

Role of Teachers in Improving the Quality of University Education: Insights from Chinese Undergraduates

Liu Zhibin¹, Shi Ruyu², Zhang Jinru³, Phawani Vijayaratnam^{4*}, Ayeswary Sivarajah⁵, Deng Pengfei⁶

Abstract

This study investigates the crucial role of teachers in Chinese undergraduate education, focusing on their influence on student learning experiences and outcomes. It examines aspects such as pedagogical methods, teacher abilities, and student engagement and motivation. Through qualitative analysis of semi-structured interviews with 15 undergraduate students, the study seeks to contribute to the existing understanding of effective teaching practices. It aims to uncover the unique factors that empower teachers to support students' academic journeys, emphasizing their significance in shaping both educational practices and policies. The findings highlight the multifaceted dynamics of teacher effectiveness, offering insights that can inform teacher training programs and guide future research to improve the quality of education.

Keywords: Role of teachers, undergraduate education, student learning, engagement and motivation, quality education.

1. Introduction

The aim of this study is to explore the role of teachers in student learning from the perspective of university students. Numerous research studies have explored the importance of effective teaching, and the impact that teachers have on student learning outcomes (Aldrup, Carstensen, & Klusmann, (2022); Devlin & Samarawickrema, (2022) Iqbal, Siddiqie, & Mazid, (2021); George, (2020). Further to the research by Yin and Wang (2016) which studied the impact of gender, grade, discipline, and institutional types on Chinese students' student engagement and motivation, this study aims to examine students' perceptions of teachers based on pedagogy and teaching methods, teacher ability, and student engagement and motivation. The findings from this study can contribute to the existing body of knowledge on effective teaching practices and provide insights into how teachers can better support students in their learning. These may be useful for educators, policymakers, and other stakeholders involved in education as per SDG 4's objective to "ensure inclusive and equitable quality education for all" (United Nations [UN], 2015, Target 4.1).

¹ Faculty of Education and liberal Art, INTI International University, Nilai, Malaysia
Sichuan Top IT Vocational Institute

² Faculty of Education and liberal Art, INTI International University, Nilai, Malaysia
Yunnan Vocational College of Transportation

³ Faculty of Education and liberal Art, INTI International University, Nilai, Malaysia

⁴ Faculty of Education and liberal Art, INTI International University, Nilai, Malaysia,
phawani.vijayaratnam@newinti.edu.my

⁵ School of Education, Communication and Language Sciences, Newcastle University, UK

⁶ Yunnan Vocational College of Transportation, China

2. Methodology

2.1. Research methods

This research employed the qualitative method, specifically in-depth interviews with a sample of 15 university students. The study seeks to understand students' experiences and perspectives on aspects of pedagogy and teaching methods, teacher ability, student engagement and motivation. The objective is to comprehensively understand the crucial role of teachers in Chinese undergraduate education, focusing on their influence on student learning experiences and outcomes. The questions in this interview are aligned with the constructivism theory (Zajda, J. 2021) which emphasizes the importance of personal experiences and subjective interpretations in the learning process. The qualitative research method used in this study has the advantage of allowing for in-depth exploration and understanding of participants' experiences and perspectives. The semi-structured interview format used in this study also allows for flexibility in questioning, enabling participants to elaborate on their responses and provide rich, detailed accounts of their experiences. (Adeoye & Olenik, 2021; Dearnley, 2015; Fylan, 2005). The focus group in this research is undergraduate students, who are an important group as they are in the process of developing foundational knowledge and skills that will shape their future academic and professional pursuits (Harkavyet. al., 2021. Understanding the perspectives of undergraduate students can help to inform teaching practices and improve student outcomes.

2.2. Data collection method

The survey was done via individual face-to-face with students online using Tencent Meeting and WeChat applications. The respondents for this survey were 15 undergraduates who are currently enrolled in formal education and are aged between 17 to 23 years. Among the 15 students, five are from the literature and history disciplines, seven from the art discipline and three from science and engineering disciplines. The samples were drawn from different schools located in diverse socio-economic and cultural contexts to ensure a well-represented student population. Interviews were conducted in Chinese and English. Each interview took around 8-10 minutes. The interviews were recorded, with the consent of the participants, and then translated into English using a language translator device.

2.3. Data analysis method

Patterns that emerged from the interview responses were categorized into themes. Each theme was then examined to understand participants' perceptions and motivations.

3. Discussion

3.1. Pedagogy

3.1.1 Role of teachers in promoting the right pedagogy

Personalized guidance is a student-centered approach that recognizes the unique learning needs of each student. It allows teachers to provide tailored instruction, support, and feedback to meet the individual needs of each student. Research has shown that personalized guidance can improve student engagement, motivation, and achievement (Brown, Lawrence, Basson, & Redmond, 2022). In a study conducted by Abedi et al., (2019), students who received personalized guidance performed better on assessments than those who received traditional instruction. In this survey, 77% of the respondents showed a sense of dependence on teachers, and this sense of dependence gradually became more apparent as the contact time increased. As mentioned by some respondents, students look up to “teachers with new ideas”, who can “focus on student exploration and discovery” and “guide students to learn to cooperate and communicate”. In Chinese

undergraduate education, the research findings imply that teachers can take a more active role in aiding learning by adopting a more student-centered pedagogical style as per Schukajlow et al., (2012). The findings also reveal that teachers needed to have an “awareness of the unique requirements and approaches to learning possessed by each student”, as well as “facilitate opportunities for students to work together and participate in group projects”. This is consistent with the findings of (Bellibaş et al, 2022; Tartavulea et al, 2020; Schukajlow et al, 2012; Cook et al, 2012). Further findings reveal that “High-quality teaching content has higher learning efficiency than high-quantity learning content” and in relation to the cognitive load hypothesis, educators can help their students learn more efficiently by presenting material in a way that reduces the amount of cognitive overload and maximizes “students working memory”.

3.1.2 Pedagogical methods that work

Interestingly, a few respondents prescribed a Vygotskian constructivist approach in the classroom (Abdulhay, H. 2015; Zajda, J. 2021) and for teachers to “extract the essence of knowledge and encourage students to actively acquire knowledge”. Echoing Landrum (2020), the findings, on the whole, imply that the “role of instructors in undergraduate education in China can be improved by adopting a more student-centered pedagogical style” to allow students to engage in real world activities that align with their interests and abilities that could improve their engagement, motivation and achievement. (Wang et al, 2021; Martínez et al, 2022) There is consensus among the respondents that teachers can empower students with opportunities for “choice and control over their educational experiences” as per Tartavulea et al, (2020). Additionally, the results of a study by Tan et. al.(2022) demonstrate that the learning environment and content quality have a greater impact on students' employability than learner quality. Hence, to inspire and motivate students, universities should focus on developing high-quality learning environments to allow students to reach their full potential.

3.2. Teacher Ability

3.2.1 Role of teachers through the eyes of students

According to Murillo et al., (2019), teaching expertise is developed through learning and experience, and it is a critical factor in enhancing performance and productivity. A study by Aelterman et al. (2019) found that students learn best when instruction is tailored to their learning styles. According to Hyland et al., (2021), effective communication is a key characteristic of successful leaders, as it helps to build trust, respect, and support via active listening and facilitates the sharing of information and ideas while enhancing collaboration. (Kreuter & Wray, 2003; Attems et al., 2020). 100% of the respondents agree that teachers in Chinese undergraduate education play an important part in forming students' views about their capabilities. These beliefs can have a major impact on students' academic performance as well as their academic achievements and are mostly shaped by cultural and societal influences. (Garfield & Ben, 2007).

3.2.2 The potential for effective teacher roles

Findings from this research underline the potential for educators to affect the views that students hold about their own capabilities through the strategies that they employ (Aelterman et al. 2019). According to the survey, nine out of 15 students believe that teachers should teach by encouraging. Moreover, nine of the students believe that teachers who understand students' unique learning preferences are better able to reach their learning potential. Respondents in this research mentioned that “When teachers build strong relationships with their students, the teacher can help students develop important non-cognitive skills, such as communication and problem-solving skills, which prepare them for life-long learning.” The incremental perspective of ability is one that teachers have the option of adopting. This approach places an emphasis on the fact that intellect and other abilities can be increased via sustained effort, learning from failures,

and perseverance (Skinner, 2019). Respondents in this study aspired for teachers to “enhance their knowledge”, “improve teacher professionalism” and “have a deep understanding of the knowledge of the courses taught”, and “maintain a focus on student learning”. This, according to the respondents, can overcome the cognitive overload of teaching content that exist in most undergraduate classrooms. Interestingly, the level of Industry 4.0 competences among lecturers in the areas of organizational learning, continuous improvement, information and communication technologies, environment, and innovative management were evaluated by Kowang et al's (2020) study. The results showed that instructors needed to increase their Industry 4.0 competencies across all five skills.

In a nutshell, the research findings on the function of teachers in Chinese undergraduate education reveal that the concept of capacity is an essential component of the picture that emerges. There is consensus among respondents that the “professional-related knowledge and skills” of teachers need to be strengthened and that teachers have the power to shape students' beliefs about their abilities and promote academic success. By promoting an incremental view of ability, teachers can create a supportive and inclusive classroom environment, and adopt pedagogical practices that focus on effort and improvement (Saputra, F. 2021; Murillo & Hidalgo, 2020).

3.3. Engagement and Motivation

3.3.1 Role of engagement in promoting learning

Han (2021) and Howard et.al. (2021) define engagement as “the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught”. The studies found that engaged students were more likely to be intrinsically motivated by their own interests and enjoyment of the learning process, rather than external factors such as rewards or punishments. The studies also found that engagement was positively correlated with academic achievement, suggesting that engagement is a key factor in promoting motivation and student success. Motivation is important for facilitating and sustaining self-regulated learning, which often results in improved academic performance (Di Serio et al., 2013).

Howard et. al. (2021) however, found that extrinsic motivation, such as rewards or punishments, could be effective in promoting short-term compliance but was less effective in promoting long-term engagement and achievement. Engagement and motivation were important themes that emerged from the analysis of data. According to the interview findings, 85% of the interviewees talked about the positive effect of enthusiasm and interest on improving academic performance. Among the 15 respondents, 12 students lacked the willingness to take the initiative to study the courses they were not interested in, and eight of them said that it was difficult to maintain enthusiasm for the courses they were studying. This is caused by factors such as a focus on rote memorization and a lack of opportunities for active learning and participation as per the study by (Reeve and Shin 2020; Drake, 2012). Students may also feel pressure from family and society to do well in school, which can make them anxious and afraid of failing. Interestingly, 14 out of 15 respondents believed stronger learning motivation leads to higher enthusiasm for learning activities, resulting in better learning outcomes. Educators can adopt various strategies to cultivate and enhance students' motivation.

3.3.2 The link between teacher, motivation and learning

As per Wong et. al. (2019), this research also suggests that teachers can encourage intrinsic motivation in the classroom by giving students a sense of autonomy, competence, and connectedness, by giving students choices and control over their learning, recognizing and valuing individual differences, and making the classroom a place where everyone feels they belong. Active learning strategies, like group work, problem-based learning, and hands-on activities, are some of the best ways to get students

interested and motivated (Lin, 2017). These methods can help students get more involved in the learning process and feel like they own and are interested in their studies (Reeve and Shin 2020). One respondent boldly suggested for teachers to “skillfully use strategies to create a democratic and equal teacher-student relationship atmosphere”.

The research findings also show how positive feedback and reinforcement can be used by teachers to get students interested and motivated. The respondents in this research mentioned that “when the teacher rewards us for our efforts or progress, we feel confident in ourselves and feel a sense of accomplishment”. Respondents further added that teachers can help their students be more engaged and motivated by using teaching methods that focus on fostering intrinsic motivation, creating a supportive and inclusive classroom environment, and giving positive feedback and reinforcement. This will lead to better academic performance and achievement. According to a study by Abdullah et al. (2022) on 480 undergraduate students in private universities in Malaysia, online feedback, future relevance, interaction, and personal well-being were all statistically significant in influencing students' satisfaction. Rasli et al. (2022) assert that traditional education's limitations require reform. They advocate adaptable methods for personalized learning, such as the flipped classroom, authentic assessments, and teaching uncertainty tolerance. Their call for a flexible and progressive educational framework emphasizes inclusivity and innovation.

4. Conclusion

This research has shed light on the significant impact that teachers can have on the learning experiences and outcomes of students. The study revealed that Chinese teachers are central to the educational system and play a crucial role in shaping students' academic and personal development (Aldrup, Carstensen, & Klusmann, 2022; Iqbal, Siddiqie, & Mazid, 2021; George, 2020; Devlin & Samarawickrema, 2022). The study emphasized the significance of teachers' attitudes, beliefs, and teaching methods, which are shaped by their educational background, cultural background, and personal experiences. The study also demonstrated the importance of teachers' interpersonal interactions with their pupils, particularly their emotional support and encouragement, in boosting students' enthusiasm and involvement in their studies. The results also have broader ramifications for bettering educational practices and policies, especially the important role universities play in developing action plans for integrating sustainability across their value chain to give students the skills and knowledge required to apply design, innovation, and leadership competencies inside the university ecosystem (Rasli et al., 2022)

4.1 Limitations

This study does, however, have certain shortcomings. The study's sample size is rather small, which restricts how broadly the results may be applied. Self-reported data used in the study, which could be biased and inaccurate. It's possible that participants gave socially acceptable responses or had trouble accurately recalling their experiences. The study does not take into account the viewpoints of other stakeholders, such as instructors or administrators, and only concentrates on the perspectives of undergraduate students.

4.2 Future research

Longitudinal studies that look at how instructors evolve and grow over time may be included in future research, as well as comparisons across various educational contexts to understand how teaching methods and teacher characteristics vary depending on the learner population. Additionally, a comparison of effective teaching techniques in various educational contexts, such as adult education, higher education, or vocational education, can highlight the universality of these features.

References

- Abdulhay, H. (2015). Constructivism. *International Journal of Pedagogy Innovation and New Technologies*, 2, 73-77. 10.5604/23920092.1187859.
- Abdullah, S. I. N. W., Arokiyasamy, K., Goh, S. L., Culas, A. J., & Manaf, N. M. A. (2022). University students' satisfaction and future outlook towards forced remote learning during a global pandemic. *Smart Learning Environments*, 9(1), 1-21.
- Abedi, P., Keshmirshekan, M. H., & Namaziandost, E. (2019). The comparative effect of flipped classroom instruction versus traditional instruction on Iranian intermediate EFL learners' English composition writing. *Journal of Applied Linguistics and Language Research*, 6(4), 43-56.
- Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semi-structured interviews. *Journal of the American College of Clinical Pharmacy*, 4(10), 1358-1367.
- Aelterman, N., Vansteenkiste, M., Haerens, L., Soenens, B., Fontaine, J. R., & Reeve, J. (2019). Toward an integrative and fine-grained insight in motivating and demotivating teaching styles: The merits of a circumplex approach. *Journal of Educational Psychology*, 111(3), 497.
- Aldrup, K., Carstensen, B., & Klusmann, U. (2022). Is empathy the key to effective teaching? A systematic review of its association with teacher-student interactions and student outcomes. *Educational Psychology Review*, 34(3), 1177-1216.
- Attems, M. S., Thaler, T., Snel, K. A., Davids, P., Hartmann, T., & Fuchs, S. (2020). The influence of tailored risk communication on individual adaptive behaviour. *International Journal of Disaster Risk Reduction*, 49, 101618.
- Bellibaş, M. Ş., Polatcan, M., & Kılınç, A. Ç. (2022). Linking instructional leadership to teacher practices: The mediating effect of shared practice and agency in learning effectiveness. *Educational Management Administration & Leadership*, 50(5), 812-831.
- Brown, A., Lawrence, J., Basson, M., & Redmond, P. (2022). A conceptual framework to enhance student online learning and engagement in higher education. *Higher Education Research & Development*, 41(2), 284-299.
- Cook, D. A., Brydges, R., Hamstra, S. J., Zendejas, B., Szostek, J. H., Wang, A. T., ... & Hatala, R. (2012). Comparative effectiveness of technology-enhanced simulation versus other instructional methods: a systematic review and meta-analysis. *Simulation in Healthcare*, 7(5), 308-320.
- Dearnley, C. (2005). A reflection on the use of semi-structured interviews. *Nurse researcher*, 13(1).
- Devlin, M., & Samarawickrema, G. (2022). A commentary on the criteria of effective teaching in post-COVID higher education. *Higher Education Research & Development*, 41(1), 21-32.
- Di Serio, Á., Ibáñez, M. B., & Kloos, C. D. (2013). Impact of an augmented reality system on students' motivation for a visual art course. *Computers & Education*, 68, 586-596.
- Drake, J. R. (2012). A critical analysis of active learning and an alternative pedagogical framework for introductory information systems courses. *Journal of Information Technology Education. Innovations in Practice*, 11, 39.
- Fylan, F. (2005). Semi structured interviewing. *A handbook of research methods for clinical And health psychology*, 65-78. Garrard, J. 2013. *Health sciences literature review made easy*.
- Garfield, J., & Ben-Zvi, D. (2007). How students learn statistics revisited: A current review of research on teaching and learning statistics. *International statistical review*, 75(3), 372-396.
- George, M. L. (2020). Effective teaching and examination strategies for undergraduate learning during COVID-19 school restrictions. *Journal of Educational Technology Systems*, 49(1), 23-48.
- Han, K. T. (2021). Effects of three levels of green exercise, physical and social environments, personality traits, physical activity, and engagement with nature on emotions and attention. *Sustainability*, 13(5), 2686.

- Harkavy, I., Bergan, S., Gallagher, T., & Van't Land, H. (2021). Universities must help shape the post-COVID-19 world. Higher education's response to the COVID-19 pandemic: Building a sustainable and democratic future, 21-30.
- Howard, J. L., Bureau, J. S., Guay, F., Chong, J. X., & Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from self-determination theory. *Perspectives on Psychological Science*, 16(6), 1300-1323.
- Hyland-Wood, B., Gardner, J., Leask, J., & Ecker, U. K. (2021). Toward effective government communication strategies in the era of COVID-19. *Humanities and Social Sciences Communications*, 8(1).
- Iqbal, M. H., Siddiqie, S. A., & Mazid, M. A. (2021). Rethinking theories of lesson plan for effective teaching and learning. *Social Sciences & Humanities Open*, 4(1), 100172.
- Kreuter, M. W., & Wray, R. J. (2003). Tailored and targeted health communication: strategies for enhancing information relevance. *American journal of health behavior*, 27(1), S227-S232.
- Kowang, T. O., Bakry, M. F., Hee, O. C., Fei, G. C., Yew, L. K., Saadon, M. S. I., & Long, C. S. (2020). Industry 4.0 competencies among lecturers of higher learning institution in Malaysia. *International Journal of Evaluation and Research in Education (IJERE)*, 9(2), 303-310. DOI: 10.11591/ijere.v9i2.20520
- Landrum, B. (2020). Examining Students' Confidence to Learn Online, Self-Regulation Skills and Perceptions of Satisfaction and Usefulness of Online Classes. *Online Learning*, 24(3), 128-146.
- Lin, L. F. (2017). Impacts of the Problem-Based Learning Pedagogy on English Learners' Reading Comprehension, Strategy Use, and Active Learning Attitudes. *Journal of education and training studies*, 5(6), 109-125.
- Martínez Casanovas, M., Ruíz-Munzón, N., & Buil-Fabregá, M. (2022). Higher education: The best practices for fostering competences for sustainable development through the use of active learning methodologies. *International Journal of Sustainability in Higher Education*, 23(3), 703-727.
- Murillo, F. J., & Hidalgo, N. (2020). Fair student assessment: A phenomenographic study on teachers' conceptions. *Studies in Educational Evaluation*, 65, 100860.
- Murillo-Zamorano, L. R., Sánchez, J. Á. L., & Godoy-Caballero, A. L. (2019). How the flipped classroom affects knowledge, skills, and engagement in higher education: Effects on students' satisfaction. *Computers & Education*, 141, 103608.
- Rasli, A., Tee, M., Lai, Y. L., Tiu, Z. C., & Soon, E. H. (2022, October). Post-COVID-19 strategies for higher education institutions in dealing with unknown and uncertainties. In *Frontiers in Education (Vol. 7, p. 992063)*. Frontiers.
- Reeve, J., & Shin, S. H. (2020). How teachers can support students' agentic engagement. *Theory Into Practice*, 59(2), 150-161.
- Saputra, F. (2021). Leadership, Communication, And Work Motivation In Determining The Success Of Professional Organizations. *Journal of Law, Politic and Humanities*, 1(2), 59-70.
- Schukajlow, S., Leiss, D., Pekrun, R., Blum, W., Müller, M., & Messner, R. (2012). Teaching methods for modelling problems and students' task-specific enjoyment, value, interest and self-efficacy expectations. *Educational studies in mathematics*, 79, 215-237.
- Skinner, B. F. (2019). *The behavior of organisms: An experimental analysis*. BF Skinner Foundation.
- Tartavulea, C. V., Albu, C. N., Albu, N., Dieaconescu, R. I., & Petre, S. (2020). Online Teaching Practices and the Effectiveness of the Educational Process in the Wake of the COVID-19 Pandemic. *Amfiteatru Economic*, 22(55), 920-936.
- Wang, N., Chen, J., Tai, M., & Zhang, J. (2021). Blended learning for Chinese university EFL learners: Learning environment and learner perceptions. *Computer Assisted Language Learning*, 34(3), 297-323.

- United Nations (2015). *Transforming our world: The 2030 agenda for sustainable development*. New York: United Nations, Department of Economic and Social Affairs.
- Wong, J., Baars, M., Davis, D., Van Der Zee, T., Houben, G. J., & Paas, F. (2019). Supporting self-regulated learning in online learning environments and MOOCs: A systematic review. *International Journal of Human-Computer Interaction*, 35(4-5), 356-373.
- Yin, H., & Wang, W. (2016). Undergraduate students' motivation and engagement in China: An exploratory study. *Assessment & Evaluation in Higher Education*, 41(4), 601-621.
- Zajda, J. (2021). *Constructivist Learning Theory and Creating Effective Learning Environments*. In: *Globalisation and Education Reforms. Globalisation, Comparative Education and Policy Research*, vol 25. Springer, Cham. https://doi.org/10.1007/978-3-030-71575-5_3
- Zhang, Z. V., & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing*, 36, 90-102.