

THE DEVELOPMENT OF A SPOC PLATFORM FOR EFL LISTENING INSTRUCTION IN HIGHER EDUCATION

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ABSTRACT

This study focuses on the design and development of a Small Private Online Course (SPOC) specifically created for the *English Listening 1* course, addressing the needs of non-English major students at a private language university in China. Hosted on the Umooc platform, the course is designed with interactive modules, multimedia resources, and task-based activities to facilitate listening comprehension and encourage student engagement. The study has two main objectives: (1) to explore the key features and functionalities of the SPOC platform, and (2) to assess how the platform's modules align with the pedagogical goals of EFL listening instruction. Through a detailed analysis of the platform's design, including resource sharing, task allocation, and collaborative learning opportunities, the study examines how these features are intended to enhance student engagement and support listening skill development. Additionally, the alignment of the platform's modules with the specific pedagogical objectives of EFL listening instruction is explored to evaluate their potential for improving listening comprehension. By providing insights into the integration of digital learning into EFL instruction, this research aims to contribute to the discourse on improving student listening proficiency and engagement in higher education contexts.

Keywords: *SPOC, EFL Listening, Umooc Platform, digital learning, student engagement*

INTRODUCTION

Listening comprehension is widely acknowledged as a fundamental skill in language acquisition, yet it presents significant challenges for EFL learners (Vandergrift & Goh, 2012). At my institution, a private language university in South China, non-English major freshmen often face difficulties such as limited vocabulary, challenges in processing rapid speech, and lack of correct listening

skills. Moreover, their minimal exposure to authentic English listening environments outside the classroom exacerbates these challenges, hindering their listening development. Traditional listening instruction at the university, which predominantly relies on teacher-centred methods and passive listening exercises, often fails to foster active engagement or address the diverse needs of students (Gilakjani, 2011). While these conventional approaches provide basic listening practice, they do not adequately help students overcome the specific barriers they encounter. As a result, there is an increasing need for innovative instructional strategies that promote student engagement and facilitate more effective listening practice.

In recent years, advancements in information technology have significantly transformed teaching methods, giving rise to hybrid teaching models that combine various instructional strategies to achieve diverse educational goals. While Massive Open Online Courses (MOOCs) gained rapid popularity worldwide starting in 2012, they also revealed several limitations, including high costs, lack of course relevance, resource waste, and high dropout rates. These shortcomings prompted educators to seek alternative solutions, leading to the emergence of Small Private Online Courses (SPOCs). Unlike MOOCs, SPOCs are smaller, more targeted online courses with restricted access, typically involving a few dozen to several hundred students. SPOCs integrate the high-quality resources of MOOCs with traditional classroom instruction, marking a significant development in the “post-MOOC era” of blended learning. This model recognizes that while online education offers distinct advantages, it cannot fully replace in-person teaching (Liu, 2021; Guo, 2021; Xie et al., 2021). By combining the flexibility of online learning with face-to-face interaction, SPOCs provide a more balanced and effective educational experience.

Despite the potential of this hybrid model, its application remains limited, especially in English listening instruction, where traditional methods continue to dominate. Furthermore, the use of SPOCs in EFL listening instruction has been insufficiently explored, particularly within the context of Chinese higher education. Most existing studies on technology-assisted listening instruction have concentrated on general language skills or large-scale online courses. Limited research has explored the potential of SPOC-based approaches to address the specific needs of non-English major students in listening skill development.

This study aims to design and develop a SPOC to meet the specific needs of non-English major students in the *English Listening 1* course at a Chinese private language university. Hosted on the Umooc platform, the course integrates authentic listening materials and interactive tasks designed to improve students’ listening comprehension and proficiency. Key features of the platform include resource sharing, task allocation, and collaborative learning opportunities, aimed at encouraging student engagement and active participation. This research investigates the potential of SPOC-based models to enhance English listening education in higher education settings, leveraging digital technologies to address contemporary learning needs.

The primary objective of this study is to analyze the design and functionalities of the *English Listening 1* SPOC, with a specific focus on how its modular structure aligns with instructional goals. The study explores how the interactive and collaborative features of the SPOC platform contribute to student engagement and support the development of listening skills, specifically in alignment with the pedagogical goals of EFL listening instruction. By addressing these aspects, the research aims to provide both theoretical insights and practical implications

for improving listening instruction in higher education, leveraging digital technologies to meet contemporary learning needs.

To achieve this objective, the study aims to fulfil the following two specific objectives:

- To examine the key features and functionalities of the SPOC platform for EFL listening instruction.
- To evaluate the alignment of the platform's modules with the pedagogical goals of EFL listening instruction.

LITERATURE REVIEW

Concept and Applications of SPOC

SPOC (Small Private Online Course) is a small-scale, selective online learning model that emerged in the post-MOOC era, combining online education with traditional teaching methods. It addresses the limitations of MOOCs, such as large class sizes, low participation, and the inability to cater to individual learning needs. SPOCs are characterized by smaller class sizes, selective enrollment, and interactive features, including micro-lectures, quizzes, peer assessments, and discussion forums, which facilitate personalized and engaging learning experiences.

In educational practice, SPOC is implemented in two main ways. One approach, proposed by Piccioni et al., integrates SPOC as a supplement to traditional classroom instruction, where students engage with online materials after in-class lessons. Another approach, advanced by Sébastien et al., blends SPOC with a flipped classroom model, where students first study materials online and then apply them during face-to-face sessions. Several prestigious universities globally have adopted SPOCs. For example, UC Berkeley's *Software Engineering* course, Harvard's *Architectural Hypothesis* course, and MIT's *Python Programming* course have all successfully utilized the SPOC model. In China, Tsinghua University introduced SPOC in 2013, implementing UC Berkeley's *Cloud Computing and Software Engineering* course. After a trial semester, students showed comparable performance to their Berkeley peers, with increased engagement (Han, 2017).

Scholarly research on the pedagogical impact of SPOC has emerged globally. Professor Bao of Harvard University suggests that SPOC's effectiveness and high completion rates underscore its potential (Zhang et al., 2014). Fox (2013) argues that SPOC enriches teaching methodologies and boosts student engagement. The integration of SPOC with the flipped classroom model has been shown to improve learning outcomes. Peng and Wang (2024) found that the SPOC-based flipped classroom significantly boosts student engagement, course appeal, and learning effectiveness. Additionally, Liu et al. (2019) conducted a meta-analysis revealing that this model outperforms traditional classrooms in key areas such as exam performance, knowledge application, and student motivation.

In conclusion, SPOC has a transformative impact on education by fostering student engagement, improving learning outcomes, and redefining teaching methods. Its potential for personalized learning makes it particularly suitable for addressing the diverse needs of students in higher education.

Benefits of the SPOC in Language Instruction

The integration of SPOC in EFL instruction has gained significant attention for its potential to enhance learning outcomes and promote active engagement. Liu (2022) highlights the effectiveness of the SPOC hybrid model in improving student performance and engagement in English listening courses, suggesting that SPOC platforms foster active participation, which is essential for language acquisition. This finding aligns with broader research supporting SPOC's positive impact on language learning. Zhu and Wang (2021) further demonstrate that SPOC models address challenges in traditional teaching, such as resource limitations and low engagement. By offering personalized learning tailored to students' proficiency levels, SPOC increases motivation and participation while enhancing interaction between students and instructors. Jiang and Liang (2023) identify key factors for sustaining engagement in SPOC-based courses, including students' initial motivation, course design, and teacher involvement, highlighting the importance of both intrinsic and extrinsic motivators in fostering long-term engagement. Xi and Chen (2018) explore the transformative potential of SPOC in flipped classrooms, noting that integrating SPOC with mobile technology creates a dynamic, student-centered learning environment that enhances autonomy and language acquisition. Zhang et al. (2018) emphasize the role of SPOC-based flipped classrooms in providing flexible, interactive learning environments, fostering active student engagement, and supporting personalized learning.

Similarly, Chen (2020) illustrates the effectiveness of SPOC in interpreting courses by promoting independent learning and continuous assessment, enabling instructors to adapt teaching strategies as needed. Finally, Zheng and Lee (2023) investigate the impact of SPOC-based blended learning on first-year English majors, showing significant improvements in listening, reading, writing, and translation skills, though speaking skills remained unaffected. In conclusion, while SPOC has been widely recognized for its ability to enhance engagement and personalize learning in EFL contexts, its application specifically in English listening instruction remains under-researched. Most studies focus on general language skills, leaving a gap in understanding how SPOC platforms can be effectively designed for listening practice. This highlights the need for further exploration into SPOC-based platforms tailored to improve listening comprehension. By addressing the unique challenges of listening instruction, such platforms could offer significant benefits in enhancing student outcomes and engagement. This study aims to fill this gap by focusing on the design and functionality of a SPOC platform specifically for EFL listening instruction in higher education.

THEORETICAL FRAMEWORK

This study draws on Social Constructivism, a theoretical framework that emphasizes the active, collaborative, and student-centered nature of learning. According to this perspective, knowledge is not passively received but actively constructed through social interactions and the collaborative engagement of learners. Three central concepts within this framework—student-centered learning, the Zone of Proximal Development (ZPD), and the role of the More Knowledgeable Other (MKO)—serve as the foundation for developing a SPOC platform tailored for EFL listening instruction.

Vygotsky (1978) contended that learning is a dynamic process in which students engage in constructing meaning through interaction with their environment and peers. In this view, learners are active agents, and the learning environment must foster autonomy and promote engagement. The SPOC platform facilitates these principles by providing interactive, personalized learning experiences. These experiences are designed to align with students' individual proficiency levels, offering tasks that are within their ZPD and gradually advancing their listening abilities (Tharp & Gallimore, 1988). By presenting tasks that challenge students without overwhelming them, the platform supports their cognitive development and listening skill improvement, allowing them to progress beyond their current capabilities.

The role of the More Knowledgeable Other (MKO), as introduced by Vygotsky, is integral to this process. In the SPOC environment, the teacher acts as the MKO, providing guidance and scaffolding to students as they navigate the complexities of English listening. Additionally, peer interactions within the platform further facilitate learning, enabling students to learn from each other's insights and experiences. This peer-to-peer collaboration is particularly crucial for enhancing social engagement and fostering a deeper understanding of listening materials.

Moreover, the SPOC platform's design allows for iterative feedback loops, where both instructor feedback and peer input contribute to students' ongoing learning. These elements create a learning ecosystem that supports both independent and collaborative cognitive development, enhancing students' listening skills and their ability to engage with the language in a meaningful way.

In summary, this study applies the principles of Social Constructivism to create a dynamic, interactive learning environment that supports EFL listening instruction. By incorporating the key concepts of ZPD and MKO, the SPOC platform not only nurtures students' cognitive growth but also empowers them to take ownership of their learning, fostering both individual and collective engagement in the language acquisition process.

DESIGN AND FEATURES OF THE SPOC PLATFORM

Course Overview---College English Listening 1

College English Listening 1 is a compulsory foundational course for first-year undergraduate students majoring in non-foreign language disciplines at a private language university in South China, where the researcher is employed. The primary aim of this course is to equip students with essential listening skills that are critical for both academic and professional communication. The course is structured around the *New Horizon College English: Listening and Speaking Course 1*, which serves as the core teaching resource. This textbook provides a systematic framework of listening exercises and tasks that are designed to improve listening comprehension, offering a rich array of authentic listening materials that reflect real-life contexts. In addition to enhancing language skills, the course also aims to develop students' cognitive frameworks and cultural awareness, while fostering critical thinking abilities. By focusing on both linguistic and cognitive growth, the course contributes to students' overall development, preparing them for both academic success and professional environments where English proficiency is crucial.

Platform Overview

The researcher leveraged the Umooc platform to design a SPOC tailored specifically for the *College English Listening 1* course. Developed by the Educational Technology Research Institute of Tsinghua University, the Umooc platform has been implemented by the researcher's institution since 2016 to facilitate online learning. This platform provides comprehensive support for instructors, enabling them to create and modularize course content, upload a variety of instructional resources, and conduct diverse interactive activities such as Q&A sessions, discussions, assessments, assignments, feedback, and announcements.

Equally, the platform addresses the learning needs of students by allowing flexible access to course materials, active participation in instructor-led learning activities, and engagement in collaborative group tasks. Its dual access system, via both a mobile application and a web-based interface, ensures compatibility with various devices, including smartphones, laptops, and desktop computers. This technological flexibility enhances connectivity and ensures accessibility for all users, including students, instructors, and teaching assistants.

As depicted in Figure 1, the web interface of the SPOC platform provides an organized presentation of essential course elements. These include teacher details, a course introduction, course-related notifications, updates, and instructor-designed modular units. Additionally, the course information section (see Figure 2) provides detailed metrics such as the number of enrolled students, course access frequency, notifications, available resources, and discussion topics. These features collectively illustrate the platform's ability to integrate and present comprehensive data to support teaching and learning objectives.

Design and Functionality of the SPOC Platform for Listening Instruction

Key functionalities of the platform include the dissemination of announcements, resource sharing, task allocation, and the facilitation of interactive and collaborative learning activities. To foster active engagement and learner interaction, Umooc integrates advanced classroom projection technologies and implements diverse assessment approaches, including inter-group and intra-group evaluations. Both synchronous and asynchronous feedback mechanisms are embedded to ensure dynamic instructor-learner communication.

Furthermore, Umooc employs a data-driven approach to monitoring student performance. The platform systematically tracks and records learners' online activities, including login frequency, total time spent on the platform, video engagement duration, assignment submissions, contributions to discussion forums (both posts and replies), and performance on unit tests (see Figure 3 and 4). These detailed analytics enable instructors to conduct formative assessments by providing comprehensive insights into learners' progress and engagement, supporting evidence-based evaluations of academic performance and instructional effectiveness. The platform also incorporates social media-inspired features, such as upvoting and emoji reactions, to sustain student interest and stimulate active participation. Unit-specific discussion boards, available in advance of scheduled classes, serve as forums for collaborative learning, enabling students to exchange ideas, provide peer feedback, and collectively explore course content.

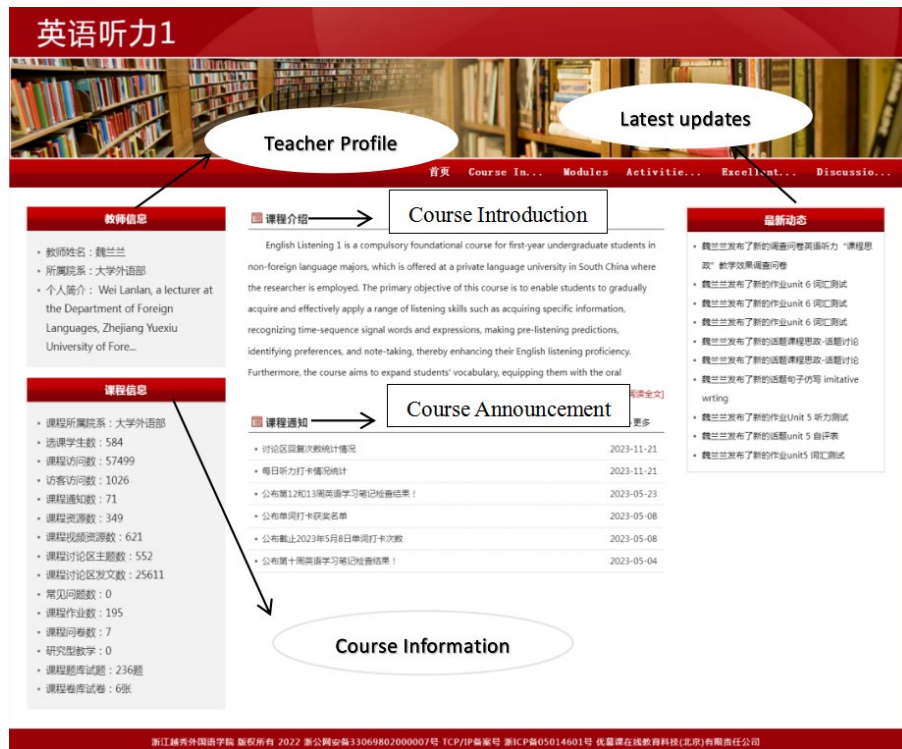


Figure 1: Screenshot of the Platform's Web Interface

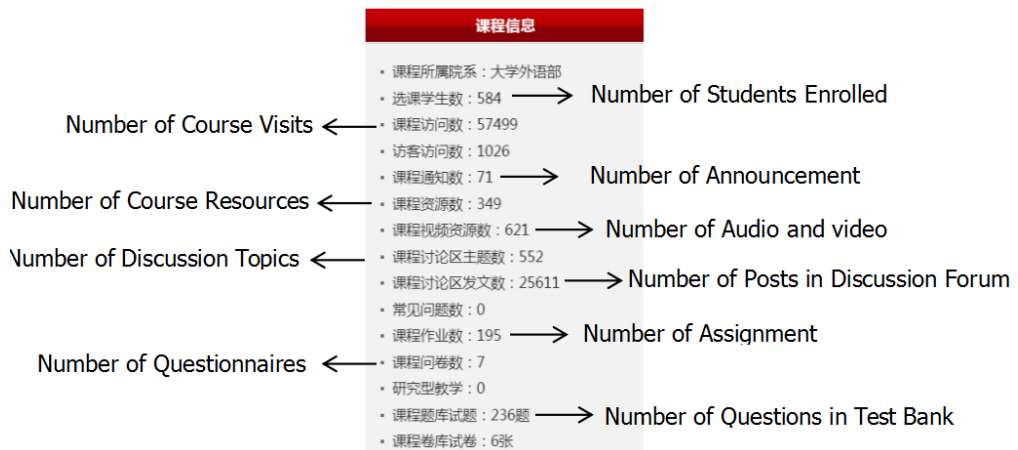


Figure 2: Description of the Course Information Section

In summary, the Umooc platform offers features such as resource sharing, interactive activities, advanced assessment tools, and detailed tracking of student online learning behaviors, including login frequency, engagement time, and activity participation. These capabilities provide instructors with data-driven insights to support English listening instruction effectively.

Student name	Frequency of Course Logins	Login Duration (in Minutes)		
学生姓名	学生用户名	登录课程次数	登录时长(分钟)	上次访问时间
濮婷婷	2233658	250	1089	2024-04-11 09:50:52
徐蕾	2233659	709	525	2024-06-24 21:00:21
尤雨洁	2233660	222	760	2024-03-26 15:25:04
陈安可	2233661	503	772	2024-05-20 11:38:54
蔡万旭	2233662	142	238	2023-12-28 09:56:56
柳舒航	2233663	70	109	2024-11-08 18:30:06
夏冰馨	2233664	1077	1966	2024-09-20 20:14:24
倪鑫怡	2233665	171	299	2024-11-08 22:27:36
平一恒	2233666	443	1249	2024-07-05 15:35:08
曹雅岚	2233667	500	2057	2024-06-26 00:28:27

Figure 3: Statistics on Student Logins and Duration

	①	②	③	④	⑤	⑥	
学生姓名	学生用户名	课程讨论区回文次数	阅读课程通知次数	阅读教学资源次数	上交课程作业次数	进入播课次数	学习播课视频时长 (分钟)
胡泽鹏	201931209020015	101	10	88	52	127	100
洪艺菲	202130502070053	235	7	214	50	144	216
邢瑞	2233653	203	15	91	80	226	281
顾恒旭	2233654	57	0	93	79	173	156
孙紫鑫	2233655	274	27	105	83	198	420
高倩	2233656	491	35	120	84	289	336
杨宇波	2233657	114	2	66	74	94	39
濮婷婷	2233658	114	4	92	63	162	383
徐蕾	2233659	544	24	119	74	155	103
尤雨洁	2233660	110	14	88	50	140	219
陈安可	2233661	297	32	129	79	193	188

Note: ① Number of Posts in the Discussion Forum; ② Number of Course Notification Views
 ③ Number of Accesses to Teaching Resources; ④ Number of Assignments Submitted
 ⑤ Number of Video Views; ⑥ Video Watching Duration (in minutes)

Figure 4: Statistics of Students' Online Learning Behavior

Alignment of SPOC Learning Modules with EFL Listening Instruction Goals

The SPOC platform is structured around a central Learning module (see Figure 5), which forms the core of the learning experience. This module comprises eight distinct units, each containing six submodules designed to address key aspects of English listening instruction (see Figure 6).

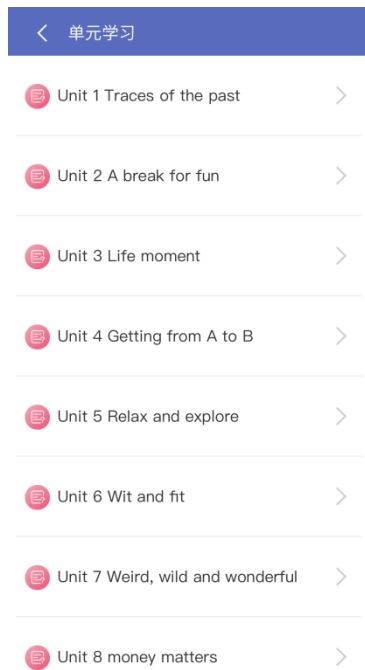


Figure 5: Learning Module on APP Interface

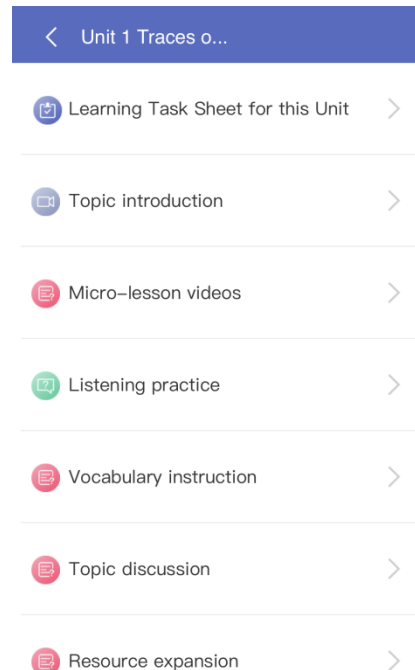


Figure 6: Submodules of Unit 1

Topic Introduction Submodule (see Figure 7): Each unit begins with the “Topic Introduction” submodule, which serves to activate students’ prior knowledge and stimulate interest in the forthcoming content. Drawing on Constructivist principles, this phase helps learners link new information to their existing knowledge base, thus facilitating a smoother transition into the more complex listening tasks ahead. Additionally, this step aims to enhance motivation by making the content more relevant and engaging.

Micro-Lesson Video Learning Submodule: In this submodule, concise instructional videos focus on core listening strategies, such as note-taking, identifying main ideas, and recognizing discourse markers. Created by the instructor or sourced from existing MOOC resources, these videos foster independent learning and reinforce listening skills. Rooted in Constructivist Learning Theory, this submodule encourages active engagement and self-paced learning, empowering students to apply strategies, strengthen their language proficiency, and develop critical thinking.

Listening Practice Submodule: This submodule presents students with a series of video-based listening tasks designed to simulate real-world contexts. By completing these tasks, students can apply listening strategies learned in previous submodules, which promotes active engagement with the material. The design of this submodule aligns with Task-Based Language Teaching (TBLT), emphasizing comprehension and task completion based on video content. These tasks provide students with opportunities to practice listening in authentic contexts, enhancing their ability to navigate various communicative situations and fostering critical listening skills.

Vocabulary Learning Submodule: The “Vocabulary Learning” submodule equips students with essential vocabulary, ensuring they are prepared to process and understand the listening material. By targeting key lexical items relevant to each unit, this module helps learners expand

their vocabulary and deepen their comprehension of spoken language. The integration of vocabulary development within the listening practice ensures students have the necessary linguistic resources to improve their listening skills.

Topic Discussion Submodule (see Figure 8): In this submodule, students collaborate with peers to discuss the unit's theme in greater depth. Rooted in Social Constructivism, this submodule highlights the importance of peer interaction in knowledge co-construction and language refinement. By engaging in these discussions, students can clarify misunderstandings, exchange ideas, and strengthen their understanding of the content.

Resource Expansion Submodule: This submodule provides supplementary materials that encourage further exploration of the topics covered in the unit. These resources promote independent learning and critical thinking, offering students the opportunity to extend their learning beyond the classroom. This feature aligns with the modern emphasis on self-directed study and lifelong learning, further supporting students' academic development.

In summary, the Learning module represents a comprehensive, pedagogically grounded approach to EFL listening instruction. By integrating diverse teaching strategies and structuring content in a modular format, the platform creates a flexible yet focused learning environment. It fosters active engagement, autonomy, and collaboration among students, while aligning with the broader goals of contemporary TESOL pedagogy. The design of the platform ensures that students not only enhance their listening proficiency but also develop skills that will support their long-term academic success.



Figure 7: Topic Introduction Module of Unit 1

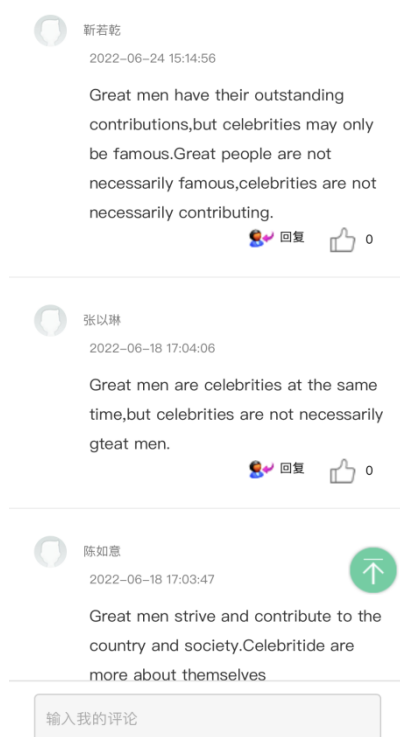


Figure 8: Topic Discussion in the Forum

CONCLUSION

This study has introduced the development and functionality of a SPOC platform designed to enhance EFL listening instruction in higher education. By integrating structured unit-based learning modules with interactive tasks and resources, the platform fosters autonomous learning and active engagement. As its construction nears completion, the next phase will focus on assessing its impact through a rigorous mixed-method approach. Quantitative analysis of student behavior data collected via the platform will examine the relationship between online engagement patterns and listening comprehension performance. Concurrently, qualitative insights derived from student interviews will illuminate their perceptions, attitudes, and experiences with the SPOC-based learning model. These findings will inform refinements to the platform and contribute to the broader discourse on technology-enhanced language learning by uncovering the dynamics between digital engagement and language acquisition. This research not only aims to validate the pedagogical potential of SPOC platforms in EFL instruction but also seeks to offer a scalable and evidence-based framework for integrating technology into language education. It underscores the transformative role of digital tools in fostering adaptive, student-centered learning environments and advancing the efficacy of contemporary language teaching practices.

REFERENCES

- Chen, J. (2020). SPOC-based flipped learning model applied in interpreting teaching. *International Journal of Emerging Technologies in Learning*, 15(17), 4–13. <https://doi.org/10.3991/ijet.v15i17.14581>
- Fox, A. (2013). From MOOCs to SPOCs. *Communications of the ACM*, 56(12), 38-40.
- Gilakjani, A. P. (2011). English listening comprehension and its relation to reading comprehension. *English Language Teaching*, 4(1), 10-17.
- Guo, Y. (2021). On translation of polysemic words in News English. *English Teaching in China and the United States: English version*, 18(7), 6.
- Han, Y. (2017). *A study on task-based teaching in college English based on SPOC* [Master's thesis, Nanjing University of Posts and Telecommunications]. China National Knowledge Infrastructure (CNKI).
- Jiang, L., & Liang, X. (2023). Influencing factors of Chinese EFL students' continuance learning intention in SPOC-based blended learning environment. *Education and Information Technologies*, 28, 13379–13404.
- Liu, C., Li, D., Zhang, B., & Hu, X. (2019). Systematic evaluation and meta-analysis of the effectiveness of SPOC flipped classroom teaching. *Open Education Research*, 25(1), 1-10.
- Liu, L. (2021). Research on IT English flipped classroom teaching model based on SPOC. *Scientific Programming*, Article ID 7273981, 9 pages. <https://doi.org/10.1155/2021/7273981>
- Liu, P. (2022). Design of college English news listening teaching system based on improved SPOC by using IoT. *Wireless Communications and Mobile Computing*, Article ID 2644521. <https://doi.org/10.1155/2022/2644521>

- Peng, P. & Wang, J. (2024). SPOC flipped classroom blended teaching reform practices in the context of digital transformation. *Applied Mathematics and Nonlinear Sciences*, 9(1), 1-18.
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, learning, and schooling in social context*. Cambridge University Press.
- Vandergrift, L., & Goh, C. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Xi, X., & Chen, M. (2018). An empirical study on flipped classroom in college English teaching based on the application of SPOC and mobile internet technology. In *Proceedings of the 2017 International Seminar on Social Science and Humanities Research (SSHR 2017)* (Vol. 113, pp. 223–227). Advances in Social Science, Education and Humanities Research. <https://doi.org/10.2991/sshr-17.2018.39>
- Xie, S.-t., Liu, Q. C. K.-h., Kong, Q.-z., & Cao, X.-j. (2021). Learning behavior analysis using clustering and evolutionary error correcting output code algorithms in small private online courses. *Scientific Programming*, Article ID 9977977, 11 pages. <https://doi.org/10.1155/2021/9977977>
- Zhang, E., Zhang, W., & Jin, C. (2018). SPOC-based flipped classroom of college English: Construction of an effective learning model. *International Journal of Emerging Technologies in Learning*, 13(1), 37–45.
- Zhang, Q., Liu, J., & Ren, Y. (2014). A deep discussion on Harvard's MOOCs: An interview with Professor Baide Bao, Associate Dean of Harvard University. *Open Education Research*, 5, 4-10.
- Zheng, L., & Lee, K. C. (2023). Examining the effects of "Small Private Online Course and Flipped-Classroom"-based blended teaching strategy on first-year English-major students' achievements. *Sustainability*, 15(21), 15349. <https://doi.org/10.3390/su152115349>
- Zhu, Y., & Wang, X. (2021). Research on the bilingual accounting hybrid teaching model under the SPOC framework: A case study of the "Financial Management" bilingual course. *Communication of Finance and Accounting*, 34, 32-35.