The Impact of Curriculum Leadership of College English Teachers on Student Engagement in Flipped Classroom Model

Lijin Yue*

Shanxi Agricultural University, Jinzhong, China *Corresponding author

Abstract: The deep integration of information technology and subject teaching is an innovative driving force for promoting the high-quality development of education and building an educational power. As a key influencing factor of student engagement, teachers' curriculum leadership plays an important role in improving the effectiveness of flipped classroom. The study, based on the four dimensional (i.e. behavioral, agentic, cognitive, and emotional) conceptualization of student engagement, explores the impact of English teacher curriculum leadership on student engagement in flipped classroom model. The findings of the study are as follows: (1) Under the flipped classroom model, English teachers' curriculum leadership is generally at a moderate level, and their leadership in resource integration and evaluation & reflection needs to be improved. (2) Students in flipped classroom had good overall performance in terms of behavioral, agentic, cognitive, and emotional engagements, but their agentic engagement still needed to be strengthened. (3) There is a significant positive correlation between English teacher curriculum leadership and student engagement. Based on these results, the article puts forward suggestions for promoting students' high-quality engagement from such aspects as special leadership improvement activities, co-constructed digital resources between teachers and students, and multi-channel evaluation and reflection, aiming at effectively exerting teachers' curriculum leadership, and thereby enhancing the effectiveness of flipped classrooms.

Keywords: golden course, flipped classroom, English teacher, curriculum leadership, student engagement

1. Introduction

"Golden Courses" is a new requirement for teaching reform in colleges and universities in the era of educational informatization 2.0. Building "high-level", "innovative", and "challenging" golden courses is not only a concrete practice for universities to achieve their educational goals, but also a key task for promoting curriculum reform in the context of first-class undergraduate education. As a new model of "Internet plus education", flipped classroom reconstructs the traditional teaching process, and realizes the integration and innovation of online teaching and classroom teaching through the links of students' pre class information interpretation, teacher-student interaction internalization, and students' reflection and consolidation after class. This not only conforms to the requirements of the "National Medium and Long Term Education Reform and Development Plan (2011-2020)" and "Education Informatization 2.0 Action Plan" to promote the deep integration of information technology with education teaching and subject teaching, but also provides an implementation path for promoting the implementation of the basic concept of "China Education Modernization 2035" and the realization of development goals.[2].

Teachers are the educational practitioners, the implementer and main force of constructing the golden courses, and their curriculum leadership level is directly related to the educational effectiveness of specific curriculum teaching. Engagement, as an important indicator of the effectiveness of students' learning behavior and prediction of academic performance, is an important variable that education evaluation and research pay attention to. Currently, there are some common problems with college students' engagement, such as insufficient engagement, poor engagement initiative, and less in-depth engagement [17]. In view of this, this study is based on a four-dimensional conceptualization of student engagement, including behavioral, agentic, cognitive, and emotional engagements, to explore the impact of English teacher curriculum leadership on college students' engagement in a flipped classroom environment, aiming at providing theoretical value and practical reference for improving teacher professional development and educational effectiveness.

2. Literature Review

2.1 Teacher Curriculum Leadership

Curriculum leadership originated in the mid-19th century and was first proposed by Professor Harry Paso. Its core meaning lies in changing the traditional paradigm of curriculum leadership, whose role is to enable schools and their systems to achieve the goal of improving students' learning quality [3]. In China, curriculum leadership is proposed under the demand of curriculum reform, and it is considered to be a key factor in deepening curriculum reform and promoting the sustainable development of teachers and universities in tertiary education.

Currently, there is no unified theory on the connotation of teacher curriculum leadership in the academic community. From the perspective of curriculum, some scholars believe that it is the ability of "teachers' awareness of the curriculum, their curriculum behavior, as well as their systematic grasp of curriculum design and implementation" [10]. From the perspective of leadership, other scholars hold that it is "the ability of teachers to lead relevant members when the design, implement, and evaluate their teaching practices in order to achieve the curriculum visions and improve the learning quality of students" [7], or it refers to "the impact of teachers on solving some curriculum problems when they guide other faculties to develop and construct school curricula in accordance with the school's positioning and educational goals, and on participating in and sharing curriculum decision-making during the process of promoting teachers' professional development and enhancing students' academic achievements [11]."

The curriculum leadership of teachers from the perspective of curriculum clarifies the steps and processes of curriculum design and implementation, but ignores the agentic initiative of teachers; Teacher curriculum leadership from the perspective of leadership emphasizes individual subjective initiative and the process of interacting with others in the organization, but ignores the methodological guidance of teachers in curriculum leadership. Given the era background of building first-class golden courses in universities, this study believes that the focus of teacher curriculum leadership should be "leadership", and the goal should be "curriculum", both of which are indispensable. Therefore, on the basis of combing and analyzing the literature, this study defines teacher curriculum leadership as "a kind of ability or influence possessed and demonstrated by front-line teachers in teaching practice activities such as curriculum value, curriculum planning, curriculum resource integration, curriculum implementation and evaluation, on the basis of the golden course concept and in accordance with the school's educational positioning and educational goals". The teacher's curriculum leadership perceived by students is divided into five dimensions: leadership in curriculum value, leadership in curriculum design, leadership in resource integration, leadership in curriculum implementation, and leadership in evaluation and reflection.

2.2 Student Engagement

Engagement refers to the degree to which individuals actively participate in the learning or work process. Since the 1980s, it has attracted widespread attention from scholars in different disciplines and research fields worldwide. Engagement is considered to be a positive learning behavior practice and an important indicator of learning effectiveness and academic achievement, with its connotation and characteristics evolving over time.

In the field of educational psychology, scholars initially believed that engagement is a learning behavior, which refers to the time and energy that students pay in the classroom learning process. With the continuous deepening of research, engagement has broken through the behavioral level and become a two-dimensional concept, including both behavioral engagement and emotional engagement in the learning process [1]. Later, some scholars proposed to understand engagement from three aspects: behavioral engagement, emotional engagement, and cognitive engagement. In general, the connotation of engagement has experienced characteristics ranging from simple to complex, from single to multidimensional.

In the field of second language teaching research, Philp&Duchesne (2016) believes that engagement is reflected not only at the cognitive and emotional levels, but also at the behavioral and social levels [4]. Other scholars, from the perspective of holistic culture, assume that engagement is influenced by factors such as classroom and personal background. Xu et al. (2019) explore students' engagement in completing different types of tasks in a classroom peer interaction environment from a social cognitive perspective [13]. It can be seen that language learning and development is a dynamic

and complex process.

At present, domestic and foreign scholars mostly analyze the current situation of students' learning engagement from three aspects: cognitive engagement, emotional engagement, and behavioral engagement. However, to some extent, they neglect the awareness of students' active engagement. Reeve&Tseng (2011) introduced the concept of "agentic engagement" [5], highlighting students' active awareness of their voluntary behavior. Therefore, this study comprehensively explores students' engagement in flipped classrooms from four aspects: behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement.

2.3 The Impact of Teacher Curriculum Leadership on Student Engagement

Based on ecosystem theory, student engagement is closely related to the learning environment in which they live. Teachers, as key elements in the learning system, have an important impact on student engagement. Domestic scholars mainly explore the current situation of student engagement from aspects such as teacher support, teacher style, and teacher questioning, and mostly focus on exploring student behavioral, cognitive, and emotional engagements, ignoring the importance of agentic participation. At present, domestic research on curriculum leadership mainly focuses on the theoretical and macro levels, mostly tracing and interpreting the connotation and significance of school curriculum leadership, principals' curriculum leadership, and teachers' curriculum leadership in kindergartens and compulsory education stages. There are relatively few studies on the curriculum leadership of ordinary teachers in universities, and there is a lack of corresponding empirical research results.

Engagement not only involves students' learning behavior, but also includes their deep level of thinking and emotional communication, as well as the implicit awareness of students' active engagement. Therefore, this study, based on Reeve&Tseng's four-dimensional engagement model of behavioral engagement, emotional engagement, cognitive engagement, and agentic engagement, explores the impact of English teacher curriculum leadership on student engagement in the flipped classroom model.

3. Research Design

3.1 Research Questions

This study focuses on the following questions:

- (1) What is the status quo of English teachers' curriculum leadership under the flipped classroom model?
 - (2) What is the level of college students' engagement in flipped classroom environment?
- (3) How does English teacher curriculum leadership affect student engagement in a flipped classroom model?

3.2 Participants

This study is carried out with participants from China. A total of 103 university students agree to participate in a questionnaire survey. They were from the same university in the northern China. Among them, 41.7% are male and 58.3% are female, with an average age of 19.3 years. They all have 10 to 12 years of English learning experience. At the end of the semester, 103 questionnaires were distributed, with 103 valid ones.

3.3 Instructional Design

On the basis of the existing flipped classroom model, the author has designed a new flipped classroom model based on the current situation of the school and the analysis of the learning situation [16]. Moreover, according to the constituent factors of flipped classroom and the content characteristics of language learning, three principles in implementing flipped classroom are also established: (1) the classroom is the main space for students to use and practice English; (2) The use and practice of language should be guided by a series of learning tasks and questions; (3) Online materials about the theme of each unit provide strong support for language practice.

3.4 Data Collection Tools

This paper uses a combination of qualitative and quantitative methods to explore the relationship between English teachers' curriculum leadership and college students' engagement in a flipped classroom through questionnaires and interviews. A total of two questionnaires were used. First, the "English Teacher Curriculum Leadership Questionnaire" is used to understand the current situation of students' perceived English teacher curriculum leadership. There are 28 questions in total, using the 5-point Likert scale. All questions are positive, and the higher the score is, the higher the curriculum leadership of the English teacher is. The Cronbach coefficient of this questionnaire is 0.948, which has a good reliability. At the end of the semester, the "Questionnaire on Student Engagement in Flipped Classroom in Tertiary English" is distributed to probe into the current situation of college students' engagement in English learning. This questionnaire is from Professor Reeve's questionnaire, and has been appropriately adapted based on the actual teaching situation and analysis of the school's learning situation. Finally, 20 items have been formed, including four dimensions of behavioral engagement, agentic engagement, cognitive engagement, and emotional engagement. Each item uses a 5-point Likert scale, ranging from "very disagree" to "very agree". The questionnaire also has good reliability, with the Clonbach coefficients of behavioral, agentic, cognitive, and emotional engagements being 0.842, 0.900, 0.846, and 0.850, respectively.

In addition, this study also uses a purposive sampling method to conduct a semi-structured interview with six students at the end of the semester for 30 minutes to gain an in-depth understanding of the impact of teacher curriculum leadership on college students' engagement in English learning. All qualitative interview data are transcribed into text and encoded by the researcher for further analysis in this study.

4. Results and Discussion

4.1 The Status Quo of Curriculum Leadership of English Teachers

This study analyzes the overall level of English teacher curriculum leadership in terms of five dimensions: leadership in curriculum value, leadership in curriculum design, leadership in resource integration, leadership in curriculum implementation, and leadership in evaluation and reflection. According to the average score (X) of each dimension, English teachers' curriculum leadership is divided into five levels, namely A (Excellent), B (Good), C (Medium), D (Pass), and E (Fail), as shown in Table 1.

Table 1: Grading of scores for each dimension of curriculum leadership of English teachers

Grade	A(Excellent)	B(Good)	C(Medium)	D(Pass)	E(Fail)
Average	4 5 <x<5 0<="" th=""><th>4.0<x<4.5< th=""><th>3 5<x<4 0<="" th=""><th>3 0<x<3 5<="" th=""><th>X<3.0</th></x<3></th></x<4></th></x<4.5<></th></x<5>	4.0 <x<4.5< th=""><th>3 5<x<4 0<="" th=""><th>3 0<x<3 5<="" th=""><th>X<3.0</th></x<3></th></x<4></th></x<4.5<>	3 5 <x<4 0<="" th=""><th>3 0<x<3 5<="" th=""><th>X<3.0</th></x<3></th></x<4>	3 0 <x<3 5<="" th=""><th>X<3.0</th></x<3>	X<3.0

This study conducted a descriptive statistical analysis of the overall level of English teacher curriculum leadership through SPSSAU. From Table 2, it can be seen that the overall curriculum leadership of English teachers is at a medium level. The lowest score for leadership in resource integration is 3.68, which belongs to the C (medium) level; Then there is leadership in evaluation and reflection, with a score of 3.69, which belongs to the medium level; The scores for leadership in curriculum value and in curriculum design are 4.11 and 4.17, respectively, which belong to the B (good) level; The highest score for leadership in curriculum implementation is 4.19, which is a good grade. According to the average scores, the five dimensions of English teacher curriculum leadership can be ranked as follows: leadership in curriculum implementation, leadership in curriculum design, leadership in curriculum value, leadership in evaluation and reflection, and leadership in resource integration. This indicates that there is a large room for improvement in English teacher curriculum leadership, and none of the five dimensions has reached an excellent level. In particular, the integration of curriculum resources and the curriculum evaluation and reflection need to be improved urgently, as shown in Table 2.

Through interviews, most students reflect that their English teachers rarely develop curriculum learning resources with them and fail to establish a model for teachers and students to jointly develop, integrate, and utilize curriculum resources. Moreover, teachers have a single evaluation method, insufficient reflective evaluation, and fail to provide timely feedback during the teaching process, thereby motivating students to actively regulate the learning process. As Wen (2019) pointed out, teachers are the builders and researchers of school-based curriculum designt, which requires them to

change traditional concepts, pay close attention to students' interest and learning needs, and individual differences, and strive to become the most valuable human resource for maintaining the sustainable development of the professional and discipline construction of the school [12].

Dimension	Minimum	Maximum	Standard	Average	Number	Grade
Leadership in Curriculum Value	9.00	25.00	3.277	4.11	5	B(Good)
Leadership in Curriculum Design	15.00	25.00	3.143	4.17	5	B(Good)
Leadership in Resource Integration	5.00	20.00	3.183	3.68	5	C(Medium)
Leadership in Curriculum Implementation	16.00	30.00	3.659	4.19	6	B(Good)
Leadership in Evaluation and Reflection	15.00	35.00	5.009	3.69	7	C(Medium)
Overall Leadership	79.00	140.00	15.917	3.96	28	C(Medium)

Table 2: Scores and grades of English teacher curriculum leadership in various dimensions

4.2 The Overall Level of Student Engagement in Flipped Classroom Model

Four types of student engagement are included: behavioral engagement, agentic engagement, cognitive engagement, and emotional engagement. Through analyzing the data obtained from the questionnaire, the overall situation of student engagement is very good (see Table 3), with the average score of the four dimensions significantly higher than 3.0. Among them, the average value of behavioral engagement is the highest, which is 4.4600; Emotional engagement and cognitive engagement took the second place, with an average of 4.4500 and 4.4120, respectively; The agentic engagement was the lowest, with an average of 4.1133. Agentic engagement refers to the awareness of students' willingness and initiative to participate in activities. Reeve (2013) believes that students can exert their initiative by changing and enriching their teaching processes [6]. It emphasizes all ways in which students can actively participate in their learning, such as raising questions they encounter during the learning process, sharing their views on relevant topics, and freely expressing suggestions and feelings about in-class activities. It not only cultivates students' ability to actively explore learning, but also helps improve their communication skills, as shown in Table 3.

N MV Variable SD Behavioral Engagement 5 4.4600 54248 Agentic Engagement 6 4.1133 71273 Cognitive Engagement 5 4.4120 59166 4.4500 Emotional Engagement 4 .58327

Table 3: Overall statistical description of student engagement in flipped classroom model

In this survey, students' agentic engagement is relatively low and the degree of dispersion is relatively large. According to interviews, some students have a strong sense of self-participation, actively communicate with teachers, and offer suggestions for curriculum construction; While some students display characteristics such as timidity and passivity, some of them feel that they have no experience and cannot propose much better strategies; Some believe that teachers are experienced and fully capable of designing highly participatory learning tasks, and presenting their own opinions may be impolite and affect teacher-student relationships. This indicates that there is relatively little or insufficient interaction between teachers and students in terms of curriculum resource integration and curriculum evaluation and reflection.

Students with high agentic engagement can create self-supporting learning opportunities in the classroom by demonstrating their initiative, which has a direct contribution to themselves (such as motivation support and achievement) and the classroom environment itself (such as teaching, teacher-student interaction). This is conducive to an interactive and harmonious learning environment and renders students focus on their academic performance.

4.3 The Impact of English Teacher Curriculum Leadership on Student Engagement in Flipped Classroom Model

Through Pearson correlation coefficient analysis, this study found that there is a statistically

positive correlation between university students' four-aspect engagement and teachers' curriculum leadership. In other words, English teachers' curriculum leadership can positively facilitate students' multi-dimensional engagement in flipped classroom learning environment.

Teachers are the main force in promoting school curriculum reform, as well as the participants and constructors of curriculum reform. Only by improving teachers' curriculum leadership can we deepen school curriculum reform and promote the comprehensive development of students. It can be seen that most English teachers neglect the dominant role of students. English teachers' weak integration of curriculum resources also leads to insufficient active participation by students.

Moreover, through interviews, it was learned that teachers had a single evaluation method, and seldom reflect on their teaching practices. This can also affect students' multidimensional engagement. As a curriculum leader, providing timely and positive feedback to students in daily teaching activities will make students more willing to participate in the learning process, not only enhancing students' trust in the teacher, but also stimulating students' enthusiasm for learning. Teachers are the key factor in improving the quality of classroom teaching. Effective evaluation and reflection can help teachers understand the learning process of students and provide targeted guidance to students.

As a technology-driven teaching method, flipped classroom enables students to have more time and space to explore and learn. This integration of personalized pre-class learning and interactive in-class activities via information technology not only strengthens college students' self-paced active learning, but also integrates it into a collaborative, interactive, and dynamic learning ecosystem, enhancing their multidimensional engagement in behavior, cognition, emotion, and agent. Peng and other scholars (2020) also believe that the flipped classroom is conducive to the development of collaborative learning activities for students [9]. Therefore, English teachers should be aware of the importance and necessity of improving curriculum leadership in the context of information technology, and actively incorporate the ideological nature of cultivating morality, the scientific and humanistic spirit contained in the curriculum, and the personalized characteristics of intelligent learning into curriculum construction, so as to help students actively adjust their multi-dimensional engagement in the learning process, thereby achieving academic progress.

5. Conclusions and Implications

The findings of this study are as follows: Under the flipped classroom model, English teachers' curriculum leadership is generally at a moderate level, especially in terms of the leadership in curriculum resource integration and leadership in curriculum evaluation and reflection. College students generally perform well in behavioral engagement, agentic engagement, cognitive engagement, and emotional engagement in flipped classroom environments, but their agentic engagement still needs to be strengthened. Moreover, there is a significant positive correlation between English teacher curriculum leadership and student engagement [15], which is consistent with the research by Yao Dilin et al. (2019). Currently, the deep integration of information technology and foreign language education is at a critical stage of transformation and upgrading [8], which puts forward higher requirements for English teachers' curriculum leadership. The overall chain of curriculum leadership in the context of information technology is the ontological core of teacher curriculum leadership, which includes profound insight into curriculum values, high-quality curriculum design, distinctive curriculum resource integration, effective curriculum implementation, and positive evaluation and reflection.

Although this study has proven that English teacher curriculum leadership in a flipped classroom model has a positive impact on student engagement, due to factors such as research participants, research conditions, and research scheme design, the research on its application effectiveness needs to be further improved, such as expanding the scope of the survey and conducting long-term follow-up surveys and practical exploration for teachers and students from different regions and schools. At the same time, this article proposes the following suggestions for future research:

First, special training programs are dedicated to enhance teachers' curriculum leadership, awaken their awareness of curriculum leadership, and build a practical platform for continuously boosting teachers' curriculum leadership from the perspective of theoretical training, instructional practice, and scientific research. It is through experts' guidance, learning and discussion at the seminars, trans-regional exchanges and communication, and a combination of online and offline methods that promote the full chain of English teachers' curriculum leadership, aiming to lay a solid theoretical and practical foundation for improving educational quality in tertiary education.

Second, co-constructing digital learning resources between teachers and students is conducive to students' agentic engagement as well as academic performance. It is beyond dispute that diverse and student-centered curriculum resources have an profound impact on students' active participation and autonomous learning abilities. Teachers need to guide students to self-diagnose learning needs, fully explore resources both inside and outside the school, online, and offline, and enable students to become resource sharers in the form of teacher-student co-construction of high-quality learning resources. The technology-driven learning resources provides a rich and multi-directional source for knowledge transfer and learning effectiveness improvement. It focuses more on providing personalized learning support for students, allowing them to increase their learning input, thereby promoting effective and in-depth learning for students.

The third is to increase multi channels for teacher's instructional evaluation and reflection, which can greatly promote students' consciousness of self-improvement in their learning process. Curriculum evaluation and reflection is a crucial factor in testing whether teaching objectives are achieved or not. The selection of evaluative objectives and criteria, contents, methods should be targeted at improving students' comprehensive literacy, in line with their psychological and cognitive development. When discovering interactive situations that are not conducive to promoting students' engagement, they can also intervene in a timely manner and provide effective guidance [14]. Only in this way can students actively engage in self-reflection and exploration, transfer existing knowledge to new situational tasks, and obtain meaningful assessment in muti-dimensional engagements.

In summary, teacher curriculum leadership based on information technology can affect students' multidimensional engagements in an "asynchronous knowledge transfer synchronous learning centered" environment, increasing their participation in curriculum practice and their sense of actual educational gain. Only by actively participating in learning activities can students efficiently regulate their learning process, thereby optimize learning outcomes.

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