The Effect of Autonomy-Supportive Teaching on Chinese Architectural Higher Vocational Non-English Majored Students' Intrinsic Motivation and Oral English Achievement

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A R T I C L E I N F O

A B S T R A C T

Purpose: Higher vocational education in China has been a focus of long-term development and has received significant attention in terms of equipping students with practical oral English skills for the globalised technical industry. Efforts are being made to enhance students' intrinsic motivation in this regard. This study aimed to investigate the impact of two teaching methods, autonomy-supportive teaching (AST) and traditional teacher-oriented teaching (TOT), on the intrinsic motivation and oral English achievement of non-English majored students in a Chinese architectural higher vocational college. **Method:** The study utilised a quantitative approach based on the principles of self-determination theory (SDT). A group of 40 students participating in AST and another group of 40 students receiving TOT were randomly chosen from the first grade of the building construction major at this college. The pre-test and post-test were administered at the start and conclusion of the semester to facilitate comparison. Two sets of participants underwent an oral English examination and provided feedback on the Speaking Motivation Scale (SMS). The data was processed using the SPSS 26 software through computer analysis. **Findings:** As a result of the detailed support provided in the intervention, the statistical findings showed that the experimental group outperformed the control group in terms of their motivation and achievement in oral English. **Implications for Research and Practice:** Based on the specific context of this research, the findings of this study highlight the superior effectiveness of AST over TOT.

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Introduction

The development of higher vocational education has garnered significant social attention under China's comprehensive education system reform. Higher education in China plays a crucial role in modern society, serving as a key driver for industrialization and socialisation. Currently, it plays a crucial and significant role in promoting societal development, technological innovation, and enhancing China's labour force quality (Ministry of Education of China, 2022). The significant growth of higher vocational education in China has led to increased interest from researchers in studying different aspects of this field. Topics such as curriculum design, teaching strategies, teacher training, technology implementation, school-enterprise cooperation, and quality assurance have become popular areas of research. The increasing number of relevant studies contributes to the advancement of discipline development in higher vocational education, the investigation of its essence and characteristics, and the establishment of theoretical frameworks, paradigms, and foundations.

The English education in Chinese higher vocational colleges has undergone reform and development since the 1950s (Wang, 2019). The Ministry of Education in China has placed significant emphasis on students' learning and practical application of English. The primary objective of oral English education is to provide students with practical verbal communication skills relevant to their future technical professions. Oral English proficiency is crucial for architectural higher vocational students due to the growing globalisation of the industry. Proficiency in spoken English not only facilitates collaboration with professionals from diverse cultural backgrounds but also provides access to a wide array of architectural and construction resources and opportunities on a global scale. Non-English major students in higher vocational colleges in China face challenges in developing their oral English skills. These challenges stem from factors such as lack of initiative, weaker intrinsic motivation and autonomous learning ability, stronger emotional stress, and perfunctory learning attitudes.

The advancement of society has also raised the bar for practitioners, demanding that students possess the capacity for lifelong learning (Deng, 2009). In the book *Learning to Survive* (Wei, 1996), a proposition "the illiterate of the future are no longer those who cannot read and write, but those who have not learned how to learn" is made. In the field of second language acquisition, motivation has garnered significant attention due to its influence on students' attitude, autonomy, and long-term learning outcomes. There are two main types of motivation: extrinsic and intrinsic motivation. The importance of intrinsic motivation cannot be overstated when it comes to developing a sustainable, effective, and autonomous approach to language learning (Ryan & Deci, 2000). It is closely linked to learning autonomy and describes how individuals naturally gravitate towards activities that are inherently satisfying and enjoyable. The pursuit of knowledge is driven by an intrinsic motivation to learn, rather than being solely focused on external rewards like grades or praise. This intrinsic motivation can be strengthened by addressing the psychological needs of learners (Ryan & Deci, 2000).

Studies have indicated that the presence of intrinsic motivation is highly influential in the acquisition and growth of second language skills, as it cultivates a sense of pleasure and curiosity in the educational journey. Active participation in learning activities and seeking opportunities for oral English practice and feedback can lead to the development

of more effective learning strategies (Dörnyei, 2009). Extrinsic motivation is driven by external factors like rewards, punishment avoidance, or recognition (Cherry, 2021). However, relying too heavily on external motivation can make learning motivation unstable and dependent (Adamma et al., 2018). English teachers in higher educational colleges, unfortunately, sometimes use ineffective teaching strategies and may not prioritise fostering students' intrinsic motivation (Dai, 2020). In addition, the effectiveness of teaching is further hindered by the large class size, as it becomes challenging for teachers to address each student's psychological needs and intrinsic motivational factors, and to implement suitable teaching approaches and strategies accordingly (Wang & Gou, 2015). Teachers often struggle or show a lack of enthusiasm when it comes to supporting students' psychological needs and promoting autonomy (Sarrazin et al., 2006). In the classroom, there may be a noticeable lack of student engagement, limited opportunities for creativity and problem-solving, and an overreliance on external motivators when teachers use repetitive teaching strategies (Martin et al., 2018).

To address the difficulties faced by non-English major students and teachers in Chinese higher vocational colleges when it comes to learning oral English and staying motivated, the researcher conducted a study comparing autonomy-supportive teaching (AST) and traditional teacher-oriented teaching (TOT) strategies. The goal was to determine the impact of AST and TOT on the intrinsic motivation and oral English achievement of non-English major higher vocational students. AST is rooted in self-determination theory (SDT) and strives to cultivate a learning atmosphere that nurtures students' autonomy, competence, and sense of connection. These psychological needs are essential for fostering intrinsic motivation and engagement in learning. By offering students options, encouraging self-directed learning, and providing constructive feedback, it can boost students' enthusiasm, satisfaction, and involvement in the learning experience.

Although there have been studies conducted on the benefits of AST in different academic fields, there is a lack of research specifically addressing the impact on non-English majored students in Chinese architectural higher vocational institutions. Therefore, the current study was conducted to address this research void. Furthermore, AST has been embraced by Chinese researchers in recent years, highlighting the need for further examination of its applicability within the Chinese context. By offering students options, encouraging self-directed learning, and providing constructive feedback, it can boost students' enthusiasm, satisfaction, and involvement in the learning experience. Although there have been studies conducted on the benefits of AST in different academic fields, there is a lack of research specifically addressing the impact on non-English majored students in Chinese architectural higher vocational institutions. Therefore, the current study was conducted to address this research void. Furthermore, AST has been embraced by Chinese researchers in recent years, highlighting the need for further examination of its applicability within the Chinese context.

Literature Review

In this section, the researcher examines learning paradigms and theories that form the theoretical foundation of the study and are pertinent to AST, intrinsic motivation, and second language acquisition. Next, we will examine the current literature and pinpoint any areas where further research is needed.

Learning Paradigms - Constructivism and Social Constructivism

Understanding different approaches to learning is crucial for educators to create and provide meaningful learning experiences for students. These approaches can assist educators in catering to the unique needs of their students, promoting active participation, stimulating critical thinking, fostering collaboration and communication, and adapting to the evolving demands of education (Kumar, 2021). By effectively incorporating the features of relevant learning paradigms, the researcher can develop more comprehensive and efficient autonomy-supportive lessons for students in oral English class.

The theory of constructivism was initially introduced by J. Piaget, a prominent Swiss psychologist who greatly impacted the study of cognitive development during the 1960s (Cherry, 2023). This text delves into the process of learning, the construction of meaning, the formation of concepts, and the essential components of an optimal learning environment. The learning model supported by constructivism places a strong emphasis on the learner, with teachers providing guidance and support (Gray, 1997). Students are information processors and the active knowledge constructors instead of the passive recipients of external stimuli and the objects of indoctrination. They are recommended to use the exploratory method to construct the meaning of knowledge, to take the initiative to collect and analyze relevant information and materials in the process of constructing cognition, to put forward various hypotheses about the problems they learn and try to verify them, and to connect the previous and current knowledge and critically analyze their connections (Gray, 1997). Constructivism believes that the teacher is the helper and facilitator of knowledge construction but not the transmitter of knowledge (McLeod & Adams, 1979).

Teachers have a crucial role in the teaching process. They strive to ignite students' curiosity, foster their motivation to learn, facilitate collaborative learning experiences, encourage critical thinking and meaningful discussions, and encourage students to explore and uncover natural patterns (He, 1997). The focus is on the learners' accumulated learning experience, encouraging them to build upon their previous knowledge rather than relying solely on teachers. This approach allows teachers to cultivate students' motivation and independence by encouraging questioning and critical thinking. The desired results of learning in constructivism align with the main objectives of autonomy-supportive teaching to some extent (Gray, 1997). Constructivism offers valuable insights for instructional designers and teachers in the field of second language teaching. It emphasises the importance of fostering students' motivation, autonomy, and active participation in the learning process. By creating interactive language acquisition environments and implementing creative teaching strategies, educators can enhance students' learning performance (Wang, 2008).

Another learning paradigm that is relevant to the practice of AST is social constructivism. Social constructivism is a branch of constructivism that focuses on the impact of other individuals and cultural factors on an individual's learning and development in the field of education. As an example, the paradigm suggests that people work together to create things and focuses on how an individual's learning is influenced by their interactions within a group (Schreiber & Valle, 2013). Yang and Wilson (2006) suggest that implementing a social constructivist approach in the second language classroom can lead to improved learning outcomes for students. In the field of oral English teaching, Youcef Beghoul and Chelghoum

(2020) emphasised the effectiveness of a social constructivist approach. This approach involves incorporating activities like group work, problem-based learning, and the use of technologies. It allows teachers to act as guides and encourages students to actively participate in the learning process through interactive activities. This occurs in an appropriate educational setting that encourages teamwork and a welcoming ambiance.

As a result, students experience significant improvement in their communication skills, leading to reduced anxiety and increased self-confidence. In the social constructivist approach, the curriculum should be structured around overarching themes that foster curiosity, critical thinking, and teamwork in the pursuit of practical and theoretical knowledge. Goals should be approached in a manner that encourages students to explore their interests and capabilities, while also considering alternative options and considering the individual as a whole - encompassing emotions, personal and cultural values, and cognitive abilities. It is important for students to have ample opportunities to become proficient in the tools and technologies commonly used in their field. This can be achieved through purposeful practice and by fostering a balance between collaborative group work and individual effort. It is crucial to offer students opportunities to utilise different modes of representation as tools for fostering shared and individual understanding. It is important for students to have the chance to showcase their work to their peers and receive valuable feedback from both their peers and their teacher (Wells, 2009).

Self-determination Theory

The theory of self-determination (SDT) was initially put forth by Deci and Ryan in the 1980s (Ackerman, 2018). It has developed a comprehensive theoretical system on human motivation and has found extensive application in diverse practical fields like management, education, and counselling. Typically, the theory explores various forms of motivation and evaluates learners' motivation through active observation (James & Gina, 2015). In the realm of academia, SDT embraces the notion of intrinsic motivation and closely aligns with the idea of learning autonomy. It views individuals as dynamic beings with an inherent capacity for psychological growth and advancement. Self-determination involves the ability to make choices based on personal needs and environmental information, allowing individuals to freely decide on their actions (Cherry, 2021). SDT, as a theory of motivation for learning, focuses on intrinsic human needs and provides a more comprehensive approach to addressing motivation issues (Cherry, 2021). The theory explores the different factors that drive human motivation, acknowledging that individuals can be motivated by their own personal interests and enjoyment, as well as external factors like rewards or social approval. On the other hand, the theory proposes that internal motivation, which comes from within oneself, is more beneficial for long-term commitment and happiness compared to external motivation. It sees intrinsic motivation as a fundamental state where individuals strive to overcome challenges in their environment solely for the satisfaction it brings (Deci & Ryan, 2000).

In the education field, it is suggested that teachers focus on meeting the psychological needs of students, such as competence, autonomy, and relatedness, to enhance their academic performance (Reeve, 2016). This text discusses the process of transitioning from a state of lacking motivation or unwillingness to becoming intrinsically motivated. The ultimate objective is to encourage students to develop a deep and enthusiastic dedication

to learning by ensuring that their psychological needs are met during the learning process (Vergara-Morales & Del Valle, 2021).
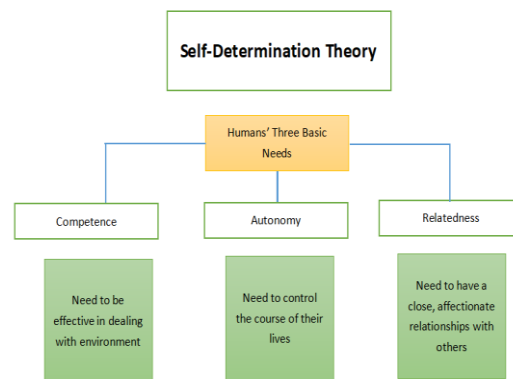
Figure 1: *Three Components in Self-determination Theory.*
Note: From "*Does motivation mediate the relationship between competence perceptions and patient outcomes among individuals with chronic low back pain? A multiple mediation analysis*", Podlog, Dimmock, Miller & Jackson, 2019.

The graph above illustrates the three components of humans' basic needs in Self-Determination Theory (SDT). Competence is the state of feeling capable and effective in one's actions and behaviours. This encompasses the pursuit of personal development, acquisition of new competencies, and attainment of a feeling of accomplishment. Increased feelings of competence are associated with greater likelihood of voluntary participation in activities and persistence in the face of challenges. Autonomy pertains to the desire for individuals to experience a sense of independence and self-determination in their actions. The concept encompasses the experience of having autonomy, authority, and agency to act in accordance with one's personal values and interests. Autonomy in individuals leads to increased initiative, intrinsic motivation, engagement, and well-being. Relatedness refers to the fundamental human need for social connections, a sense of belonging, and meaningful relationships with others. It encompasses the experience of being understood, cared for, and supported by others. Individuals with a sense of relatedness are more likely to experience positive emotions, exhibit cooperative behaviour, and maintain motivation. Previous studies have consistently demonstrated the applicability of SDT across different cultural and linguistic contexts (McEown & Oga-Baldwin, 2019). The theory identifies three fundamental psychological needs that are universally shared by individuals across various cultures and language settings. Fulfilling needs is linked to psychological well-being and motivation. The theory offers a flexible conceptual framework that can be adapted and applied to various cultural contexts. It does not dictate specific behaviours or values, but instead emphasises the fundamental psychological needs that may be expressed differently across cultures while retaining their essential nature. Additional research and exploration will enhance comprehension of the theory and enhance its applicability and explanatory capacity.

Krashen's Theory - the Affective Filter Hypothesis

The Affective Filter Hypothesis, proposed by Stephen Krashen, posits that various affective factors influence second language acquisition (Gonzalez, 2020). This hypothesis is a component of Stephen Krashen's comprehensive theory, which encompasses the Acquisition—Learning Hypothesis, the Monitor Hypothesis, the Input Hypothesis, the Monitor Model, the Affective Filter Hypothesis, and the Natural Order Hypothesis. Krashen (1985) posits that language acquisition takes place when learners are exposed to "comprehensible input," which refers to second-language input that is slightly more advanced than the learner's current language proficiency level. In this context, learners can concentrate on comprehending meaning or information rather than the specific grammatical structure of the second language. Language intake can occur when learners engage with language material slightly beyond their current proficiency level, if it is interesting and abundant. However, a large amount of comprehensible input alone does not ensure effective language learning. Krashen introduced the concept of a "affective filter" to capture the influences on the second language acquisition process.

The research objective of this study focuses on the Affective Filter Hypothesis, which suggests that learners' emotional states, including motivation, anxiety, and self-confidence, have a significant impact on language acquisition (Krashen, 1986). Krashen (1986) argued that learners with high motivation and low anxiety levels experience a reduced "affective filter," facilitating the intake of second language input during the language acquisition process. On the other hand, a significant affective barrier, which is influenced by factors such as fear or lack of motivation, can hinder the process of language acquisition by creating mental barriers that obstruct the intake of information. The hypothesis of the Affective Filter refers to the psychological and emotional factors that can influence language acquisition and learning. The hypothesis and AST are closely linked.

The concept of the emotional filter suggests that the emotional state can influence language acquisition. Tension, anxiety, or unpleasant emotions elevate the affective filter, hindering the reception of new language input and slowing down the language acquisition process. The primary focus of AST is to motivate learners and promote their autonomy in the learning process. Teachers can reduce learners' affective filters by providing engaging, relevant, and comprehensible learning materials and promoting learner autonomy and initiative. An environment that supports autonomy contributes to creating a positive emotional state that enhances students' motivation, particularly intrinsic motivation, and facilitates more effective language input. The correlation between the application of AST in a second language classroom and the reduction of learners' affective filters, as well as the establishment of an environment conducive to language acquisition, is evident.

Past Literature Review

Chinese researchers have conducted studies on the acquisition of oral English by Chinese non-English major higher vocational students. Their research primarily assessed the effectiveness of various teaching methods in improving students' oral English proficiency. The implementation of innovative approaches included the establishment of wisdom classrooms and language laboratories, as well as the integration of role-play activities, peer tutoring, and task-based teaching. The research focused on students in higher vocational settings and involved contributions from scholars such as Cui (2021),

Wang and Gou (2015), Mingyong (2015). However, these studies were limited due to the absence of control groups or empirical research. Lin (2017), Zhou (2022), and Zhong (2010) found that teachers' autonomy supportive behaviours can improve students' autonomy and learning achievement in oral English classes in Chinese higher vocational colleges.

These studies identified a limitation in the research on AST. While they discussed certain autonomy-supportive behaviours of teachers, such as building students' confidence and assigning homework based on their preferences, there is a lack of empirical evidence on the overall effectiveness of AST. In practice, the use of AST as a teaching strategy has not received much attention or recognition from Chinese researchers. The implementation of AST in the entire process of oral English teaching in Chinese higher vocational colleges through quasi-experimental studies has been rare. Research on SDT and intrinsic motivation has been more extensive outside of mainland China, where these concepts were originally developed and widely studied.

Alrabai (2021), Rahmanpanah and Mohseni (2017), Dincer and Yesilyurt (2017), and Clabaugh (2013) investigated the effects of AST on university students' oral English proficiency, motivation, autonomy, and engagement in Saudi Arabia, Iran, Turkey, and the United States, respectively. The existing research consistently demonstrates a positive correlation between AST implementation and the variables. However, it is important to acknowledge that the participants in these studies were predominantly from universities, and their specific majors were not addressed. The impact of autonomy-supportive teaching on students' English learning has been extensively analysed in various levels of schooling, including primary and secondary education. Researchers such as Phithakmethakun and Chinokul (2020), Jiang et al. (2019), and Wu (2020) conducted studies with participants in these levels, and their findings consistently indicated that autonomy-supportive teaching had positive effects on learners' motivation and second language achievement.

Several studies have examined the influence of intrinsic motivation on the English language acquisition of university students. These studies have consistently found that enhancing intrinsic motivation can effectively improve students' speaking proficiency. The study conducted by Alghonaim (2021) examined the correlation between intrinsic motivation and speech production among 148 Saudi EFL college students. The results indicated that the experimental group, which received intrinsic motivation intervention, exhibited a significantly higher rate of speech production in comparison to the control group. Several researchers (Elizabeth & Ena, 2019; Kholifah et al., 2021; Wilona et al., 2010) have investigated the relationship between intrinsic motivation and speaking proficiency in Indonesian university students. Their study aimed to investigate the relationship between these variables and understand the internal motivational factors that influence English language proficiency in a specific context. Naima (2013) conducted a study on the role of intrinsic motivation in developing English speaking proficiency among third-year students at LMD in Algeria.

Naima's findings were consistent with those of other Indonesian researchers, suggesting that intrinsic motivation is more important than extrinsic motivation in improving oral English skills. Ngo et al. (2017) conducted a study comparing the motivation to learn English in non-English major and English major students at a Vietnamese university. The findings revealed that English major students exhibited greater levels of intrinsic motivation compared to the other group. However, both groups

demonstrated intrinsic motivation, with the only distinction being the degree of motivation. The study revealed that the English learning performance, including oral proficiency, improved in both groups when intrinsic motivation was enhanced through specific means. The research findings suggest that internal motivation, driven by personal interest, pleasure, and satisfaction in the learning process, is more strongly and positively associated with speaking proficiency in English learning compared to external motivators. The importance of fostering intrinsic motivation among language learners to enhance their oral communication skills in higher education settings is emphasised.

Theoretical and empirical research on second language learning motivation from the western world has contributed novel ideas and methodologies to the field of Chinese linguistics. The study of motivation for second language acquisition was introduced to the second language teaching community in China in the 1980s. Gui (1986) and Wang (1989) translated and applied motivation theories to their second language teaching research in Chinese. The research conducted during this period in China primarily focused on three aspects: The study focused on three main aspects: the relationship between motivation and its influencing factors, the different types of motivation, and various motivating strategies. The primary strength of these studies was the utilisation of quantitative research methods, which facilitated a systematic and objective approach to measuring the three aspects. The main limitation of these studies was the narrow focus on the motivation of Chinese university undergraduates, neglecting higher vocational students.

The primary distinction between this study and the previously mentioned research lies in the emphasis placed on intrinsic and extrinsic motivation for improving English proficiency. While the latter study considered both types of motivation, this study solely focused on intrinsic motivation due to its theoretical foundation in self-determination theory. Various studies have shown that intrinsic motivation is important for improving oral English skills among non-English major students in Chinese vocational colleges, specifically in the context of oral education. However, it is important to acknowledge certain limitations. The studies did not examine specific motivational strategies or interventions to enhance oral English proficiency. This highlights the need for future investigations to assess the effectiveness of motivational interventions, such as autonomy-supportive teaching, instead of focusing on general advice and discussing the challenges of increasing intrinsic motivation.

The review of past literature indicates that there has been extensive research on the efficacy of autonomy-supportive teaching in international studies, primarily involving university-level participants. Furthermore, there is a lack of research in the Chinese higher vocational context that specifically focuses on intrinsic motivation and its influence on oral English achievement, especially in relation to specific majors. Given the existing gaps in the research, the researcher conducted this study. The research methodology will be discussed in the following section.

Research Methodology

This study employed a quantitative methodology. A quasi-experimental design, specifically a 2 x 2 non-equivalent group design, was utilised to examine the differential impact of AST and TOT on participants' intrinsic motivation and oral English achievement. The research questions and hypotheses were:

Q1: What is the difference in the Chinese architectural higher vocational college students' intrinsic motivation between the AST and TOT strategy?

Ho1: There is no significant difference in the Chinese architectural higher vocational college students' intrinsic motivation between the AST and TOT strategy.

Q2: What is the difference in the Chinese architectural higher vocational college students' oral English achievement between the AST and TOT strategy?

Ho2: There is no significant difference in the Chinese architectural higher vocational college students' oral English achievement between the AST and TOT strategy.

The researcher randomly assigned two out of the six classes to the experimental group, which received AST, while the remaining classes were assigned to the control group, which received instruction from TOT. The participants were freshmen majoring in building construction at an architectural higher vocational college in Southwest China. The total number of participants was 80, with 40 participants in each group. To minimise bias, two classes were instructed by two chosen teachers who met the selection criteria, including equivalent educational background, teaching experience, certification, teaching style, and overall comprehension of the intervention and variables in this study. Following the selection process, Teacher X developed a stronger passion for teaching in an autonomy-supportive classroom. As a result, she was assigned to teach in the experimental group, while Teacher Y taught in the control group. Both teachers are women and proficient in timely communication. The individual possesses a doctoral degree in English Education and has over five years of teaching experience. The study spanned 8 weeks, during which all collected data was processed using the statistical package for Social Science Software (SPSS) 26.

The study's quantitative phase included administering pre-test and post-test measures to evaluate students' intrinsic motivation and oral English achievement. The instruments used were the Speaking Motivation Scale (SMS) and the Speaking Test Grading Scale. The SMS was derived from the Writing Motivation Scale (WMS) created by Yeşİlyurt (2008) and modified by Dinçer (2011) to a five-point Likert scale format. The SMS consists of 31 items, organised into three sections and six subsections. The three main sections include amotivation, extrinsic motivation, and intrinsic motivation. To align with the research objective, the scale excluded the sections on extrinsic motivation and amotivation. Only 11 items related to intrinsic motivation were retained and translated into Chinese, while the English version remained (See Appendix 1). The scale has high to adequate validity and reliability with Cronbach's alphas of intrinsic motivation section equaling to 0.87 (Dincer & Yesilyurt, 2017). The intrinsic motivation section contains 3 subsections which refer to its important dimensions - Knowledge (Item 1, 4, 7), Accomplishment (Item 2, 5, 8, 10), and Stimulation (Item 3, 6, 9, 11), and each item is listed in a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The students were instructed to deliver a 5-minute presentation with visual aids at the start and conclusion of the study period to assess their oral English proficiency. Students have the option to independently choose a topic from 10 chapters in the textbook based on their personal interest. The students' oral English performance was assessed by Teacher X and Teacher Y using a grading scale (refer to Appendix 2) that was initially created by the University of Tennessee in 2007. The researcher further refined the scale after obtaining validation from three EFL experts.

The teaching strategy employed in two study groups reveals distinctions between AST

and TOT in terms of (1) teacher roles, (2) student autonomy and decision-making, (3) motivation and engagement, (4) learning environment and interaction, and (5) goal setting and assessment. In an autonomy-supportive classroom, teachers act as facilitators or guides, offering hints or assistance to students as necessary, and prioritising students' intrinsic motivation and autonomy in their learning. Teachers provide students with increased autonomy and psychological assistance, enabling them to actively engage in setting personal goals, making decisions, and solving problems. This approach aims to cultivate a sense of ownership and responsibility for their own learning. The establishment of a collaborative and interactive learning environment promotes active student participation, idea sharing, and peer-to-peer interactions. The classroom culture emphasises respect, cooperation, and shared decision-making.

In addition, students engage in self-reflection and self-assessment of their learning in AST. The focus is on intrinsic goals and personal development rather than solely on external evaluations. Teachers in TOT play a central role in making decisions about learning goals, activities, and assessments. Students have limited agency in their learning process. An effective teacher-oriented teaching (TOT) approach often utilises external motivators, such as grades, rewards, or punishments, to enhance student engagement. The emphasis is primarily on compliance and meeting external expectations, with a greater emphasis on following instructions, completing assigned tasks, and seeking validation from teachers rather than fostering intrinsic motivation. Many studies have found that TOT is associated with passive behaviour, lack of initiative and motivation, dependence, and non-autonomy among EFL learners. This contradicts the core philosophy of AST (Alrabai, 2021).

The researcher developed the AST lesson plans and received input from Teacher X, who underwent a 2-week AST training session prior to implementing the intervention. The instructional activities in the class included student-centered learning and teaching (SCLT) measures such as Problem-Based Learning, Flipped Classroom, and Cooperative Learning, which were found to have similarities in practice with AST. The similarities are illustrated in the figure below.
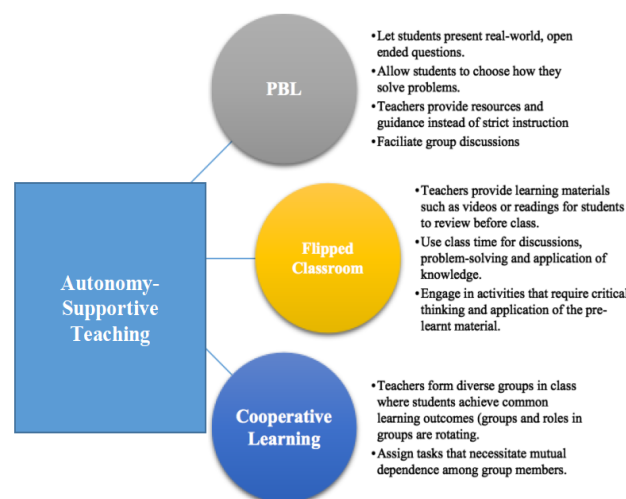

Figure 2: *Similarities among AST, PBL, Flipped Classroom and Cooperative Learning in Practice.*

The lesson plans were designed based on Reeve (2016) Three Critical Motivational Moments of AST Flow, in addition to incorporating SCLT activities. The learning session was divided into three parts: Pre-Lesson (expectations), During Lesson (scaffolding), and post-Lesson (feedback). Teacher X emphasised the use of non-pressuring language and the incorporation of Reeve's six inner motivational resources (Autonomy, Competency, Relatedness, Curiosity, Interest, Intrinsic Goals) throughout the entire process. The AST flowchart and examples of AST and TOT lesson plans on the same topic can be found in appendix 3, 4, and 5 for comparison. Reeve (2016) found that disengagement, misbehaviour, and poor performance are frequently observed in AST classrooms, particularly when students have not demonstrated adaptability during the initial stages of intervention implementation. Teacher X was aware of common categories of difficulties encountered by students and implemented specific measures when she observed similar challenges.

Factors	Solving Approaches
Disengagement	1. Foster autonomy by providing choices and opportunities for students to have a say in their learning. 2. Connect the learning material to students' interests and real-life contexts to enhance their motivation. 3. Incorporate active learning strategies such as hands-on activities, discussions, and group work to increase engagement. 4. Provide regular feedback and recognition for students' efforts to maintain their motivation. 5. Offer varied and stimulating learning experiences to cater to different learning styles and preferences.
Misbehavior	1. Establish clear classroom rules and expectations, and discuss them with students to ensure their understanding. 2. Encourage autonomy by involving students in the development of classroom rules and consequences for misbehavior. 3. Implement proactive strategies, such as positive behavior reinforcement, to encourage and acknowledge appropriate behavior. 4. Address misbehavior privately, focusing on finding the underlying cause and discussing strategies for improvement. 5. Offer additional support or resources for students who may be struggling academically or emotionally, as misbehavior can sometimes stem from underlying issues.
Poor Performance	1. Provide differentiated instruction and personalized support based on individual student needs. 2. Offer extra assistance, such as additional explanations, one-on-one sessions, or peer tutoring, to help students grasp the material. 3. Set clear and achievable learning goals with students, breaking them down into smaller steps to monitor progress. 4. Encourage autonomy by involving students in self-assessment and goal-setting, allowing them to take ownership of their learning process. 5. Provide constructive feedback that highlights areas of improvement while also acknowledging students' strengths and efforts. 6. Offer additional resources or alternative learning strategies to cater to diverse learning styles and abilities.

Figure 3: *Three Common Problems and Solving Approaches in AST.*
Note. From "*Autonomy-supportive teaching: What it is, how to do it*", by Reeve (2016).

Results and Findings

This section provides detailed explanations of the outcomes obtained from each analysis using quantitative data analysis methods. These methods include examining the demographic characteristics of the sample, assessing the normality of the distribution, evaluating homogeneity, and comparing variables between the experimental and control groups.

Below table illustrates the demographic characteristics of the sampling regarding to the gender.

Table 1

Gender Characteristics of the Sampling

Variable	Attribute	Sampling		Control Group		Experimental Group		χ2	P
		n	%	n	%	n	%		
Gender	Male	42	52.5%	22	55.0%	20	50.0%	0.201	0.654
	Female	38	47.5%	18	45.0%	20	50.0%		

Table 1 presents the gender distribution of students in two study groups. The sample consisted of 42 male students (52.5%) and 38 female students (47.5%), totaling 80 students. The researcher used a chi-square test to compare the gender distribution between the experimental and control groups. The control group consisted of 22 male students and 18 female students, while the experimental group included 20 male students and 20 female students. The results suggest that there was no statistically significant difference in gender distribution between the experimental and control groups (p=0.654, p>0.05). The demographic baseline characteristics were deemed equivalent between the experimental and control groups in this study.

The Shapiro-Wilk test was used to assess the normality of variable distributions in the pretest for both study groups. The Levene's Test for Equality of Variances was used to evaluate the homogeneity of the variances. The independent samples T-test was conducted after confirming homogeneity. The results are presented in Table 2.

Table 2

The Results of Shapiro-Wilk Test and Levene's Test (Pre-test)

Variables	Control Group		Experimental Group	
	Shapiro-Wilk	p	Shapiro-Wilk	p
Intrinsic Motivation	0.983	0.798	0.969	0.343
Oral English Achievement	0.976	0.544	0.978	0.598

Variable	Control Group		Experimental Group		Levene's Test		t	p	Cohens' d
	Mean	Sd.	Mean	Sd.	F	p			
Intrinsic Motivation	3.490	0.499	3.561	0.563	0.024	0.877	-0.601	0.549	-0.136
Oral English Achievement	3.529	0.563	3.601	0.632	0.419	0.519	-0.539	0.591	-0.122

According to above data, the p-values for intrinsic motivation (Control Group: W=0.983, p=0.798; Experimental Group: W=0.969, p=0.343) and oral English achievement (Control Group: W=0.976, p=0.544; Experimental Group: W=0.978, p=0.598) in two study groups were all greater than 0.05, indicating that the two variables in both experimental and control groups exhibited a normal distribution in the pretest session. Therefore, Levene's Test for Equality of Variances was able to be employed to assess homogeneity of the variances. As indicated by the mean values, the control group exhibited lower levels in both intrinsic motivation (M=3.490, SD=0.499) and oral English achievement (M=3.529, SD=0.563) in contrast to the experimental group, where intrinsic motivation (M=3.561, SD=0.563) and oral English achievement (M= 3.601, SD=0.632) were reported at higher levels. In addition to it, the test results indicated that the variances of variables in both the experimental and control groups were homogeneous and satisfying the assumption of

homogeneity of the variances for this study, as p-values of intrinsic motivation (F=0.024, p=0.877, d=-0.136) and oral English achievement (F=0.419, p=0.519, d=-0.122) variables were all greater than 0.05 as the threshold of Levene's Test. Therefore, independent samples A t-test was performed to compare the experimental and control groups at the start of the experimental period. The t-values for intrinsic motivation and oral English achievement were -0.601 and -0.539, respectively. The p-values for these variables were 0.549 and 0.591, both greater than the threshold of 0.05.

The analysis of Levene's Test and independent samples T-test for two variables indicated that there was no statistically significant difference between the control group and the experimental group at the beginning of the experiment. The findings suggest that the baseline characteristics of the experimental and control groups in this study were comparable. Following an 8-week implementation of AST, there were notable performance disparities observed between the two study groups. The results obtained from the post-test are presented in Table 3.

Table 3

The Results of Shapiro-Wilk Test and Levene's Test (Post-test)

Variables	Control Group		Experimental Group	
	Shapiro-Wilk	p	Shapiro-Wilk	p
Intrinsic Motivation	0.985	0.859	0.959	0.151
Oral English Achievement	0.971	0.388	0.969	0.327

Variable	Control Group		Experimental Group		Levene's Test		t	p	Cohens' d
	Mean	Sd.	Mean	Sd.	F	p			
Intrinsic Motivation	3.586	0.530	4.265	0.503	0.001	0.974	-5.875	0.000	-1.330
Oral English Achievement	3.615	0.440	4.317	0.378	1.047	0.309	-7.657	0.000	-1.734

According to Table 3, the p-values for intrinsic motivation (Control Group:M=0.985, p=0.859; Experimental Group: M=0.959, p=0.151) and oral English achievement (Control Group:M=0.971, p=0.388; Experimental Group: M=0.969, p=0.327), all reached a higher level than 0.05 in the post test, meaning two variables in both study groups exhibited a normal distribution. Therefore, the Levene's Test for Equality of Variances was conducted. The means of the post-test in the experimental group in intrinsic motivation (M=4.265, SD=0.503) and oral English achievement (M=4.317, SD=0.378) were all higher than that in the control group (Intrinsic Motivation:M=3.586, SD=0.530; Oral English Achievement: M=3.615, SD=0.440). The variances of intrinsic motivation (F=0.001, p=0.974, d=-1.330) and oral English achievement (F=1.047, p=0.309, d=-1.734) in both study groups satisfied the assumption of homogeneity of the variances. At the end of the experiment, significant differences were observed through independent T-test between the control group and the experimental group in intrinsic motivation (t=-5.875, p<0.001) and oral English achievement (t=-7.657, p<0.001). In all cases, the experimental group outperformed the control group, indicating that the group utilizing AST achieved significantly higher end-of-term scores in terms of intrinsic motivation and oral English achievement, compared to the control group receiving TOT. Hypotheses 1 and 2 were thus rejected.

Conclusion

The study's findings have contributed to educational theory and practice by offering evidence-based recommendations for the implementation of AST in Chinese architectural higher vocational colleges. The statistical results indicate that AST, which addresses students' psychological needs of autonomy, competence, and relatedness, has a stronger impact on the variables compared to TOT. This suggests that AST has the potential to improve students' intrinsic motivation and oral English proficiency, and to better prepare them for successful careers in the globalised technical industry. Furthermore, students in higher vocational colleges can fully adopt AST principles through active participation in AST-oriented courses, collaborative work with peers, setting goals, integrating technology, cultivating a growth mindset, and making meaningful contributions to a supportive learning community. The findings enable students to apply AST principles across various subjects and grade levels in education.

Policymakers should explicitly endorse the use of AST in educational guidelines at both national and institutional levels to enhance the overall learning experience. Institutions can better align their policies with AST principles by emphasising the benefits of student-centered approaches. Policymakers should establish monitoring and evaluation mechanisms to assess the implementation of AST in educational institutions, promoting accountability and improvement. Institutions that have successfully implemented monitoring systems can serve as examples for effective evaluation. These systems have led to data-driven improvements in AST practices and subsequent enhancements in student outcomes in oral English achievement. Policymakers play a crucial role in promoting an educational environment that not only acknowledges the potential advantages of AST but also actively promotes and facilitates its widespread adoption. While the explicit endorsement of AST principles in educational guidelines is important, it can be further strengthened by actively promoting these principles at the institutional level. Faculty leaders and members can collectively emphasise the significance of AST in improving oral English learning, offering practical advice on incorporating it into English education policies that are tailored to the specific context of vocational colleges.

The incorporation of AST principles in English education classes in higher vocational colleges in China can be facilitated by teachers, adopting a bottom-up approach that emphasises collaboration, experimentation, and shared responsibility. By promoting autonomy and continuous improvement at the grassroots level, other higher vocational institutions in different regions of China can establish dynamic oral English learning environments that are in line with the successful model observed in the selected school of this study. Teachers who possess high initiative and capabilities can contribute to creating a dynamic and effective oral English learning experience for students. This can be achieved through professional development, awareness of learners' intrinsic motivation enhancement, strategic teaching, and the creation of an inclusive and autonomy supportive learning environment. These efforts aim to enhance students' intrinsic motivation and sustainability in oral English learning.

The research had limitations related to small sample size, limited sample selection, geography, and time constraints. These limitations should be addressed in future studies to obtain more generalised results. Furthermore, since both the experimental and control groups were selected from the same college and were easily accessible to the researcher,

there is a potential risk of data contamination. To mitigate the impact of pollution on the data, both the experimental group and control group were instructed on the same topics as outlined in the textbook.

Notwithstanding these limitations, the study's findings provide valuable insights into the positive effects of AST on learners' intrinsic motivation and oral English proficiency. Additionally, the study offers practical recommendations for Chinese policymakers, higher vocational institutions, teachers, and students who are interested in the effectiveness of AST. The identified constraints offer opportunities for future research to further develop and enhance our current understanding of the application of AST. This includes integrating student-centered learning and teaching activities, constructivist, and social constructivist paradigms, as well as self-determination theory and Krashen's theory. Future studies should prioritise investigating the effectiveness of AST on various subjects in English education, including reading, listening, grammar, vocabulary, and writing, as well as in other academic disciplines and grade levels. The lesson flow and plans developed in this study may inspire individuals interested in AST implementation. The dependent variable can consider extrinsic motivation in addition to self-determination theory. Research on the transition from extrinsic motivation to intrinsic motivation has attracted global interest. However, there is a lack of research in the context of Chinese higher vocational colleges. Furthermore, future research should prioritise the creation of measuring scales that are more suitable for Chinese higher vocational students. The instruments used in this study were initially designed for participants outside of China, specifically university students. Hence, future research may consider redesigning assessment scales to capture a more comprehensive range of precise data.

References

Ackerman, C. E. (2018, 21 Jun). *Self Determination Theory and How It Explains Motivation*. Positive Psychology.com. https://positivepsychology.com/self-determination-theory

Adamma, O. N., Ekwutosim, O. P., & Unamba, E. C. (2018). Influence of Extrinsic and Intrinsic Motivation on Pupils Academic Performance in Mathematics. *SJME (Supremum Journal of Mathematics Education), 2*(2), 52-59. https://doi.org/10.5281/zenodo.1405857

Alghonaim, A. S. (2021). Intrinsic motivation and speech production in Saudi EFL college students. *Journal of Psycholinguistic Research, 50*(5), 1137-1157. https://doi.org/10.1007/s10936-021-09803-1

Alrabai, F. (2021). The influence of autonomy-supportive teaching on EFL students' classroom autonomy: An experimental intervention. *Frontiers in Psychology, 12*, 728657. https://doi.org/10.3389/fpsyg.2021.728657

Cherry, K. (2021, November 08). *What Is Self-Determination Theory? How Self-Determination Influences Motivation*. Verywell Mind. https://www.verywellmind.com/what-is-self-determination-theory-2795387

Cherry, K. (2023, November 13). *Jean Piaget Biography (1896-1980)*. Verywell Mind. https://www.verywellmind.com/jean-piaget-biography-1896-1980-2795549

Clabaugh, D. J. (2013). *Increasing community college basic skills English instructors' use of autonomy supportive instruction to impact students' perceptions of autonomy and engagement* [Doctoral Dissertation, University of San Francisco]. https://repository.usfca.edu/cgi/viewcontent.cgi?article=1062&context=diss

Cui, L. (2021). A study on the construction of wisdom classroom for oral english course in

higher vocational college based on big data and artificial intelligence. In *2021 2nd International Conference on Big Data and Informatization Education (ICBDIE)* (pp. 253-256). IEEE. https://doi.org/10.1109/ICBDIE52740.2021.00063

Dai, H. Y. (2020). A Study on the Teaching Mode of Chinese Higher Vocational English Culture from the Perspective of Multicultural Education. In *2020 2nd Asia-Pacific Conference on Advance in Education, Learning and Teaching (ACAELT 2020)* (pp. 183-186). Francis Academic Press. https://doi.org/10.25236/acaelt.2020.040

Deci, E. L., & Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01

Deng, C. M. (2009). On the effective way of articulation between EGP and ESP courses in higher vocational colleges. *Adult Education in China,* (14), 150-151. http://www.cqvip.com/qk/97691x/200914/31166670.html

Dinçer, A. (2011). *Turkish EFL Speaking Course Students' Motivational Orientations and Their Instructors' Autonomy Support* [Master's thesis, Eğitim Bilimleri Enstitüsü]. https://files.eric.ed.gov/fulltext/ED574884.pdf

Dincer, A., & Yesilyurt, S. (2017). Motivation to Speak English: A Self-Determination Theory Perspective. *PASAA: Journal of Language Teaching and Learning in Thailand, 53*, 1-25. https://files.eric.ed.gov/fulltext/EJ1153672.pdf

Dörnyei, Z. (2009). *The Psychology of Second Language Acquisition*. Oxford University Press. https://global.oup.com/academic/product/the-psychology-of-second-language -acquisition-9780194421973

Elizabeth, E., & Ena, O. T. (2019). Intrinsic and extrinsic motivation of English education graduation students batch 2018 in accomplishing academic performance. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 7*(2), 21-31. https://ejournal.iainpalopo.ac.id/index.php/ideas/article/viewFile/997/1322

Gonzalez, V. (2020, September 22). *What Is the Affective Filter, and Why Is it Important in the Classroom?* Seidlitz Education. https://seidlitzblog.org/2020/09/22/what-is-the-affective-filter-and-why-is-it-important-in-the-classroom

Gray, A. J. (1997). *Constructivist Teaching and Learning* (SSTA Research Centre Report #97-07). Regina, SK, Canada: Saskatchewan School Trustees Association. https://saskschoolboards.ca/wp-content/uploads/97-07.htm

Gui, S. (1986). Analysis of the social-psychology of the English major undergraduates in China. *Modern Foreign Languages,* (1), 1-13. https://www.zhangqiaokeyan.com/ academic-journal-cn_detail_thesis/0201295693352.html

He, K. (1997). Constructivist teaching model, teaching methods and instructional design. *Journal of Beijing Normal University: Social Sciences Edition, 5*, 74-81. https://cit.bnu.edu.cn/docs/2018-07/20180727162413336055.pdf

James, W., & Gina, A. (2015). *International Encyclopedia of the Social & Behavioral Sciences* (Vol. 11). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.10548-3

Jiang, J., Vauras, M., Volet, S., Salo, A.-E., & Kajamies, A. (2019). Autonomy-supportive and controlling teaching in the classroom: A video-based case study. *Education Sciences, 9*(3), 229. https://doi.org/10.3390/educsci9030229

Kholifah, S., Saleh, M., & Faridi, A. (2021). The Effect of Intrinsic Motivation on Students' Improvement of English Speaking Skill. *International Journal of Scientific and Research Publications 11*(10), 228-235. https://doi.org/10.29322/IJSRP.11.10.2021.p11824

Krashen, S. D. (1985). *The Input Hypothesis: Issues and Implications*. New York: Longman.

https://catalogue.nla.gov.au/catalog/2938951

Krashen, S. D. (1986). *Principles and practice in second language acquisition*. https://www.sdkrashen.com/content/books/principles_and_practice.pdf

Kumar, R. (2021). Learning paradigms: A foundation for designing effective learning experiences. *International Journal of Educational Technology in Higher Education, 18*(1), 1-16.

Lin, S. Z. (2017). Application of the self-directed learning teaching model of higher vocational English.

Martin, A. J., Mansour, M., Anderson, M., Gibson, R., Liem, G. A., & Sudmalis, D. (2018). Young people's creative and performing arts participation and arts self-concept: A longitudinal study of reciprocal effects. *The Journal of Creative Behavior, 52*(3), 240-255. https://doi.org/10.1002/jocb.146

McEown, M. S., & Oga-Baldwin, W. Q. (2019). Self-determination for all language learners: New applications for formal language education. *System, 86*, 102124. https://doi.org/10.1016/j.system.2019.102124

McLeod, D. B., & Adams, V. M. (1979). The interaction of field independence with discovery learning in mathematics. *The Journal of Experimental Education, 48*(1), 32-35. https://doi.org/10.1080/00220973.1979.11011710

Mingyong, Z. (2015). Investigation into the use of mobile technology in English teaching and learning in institutes of higher vocational education in Hubei province in China. In *2015 International Conference on Futuristic Trends on Computational Analysis and Knowledge Management (ABLAZE)* (pp. 505-509). IEEE. https://doi.org/10.1109/ABLAZE.2015.7155037

Ministry of Education of China. (2022). *Achievements of reform and development of vocational education in the past ten years: the modern vocational education system with Chinese characteristics has been promoted in depth*. Sina News. https://edu.sina.cn/2022-05-24/detail-imizmscu3073287.d.html?vt=4&pos=108&his=0

Naima, B. (2013). *The Role of Intrinsic Motivation in Developing the Students' Speaking Skill* [Master's thesis, Mila University Center]. http://archives.univ-biskra.dz/handle/123456789/4756

Ngo, H., Spooner-Lane, R., & Mergler, A. (2017). A comparison of motivation to learn English between English major and non-English major students in a Vietnamese university. *Innovation in Language Learning and Teaching, 11*(2), 188-202. https://doi.org/10.1080/17501229.2015.1094076

Phithakmethakun, M., & Chinokul, S. (2020). Autonomy-Supportive English Language Instruction: An Experimental Study on Students' Motivation in English Language Classrooms. *LEARN Journal: Language Education and Acquisition Research Network, 13*(1), 94-113. https://files.eric.ed.gov/fulltext/EJ1242978.pdf

Rahmanpanah, H., & Mohseni, A. (2017). Engagement and Motivation in EFL Classroom: Humanizing the Coursebook or Autonomy-supportive Teaching Climate? *Journal of Language and Translation, 7*(1), 69-88. https://www.sid.ir/fileserver/je/1000420171307.pdf

Reeve, J. (2016). Autonomy-supportive teaching: What it is, how to do it. In *Building autonomous learners: Perspectives from research and practice using self-determination theory* (pp. 129-152). Springer. https://doi.org/10.1007/978-981-287-630-0_7

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology, 25*(1), 54-67. https://doi.org/10.1006/ceps.1999.1020

Sarrazin, P. G., Tessier, D. P., Pelletier, L. G., Trouilloud, D. O., & Chanal, J. P. (2006). The effects

of teachers' expectations about students' motivation on teachers' autonomy-supportive and controlling behaviors. *International Journal of Sport and Exercise Psychology, 4*(3), 283-301. https://doi.org/10.1080/1612197X.2006.9671799

Schreiber, L. M., & Valle, B. E. (2013). Social constructivist teaching strategies in the small group classroom. *Small Group Research, 44*(4), 395-411. https://doi.org/10.1177/1046496413488422

University of Tennessee. (2007). Oral Presentation Scoring Guide. https://www.utm.edu/staff/agathers/documents/Oral%20Presentation%20Scoring%20Guide.pdf

Vergara-Morales, J., & Del Valle, M. (2021). From the basic psychological needs satisfaction to intrinsic motivation: mediating effect of academic integration. *Frontiers in Psychology, 12*, 612023. https://doi.org/10.3389/fpsyg.2021.612023

Wang, C. M. (1989). A Model of Chinese Students Foreign Language Learning. *Foreign Language Teaching and Research,* (4), 47-52. http://www.cqvip.com/qk/96946x/198904/1002901371.html

Wang, H. J. (2019). From an international perspective, this paper examines the policy orientation of China's undergraduate higher vocational education. *Think Tank on China Higher Vocational Education.* http://www.zggzzk.com/redianzixun/shownews.php?id=164

Wang, L., & Gou, W. (2015). Problems Analysis and Solutions of Oral English teaching in Vocational Colleges. In *2015 International Conference on Management, Education, Information and Control* (pp. 426-430). Atlantis Press. https://doi.org/10.2991/meici-15.2015.76

Wang, Q. (2008). Teaching Spoken English under the Guidance of Constructivist Theory. *Journal of Liaoning Institute of Administration,* (1), 101-102. https://www.cqvip.com/qk/82553x/200801/26389664.html

Wei, Y. (1996). *Learning to Survive.* Educational Science Publishing House.

Wells, G. (2009). Appendix I - A Social Constructivist Model of Learning and Teaching. In *Dialogic Inquiry - Towards a Socio-cultural Practice and Theory of Education.* Cambridge University Press. https://doi.org/https://doi.org/10.1017/CBO9780511605895.013

Wilona, A., Ngadiman, A., & Palupi, M. R. (2010). The Correlation between Intrinsic Motivation and Speaking Proficiency of the English Department Students. *Magister Scientiae,* (27), 45-56. https://doi.org/https://doi.org/10.33508/mgs.v0i27.645

Wu, L. (2020). *Providing choices: Enhancing primary students' learning motivation in Hong Kong ESL classroom through autonomy-supportive teaching* https://repository.eduhk.hk/en/publications/providing-choices-enhancing-primary-students-learning-motivation-

Yang, L., & Wilson, K. (2006). Second Language Classroom Reading: a Social Constructivist Approach. *The Reading Matrix, 6*(3), 364-372. https://www.researchgate.net/publication/255587044

Yeşİlyurt, S. (2008). The Relationship between Students' Perceived Autonomy Support and Motivational Patterns in English Writing courses: A Self-determination Theory approach. *Journal of Atatürk University Institute of Social Sciences, 12*(2), 397-412. https://www.acarindex.com/dosyalar/makale/acarindex-1423871680.pdf

Youcef Beghoul, P., & Chelghoum, A. (2020). Use of the Social Constructivist Approach in Teaching Oral Skill to FirstYear BA Students of English. In *The Second National Conference on Language, Mind and Learner's Cognitive Capacities* (pp. 16-31). University of Eloued. http://dspace.univ-eloued.dz/handle/123456789/2808

Zhong, J. (2010). An Analysis of the Cultivation of English Autonomy of Non-English Major Students in Higher Vocational Colleges. *English Overseas, 36.*

Zhou, J. (2022). *Self-directed Learning Strategies for Oral English for Higher Vocational Students.* https://www.baywatch.cn/jiaoyulunwen/yingyukouyulunwen/92917.html

Appendix

Appendix 1

Speaking Motivation Scale 口语学习驱动力调查表
本量表包含了你在参与口语老师提供的口语活动（角色扮演、交流游戏、讨论等）中的内驱力有关的项目。
(This scale contains items related to your intrinsic motives in carrying out the speaking activities (role-play, communication game, discussion ,etc. in/out of the classroom) given by your speaking teacher.)
请根据你对每个陈述的同意程度，标出最合适的数字。
(Please mark the number which is most appropriate for your levels of agreement with each statement）
如：我在课堂内外参与口语活动和任务（如角色扮演、信息差距、拼图活动等），是因为.......。
（* *I do the speaking activities and tasks (role-play, information gap, jigsaw activities, etc) in/out of classroom given by my speaking teacher because.......*）

* *1=strongly disagree   2=disagree   3=moderately agree   4=agree   5=strongly agree*
非常不同意   不同意   一般同意   同意   非常同意

1. 因为在探索新的表达观点和感受技巧的时候，我能体会到极大的乐趣。
Because I experience a great pleasure while discovering new techniques of expression of ideas and feelings through speaking.
 很不同意 Strongly Disagree   ○1   ○2   ○3   ○4   ○5   很同意 Strongly Agree

2. 因为我认为完成复杂的口语任务能够提高我的学业表现。
Because I think carrying out complex speaking tasks will improve my performance.
 很不同意 Strongly Disagree   ○1   ○2   ○3   ○4   ○5   很同意 Strongly Agree

3. 因为我热爱英语口语。
Because I like Speaking in English.
 很不同意 Strongly Disagree   ○1   ○2   ○3   ○4   ○5   很同意 Strongly Agree

4. 因为我在发现新事物时得到了满足感。
Because I get a satisfaction in finding out new things.
 很不同意 Strongly Disagree   ○1   ○2   ○3   ○4   ○5   很同意 Strongly Agree

5. 因为我在完善自己的外语口语能力的时候感到快乐。
Because I have a pleasure while I am perfecting my abilities in foreign language speaking.
 很不同意 Strongly Disagree   ○1   ○2   ○3   ○4   ○5   很同意 Strongly Agree

6. 因为它让我开心。
Because it makes me happy.
很不同意 Strongly Disagree　　　　　○1　　　　　○2　　　　　○3　　　　　○4　　　　　○5　　　　　很同意 Strongly Agree

7. 因为我对了解外语口语有一种兴奋感。
Because I have an excitement in knowing more about the foreign language speaking.
很不同意 Strongly Disagree　　　　　○1　　　　　○2　　　　　○3　　　　　○4　　　　　○5　　　　　很同意 Strongly Agree

8. 因为当我掌握了高难度的口语活动时，我感到了很大的个人满足感。
Because I feel a lot of personal satisfaction when I master difficult speaking activities.
很不同意 Strongly Disagree　　　　　○1　　　　　○2　　　　　○3　　　　　○4　　　　　○5　　　　　很同意 Strongly Agree

9. 因为我发现它很有趣。
Because I think it is interesting.
很不同意 Strongly Disagree　　　　　○1　　　　　○2　　　　　○3　　　　　○4　　　　　○5　　　　　很同意 Strongly Agree

10. 因为当我在英语口语方面做得比我想象的好时，我感觉很好。
Because I feel good when I do better than I though in Speaking English.
很不同意 Strongly Disagree　　　　　○1　　　　　○2　　　　　○3　　　　　○4　　　　　○5　　　　　很同意 Strongly Agree

11. 因为当我参与到口语活动中时，我感到非常兴奋。
Because I feel a great excitement when I am involved in speaking activities.
很不同意 Strongly Disagree　　　　　○1　　　　　○2　　　　　○3　　　　　○4　　　　　○5　　　　　很同意 Strongly Agree

Note. "*Turkish EFL Speaking Course Students' Motivational Orientations and Their Instructors' Autonomy Support*", by Dincer, Yesilyurt & Goksel, 2011.

Appendix 2

Speaking Test Grading Scale

Student Name: ☐ pretest   ☐ posttest

	Rating Scale	Poor	Fair	Average	Good	Excellent
Content		1	2	3	4	5
1	Topic appropriate for audience (holds listeners' attention, appropriate level for education and expertise)					
2	Knowledge of topic (depth of knowledge, well-researched)					
3	Evidence of support and clear reasoning (supporting details, literature cited is thorough and relevant)					
4	Professional and thorough discussion (polite, fields questions/ comments accurately)					
Organization		1	2	3	4	5
5	Development of idea/clarity of purpose (relevance, stated hypothesis or question)					
6	Clear, engaging introduction, body and conclusion					
7	Logical sequence/smooth flow of ideas (smooth transitions, easy to follow thought process)					
8	Relevant supporting details and examples					
Visual Aids		1	2	3	4	5
9	General Appearance of aids (background design and color, spacing, layout)					
10	Text (size, font, concise & appropriate wording, grammar, spelling)					
11	Graphics (relevant, informative, complete, appealing)					
Delivery		1	2	3	4	5
12	Eye Contact					
13	Volume, rate and intonation of speech (too loud or soft, too fast or slow, too many interjections . . . um. . .um, monotone voice, etc.)					
14	Vocabulary, pronunciation, articulation					
15	Body language (posture, gestures, facial expressions)					
16	Personal Appearance (appropriate dress, hygiene)					
17	Enthusiasm for topic					
18	Prepared/practiced/rehearsed					

Note. From *"Oral Presentation Scoring Guide"*, by University of Tennessee (2007).

Appendix 3

Autonomy Supportive Teaching Flow in oral English Class

Phases	Task	(1) Purpose	(2) General Applications
Pre-Lesson (Expectations)	**1. Class commences** (1) Creating a welcoming atmosphere and good interpersonal relationship • Greet students and show genuine interest in their well-being when they enter the classroom **(Relatedness)** • Engage in casual conversations to build positive classroom climate **(Relatedness)** **2. Introduction/ Warm-up Activities** (1) Foster students' inner motivational resources and show patience for self-paced learning • Briefly explain the objectives of the lesson, notify students their autonomy, competence, relatedness, curiosity, interest and intrinsic goals are supported in class, and learn students' previous knowledge on similar topic **(Curiosity)** • Warm-up activities are designed by allowing students to choose and share information/opinions in various forms (individually/in group; written reflection/verbal discussions) **(Autonomy)** **3. Explain Rationale Objectives** (1) Help students to clarify why to engage in class (2) Explain to students why the teacher sets class like this, why these activities and learning content are beneficial for their improvement **(Interest/Intrinsic Goals)** **4. Setting Goals** (1) demonstrate students' good leadership of decision making in learning (2) Set goals at the start of class by engaging students in discussion about their learning goals and what they hope to achieve, their reflection on their strengths, areas for improvement and personal interest in oral English **(Intrinsic Goals and Interest)**		
During Lesson (scaffolding)	**1. Demonstration** (1) Give clear instruction to students and offer help when they need • Provide choices by offering options for different scenarios, techniques, or strategies to cater to students' individual interests and learning needs. **(Autonomy and Interest)** • Invite input and collaboration by inviting real-word and open-end questions, comments, and suggestions from students to foster a collaborative and inclusive learning environment, and engaging in a dialogue with students, seeking their perspectives and insights **(Relatedness and Competence)** • Model the thinking process of students to help them understand the underlying reasoning and strategies involved **(Competence)** • Encourage student observation and analysis, and provide guidance on what to look for, such as specific cues, non-verbal communication, or problem-solving strategies. **(Autonomy and Curiosity)**		

	2. Practice and Games (1) Knowledge reinforcement and interest/curiosity enhancement ● Provide opportunities for students to practice the demonstrated skill immediately after the demonstration **(Competence)** ● Create a supportive environment where students can experiment, make mistakes, and receive constructive feedback **(Autonomy and Relatedness)** ● Encourage students to apply their observations and insights from the demonstration to their own practice **(Autonomy and Competence)** ● Arrange peer evaluation session and ask students provide constructive feedback and suggestions to each other for improvement. **(Relatedness and Competence)**
Post-Lesson (feedback)	**1. Debriefs/questions/feedbacks** (1) provide constructive feedback, promote autonomy and intrinsic motivation and encourage reflection and growth ● positive reinforcement by highlighting accomplishments of students and recognizing their efforts **(Relatedness)** ● specific feedback on skills and behaviors and encourage self-assessment **(Autonomy and Intrinsic Goals)** ● follow-up and ongoing support - assign homework/logs; regular check-ins **(Autonomy and Competence)** ● Set homework to extend learning of students and offer resources to students for previewing next class **(Autonomy and Competence)**

Appendix 4

Autonomy-Supportive Teaching - Lesson Plan

Improving Oral Skills in English Presentation	
Class Type	Lecture
Duration	120 minutes
Teaching Objectives	To provide students with the necessary knowledge, techniques, and practice opportunities to enhance their oral skills in English presentation. The goal is equipping students with the skills they need to plan, deliver, and engage an audience during English presentations effectively with clear and useful visual aids.
Learning Objectives	1. Identify and explain important components of a presentation like content, organization, delivery and visual aids. 2. Develop effective content organization skills and be able to structure presentations in a logical and coherent way. Supportive details and a good flow of idea can be demonstrated. 3. Develop confidence and overcome public speaking anxiety 4. Be able to rehearse and practice individually or in group 5. Be able to self-evaluate own presentations and give feedbacks to the peer.
Learning Aids	1. Multimedia and Blackboard 2. Speaking Test Grading Scale 3. Handouts with Presentation Tips and Guidelines 4. Self-evaluation Form and Checklist
Teaching Strategy	Autonomy-Supportive Teaching

Lesson Plan-Autonomy Supportive Teaching

Phases	Task	Specific Applications	Time Length (as reference)
Pre-Lesson (Expectations)	1.Class Commences	1. Starting class by greeting the students, ask questions like "how are you?" " is everything doing good"? "any problems do you have from last class and homework?"	5mins
	2. Introduction /Warm-up Activities	1.Briefly introduce the topic of the lesson and explain learning objectives to students with encouraging words like " I have confidence that you will be the best learners today". Ask students if there is ability they want to achieve. 2.Engage students by asking them to share their previous experiences with presentations and any challenges they faced. Explain the flow and activities of this lesson. Use the sentences like "here is the plan for today. Does that sound like a good use of our time? Any suggestions? Is there anything in this lesson that we might improve?". 3. Start the warm-up activity: show the video named *"good presentation vs.bad presentation"* to students and let them work in pair or individually to summarize the key features of a good and bad presentation. Students can report ideas verbally or as written reflection (the teacher helps with reading if students agree with).	15mins

	3.Explain Rational Objectives	1.Ask students to summarize why learning to give a good English presentation is important. 2.Notify students group work is the major activity in this lesson. While for students who prefer independent work, the teacher offer autonomy to them to do so, but they still need to participate in group evaluation.	10mins
	4. Setting Goals	1.Distribute self-evaluation form and checklist to students. Students mark what knowledge they want to master from the lesson at the start of the lesson. For example, among four elements of presentation *"delivery" "organization" "content" and "visual aids"*, or three primary types of presentations *"Informative Presentation", "Persuasive Presentation", and "Demonstrative Presentations"*, they can mark any of these items according to their personal interest and previous self-evaluated competence. The rest of unmarked items are encouraged to be mastered after class through homework or self-learning.	5mins
During-Lesson (Demonstration)	1.Demonstration	1.Show students 3 interesting but informational video clips about 3 primary types of presentations: *"Informative Presentation", "Persuasive Presentation", and "Demonstrative Presentations"*. 2.Provide students with handouts that contain tips and guidelines for effective presentations of each type. Ask students to find the additional features of each type of presentations and write on the handouts, share with the class. Provide students guide or hint if needed. 3. Offer a general range of presentation topics to students. Divide the class into small groups or as individual, and each group/individual determines a specific presentation topic that interests them. Encourage students to brainstorm and outline their presentation together.	35mins
	2.Practice	1. Allow each group/individual to plan and practice their presentations autonomously, providing guidance and support as needed. 2. Circulate among the groups, offering constructive feedback, asking open-ended questions, and encouraging students to reflect on their progress. 3. Emphasize the importance of self-reflection and self-evaluation during the practice session. 4. Arrange a peer feedback session, where each group presents their practice presentation to another group. 5. Distribute the presentation evaluation rubric and ask students to assess their peers' performances based on the given criteria. Students are able to give constructive suggestions or comments to each other.	35mins

| Post-Lesson (feedback) | Debriefs/questions/feedbacks | 1. Conduct a brief whole-class reflection on the practice session, asking students to share their thoughts, challenges, and areas of improvement. Students are encouraged to come up with and share solutions to challenges in class.
 2. Approve and praise engagement and improvment of all students in the lesson. Ask about their suggestions to this and next lesson on activities, teaching aids, content and etc.
 3. Provide additional resources or techniques for individual practice, such as online tutorials, recorded presentations for self-evaluation, or recommended reading materials. Students are encouraged to select any resources to self learn after class.
 4. Assign Homework. Students are encouraged mark on checklist what they learn after class and write down challenges or questions encountered. Teacher solve problems of students at the beginning of next class. | 15mins |

Appendix 5

Traditional Teacher Oriented Teaching - Lesson Plan

Improving Oral Skills in English Presentation	
Class Type	Lecture
Duration	120 minutes
Teaching Objectives	To provide students with the necessary knowledge, techniques, and practice opportunities to enhance their oral skills in English presentation. The goal is equipping students with the skills they need to plan, deliver, and engage an audience during English presentations effectively with clear and useful visual aids.
Learning Objectives	1. Identify and explain important components of a presentation like content, organization, delivery and visual aids. 2. Develop effective content organization skills and be able to structure presentations in a logical and coherent way. Supportive details and a good flow of idea can be demonstrated. 3. Develop confidence and overcome public speaking anxiety 4. Be able to rehearse and practice individually or in group 5. Be able to self-evaluate own presentations and give feedbacks to the peer.
Learning Aids	1. Multimedia and Blackboard 2. Speaking Test Grading Scale 3. Handouts with Presentation Tips and Guidelines
Teaching Strategy	Traditional Teacher Oriented Teaching

Lesson Plan-Traditional Teacher Oriented Teaching

Phases	Task	Specific Applications	Time Length(as reference)
Pre-Lesson	1.Introduction	1. Start the lesson by explaining the importance of oral skills in English presentations and how they contribute to effective communication. 2. Share personal experiences and examples of successful presentations to engage students and highlight the desired outcome.	10mins
	2.Warm-up Activities	1.Briefly introduce the topic of the lesson and notify students learning objectives. 2.Explain the flow of and activities in this lesson. 3.Start warm-up activity: show the video named "*good presentation vs.bad presentation*" to students and let them work in pair to summarize the key features of a good and bad presentation. Students report ideas verbally.	15mins
	3.Explain Rational Objectives	1.Ask students to summarize why learning to give a good English presentation is important. 2.Notify students all in-class activities need to be finished in groups.	10mins

During-Lesson	1. Teacher-led Instruction	1.Show students 3 interesting but informational video clips about 3 primary types of presentations: "*Informative Presentation*", "*Persuasive Presentation*", *and "Demonstrative Presentations"*. 2. Distribute Handouts with Presentation Tips and Guidelines to students, and present a teacher-dominated lecture strictly following the handouts on the key elements and features of a successful presentation on each type of presentation, covering topics such as content, organization, visual aids, delivery. The teacher demonstrates each item in-detailed on the handout, complimentary is not needed from students. 3. Assign a selected presentation topic to students. Divide the class into small groups, each group brainstorms and outlines their presentation together.	35mins
	2.Practice	1. Allow each group plan and practice their presentations. 2.Circulate among the groups, monitor their practice, offer guidance, answer questions, and ensure that students understand the presentation requirements and expectations. 3.Emphasize the importance of presentation scores that will influence students' academic performance in the semester. 4.Arrange a peer feedback session, where each group presents their practice presentation to another group. 5.Distribute the presentation evaluation rubric and ask students to assess their peers' performances based on the given criteria. Students are able to give constructive suggestions or comments to each other.	40mins
Post-Lesson	Summary and Conclusion	1.Conduct a brief summary to this lesson and key knowledge. 2. Ask about challenges and problems students encountered in lesson and give them direct solutions. 3.Assign Homework. The teacher marks the grades directly.	10mins