

# **Integrating Western Andragogy in Chinese EFL Instruction: Cultural Implications, Teaching Practices, and an AI-Mediated Framework**

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## **Abstract**

Generative AI is emerging as a transformative tool in foreign language education because it can enable natural language interaction, adaptive feedback, and personalized learning. In China, where English as a Foreign Language (EFL) education is closely tied to national development and individual mobility, interest in AI-enhanced learning is growing. Yet adult EFL instruction remains shaped by teacher-centered traditions, exam pressures, and hierarchical norms, even as learner-centered and andragogical practices gain attention. This article analyzes the cultural and systemic context of adult EFL in China and reports survey findings on Chinese EFL teachers' orientations toward teacher-centered versus andragogical approaches. Results suggest that while learner-centered elements appear, instruction is still predominantly teacher-directed. To address this gap, the article proposes the AI-Mediated Andragogical EFL framework, integrating andragogy, sociocultural theory, self-regulated learning, and formative feedback theory to guide coherent AI use. The framework positions teachers as learning orchestrators and identifies contextual constraints shaping implementation.

**Keywords:** Andragogy, Confucianism, English as a Foreign Language (EFL), Flexibility, Knowledge Transmission, AI

## **Introduction**

In the quest for effective and efficient ways of learning foreign languages, digital tools have played a pivotal role. The latest in the long list of digital tools helpful for language learning is AI. Made possible by advancements in large language models, natural language processing, and machine learning, AI tools are emerging as a transformative tool in many human pursuits including foreign language learning. At the center of the transformative potential of AI is one stunning feature of generative AI tools such as ChatGPT – that humans can interact with the digital tool through language, in a natural, conversational way. As Bill Gates observes, this is “the most important advance in technology since the graphical user interface” (Gates, 2023). Conceivably, for language learning where the objective is to be able to converse meaningfully in another language, a tool that enables interaction and learning through conversation which mimics human conversation and has a foundation of extensive knowledge is likely to be most helpful. A perusal of contemporary literature on language learning shows an increasing interest and exploration of AI for foreign language learning.

In China, where there are ongoing efforts to ensure adequate English Education standards, attention is also turning to AI as a tool for learning English as a Foreign Language (EFL).

Additionally, much of the EFL teaching in China is in adult learning environments, making andragogy a suitable learner-centered philosophy for guiding EFL teaching in China.

In the present article, the authors discuss EFL in China providing context for the focus on EFL in China, exploring andragogy and its applicability to EFL, highlighting the potential of AI to support andragogical approaches to EFL. A conceptual framework for AI-Mediated Andragogical EFL emerges from the discussion and is presented with the aims of stimulating thinking for further development of AI use in EFL in China and also highlighting the need for proposing, testing and evaluating approaches to AI in EFL that are grounded in theory and are structurally sound.

To strengthen the logic of the paper, the survey findings are presented first as contextual evidence of current instructional orientations, and the proposed AI-mediated framework is then introduced as a theory-informed response to the gaps identified.

### Research Questions

RQ1: To what extent do Chinese university EFL teachers report instructional practices aligned with andragogical principles (e.g., climate building, relating to experience, assessing needs, participation, and flexibility) versus traditional teacher-centered practices?

RQ2: Which andragogy-related dimensions are comparatively strongest and weakest in the reported instructional profile of Chinese university EFL teachers?

RQ3: How can the observed instructional profile and contextual constraints inform a theory-grounded AI-Mediated Andragogical EFL framework to guide coherent integration of generative AI in adult EFL instruction in China?

### English Language Education in China

English is the native language in just a handful of countries, but English is spoken by more people in the world than any other language and has become the ‘lingua franca’, used globally to overcome language barriers to communication. English proficiency is now seen as key for upward mobility, particularly in securing positions in foreign enterprises (Brown & Lee, 2018).

Ministry of Education of the People’s Republic of China (2022) seeing English as indispensable to China’s place in the global community, China’s government is investing significant effort into ensuring adequate English education standards. China’s Ministry of Education released, in 2022, the most recent English curriculum Standards for Compulsory Education. The revised curriculum rests on four pillars for English language learning: language ability, cultural awareness, critical thinking and learning ability (Yu et al., 2023). Echoing the nature of broader education reform in China, experiential learning, application through practice and creating through skills transfer are key elements of the educational theory underpinning the English curriculum . “Integration of instrumentality and humanity” characterizes the English curriculum and learning English is seen as facilitating cultural and cross-cultural understanding and communication, subsequently nurturing international perspectives (Zou et al., 2024).

English learning is a required subject in compulsory education and in higher education (Fan, 2023) China's strategies for developing English competency in its citizens is not restricted to the compulsory years of schooling. Teaching English as a foreign language is also popular in higher education and other adult learning contexts. The perspectives on English language learning and curriculum expressed by the ministry of education for English language learning in compulsory school permeate through all education levels of English as a foreign language (EFL) teaching. While teaching English to youngsters in the compulsory education years is crucial to embedding English proficiency in the country, adult English competencies provide more immediate economic and workplace benefits because adults are already participating (or about to participate) in the global community. With emphasis on the peculiarities of effective *adult* learning, the theory of andragogy comes into view as a useful theoretical frame to guide the teaching of language in the adult learning settings in China. Andragogy encapsulates the principles of student-centered (active, experiential and meaningful learning) learning (which are already espoused in China's English curriculum for compulsory schooling). Western andragogical approaches—extensively documented in adult learning literature for their capacity to enhance learner autonomy, critical thinking, and problem-solving—emphasize critical thinking and student-centered learning, differing sharply from traditional Chinese teaching, which focuses heavily on rote memorization (Cortazzi & Jin, 1996).

#### *Western and Chinese education approaches*

Western and Chinese educational approaches differ significantly in philosophy and practice. In Western education, there is a clear distinction between pedagogy, which is teacher-directed for children, and andragogy, which emphasizes self-directed learning for adults (Knowles, 1970; Knowles et al., 1998). Western pedagogy focuses on teacher-set objectives and structured learning paths, while andragogy encourages learners to take active roles, fostering critical thinking and collaboration (Coryell & Baumgartner, 2024). Learners are expected to engage with material independently, promoting self-motivation and reflective practices (Fleming, 2023; Merriam & Baumgartner, 2020).

Chinese education, in contrast, prioritizes knowledge transmission. Teachers are seen as the primary source of knowledge, emphasizing memorization and textual analysis over interactive learning (Paine, 1992). This traditional model aligns with Confucian values, where the teacher's authority and expertise are central, and students are expected to learn by absorbing information rather than questioning or negotiating content (Anderson et al., 2001).

To understand these different approaches, frameworks like Bloom's Taxonomy and Webb's Depth of Knowledge (DOK) offer insight into how learning is structured. Bloom's Taxonomy is hierarchical, focusing on cognitive skills ranging from basic recall to critical thinking and creation (Bloom, 1956). DOK, on the other hand, emphasizes the complexity of tasks and the contexts in which students must apply their knowledge, from simple recall to extended reasoning (Hess, 2009). Both models are useful in designing educational experiences but approach student learning from different angles: Bloom's measures cognitive processes, while DOK focuses on contextual depth.

The contrast between these two educational systems is shaped by their historical and cultural roots. Western education promotes student empowerment through collaboration and interaction, while Chinese education maintains rigorous academic standards and hierarchical teacher-student relationships. These distinctions raise important questions about the potential for integrating Western andragogical principles in Chinese education, where cultural norms may resist more flexible, learner-centered methods (Wang & Farmer, 2008).

Despite rapid economic development and globalization, Confucian values still strongly shape educational practices in China. Confucianism, which has influenced Chinese society for centuries, values rigorous study and the acquisition of knowledge (Chai & Chai, 1965). This cultural backdrop underpins teaching practices, with teachers regarded as authorities expected to impart extensive knowledge (Chai & Chai, 1965).

Confucianism's emphasis on hierarchical structures conflicts with Western andragogy, which promotes egalitarian teacher-student relationships and encourages dialogue (Zhang, 2017). In traditional Chinese classrooms, the teacher serves as a gatekeeper of knowledge, while questioning authority is often seen as disruptive (Gu, 2001). The high-stakes exam system, which heavily influences social mobility, also reinforces teacher-centered approaches focused on memorization and exam preparation (Biggs, 1996). This environment leaves little room for andragogical methods that emphasize self-directed learning and critical thinking (Tang & Biggs, 1996).

Furthermore, the Confucian reverence for established knowledge and past traditions fosters resistance to Western teaching innovations. Teachers often perceive concepts like learning contracts or curricular negotiation as incompatible with their cultural values (Gao & Watkins, 2001). The fear of "losing face," a critical aspect of Chinese social interaction, discourages teachers from adopting unfamiliar teaching methods that could expose them to criticism (Bond, 2010).

While some teachers may recognize the potential benefits of learner-centered approaches, many were hesitant to adopt them due to cultural expectations and the perceived risks associated with deviating from traditional methods (Li, 2013). The findings highlighted the importance of culturally sensitive educational reforms that respect these deep-rooted influences

Chinese educators often resist Western andragogical approaches, which focus on student-centered learning and teacher facilitation. In China, the hierarchical teacher-student relationship is key to maintaining discipline and preparing students for rigorous national exams like the Test for English Majors (TEM) (Boyle, 2000; Lennon, 2021). These exams, akin to the TOEFL, emphasize an exam-oriented approach, favored by Chinese educators and students alike (Boyle, 2000).

The preference for teacher-centered methods is ingrained in Chinese educational culture, reflecting Confucian values that emphasize the teacher's role as a moral and intellectual guide (Jin & Cortazzi, 1998). This approach ensures classroom order and prepares students for high-stakes assessments, which dictate their future academic and professional opportunities (Wang, 2016).

Western strategies that emphasize collaboration, negotiation of learning objectives, and learning contracts face skepticism in China. The centralized curriculum and exam-focused culture prioritize rote memorization and mastery of content, which educators believe fosters a deeper comprehension essential for passing rigorous exams (Biggs, 1996). In contrast to Western critiques of rote learning as superficial, Chinese educators argue that it promotes disciplined and thorough knowledge retention, which they view as foundational for higher-order thinking (Biggs & Watkins, 2001). Both teachers and students share concerns about adopting Western methodologies. Chinese teachers fear that incorporating Western approaches would undermine their authority and expose them to criticism (Boyle, 2000). Likewise, adult students, accustomed to a structured and hierarchical environment, find the shift to student-centered learning uncomfortable.

Interestingly, although Western andragogy contrasts sharply with the tradition of teacher-centered practices in China, there is an apparent shift towards integrating Western student-centered teaching methods in the design and delivery of the EFL curriculum in China. This observation led the authors to explore the extent to which Chinese EFL teachers use andragogical methods, gaining some insights into how Chinese teachers perceive and respond to andragogical methods versus traditional approaches.

### **Andragogy and Traditional Teacher-Centered approaches among Teachers of English in China**

China's pursuit of the Four Modernizations has elevated English proficiency as a key to accessing Western knowledge (Boyle, 2000; Lennon, 2021). This shift, coupled with the rise of a prosperous middle class, has boosted the demand for English education and increased the status of English teachers, often seen in influential roles, including within the Chinese Communist Party (Dong, 1996). The CCP tightly controls educational content, standardizing textbooks like *Junior English for China* and *College English for Students*, aligning them with national goals (Boyle, 2000).

Confucianism still profoundly influences Chinese education, emphasizing knowledge acquisition and respect for authority (Chai & Chai, 1965). This cultural backdrop contrasts with Western andragogy, which values egalitarianism and student autonomy (Zhang, 2017). In China, teaching remains hierarchical, with teachers expected to impart knowledge rather than facilitate dialogue, a practice reinforced by a high-stakes exam system that rewards memorization (Biggs, 1996). This makes implementing Western methods, such as learning contracts or self-directed learning, challenging (Gao & Watkins, 2001).

Despite this, some educators are adopting blended approaches, combining traditional methods with elements of andragogy, like collaborative projects. These hybrid models offer a potential middle ground that respects China's educational heritage while introducing more interactive elements (Li & Wegerif, 2014). Future reforms should consider the cultural and practical needs of the Chinese context, exploring ways to balance traditional and student-centered methods. This led the authors to explore further, gaining some insights into how Chinese teachers perceive and respond to andragogical methods versus traditional approaches. We employed survey methods because survey research allows generalizing findings from a sample to a larger population,

making it suitable for studying English teachers in China (Creswell & Creswell, 2022). Given the large number of English teachers and the cost-effectiveness of online surveys, this method was used to gather data (Choi & Torrisi-Steele, 2024). The researchers developed a 50-question survey based on Conti's (1983) Principles of Adult Learning Scale (PALS), tailored to assess teaching practices at eight universities of foreign languages. Conti's PALS was adapted to evaluate Chinese educational settings, incorporating both andragogical (student-centered) and pedagogical (teacher-centered) approaches (Conti, 1983). Modifications included reflecting rote learning and teacher-directed instruction. The survey used a 6-point Likert-type scale (0–5), where 0 indicated 'strongly disagree' and 5 indicated 'strongly agree,' with a high alpha reliability of .94. Seven factors were measured: Learner-Centered Activities, Personalizing Instruction, Relating Experience, Assessing Needs, Climate Building, Participation, and Flexibility. A random sample of 200 teachers participated, with 168 completed surveys returned. Data were analyzed using SPSS 28.0 software. Missing responses were handled using pairwise deletion for exploratory factor analysis and listwise deletion for regression models; item-level missingness was low and sensitivity checks indicated that the primary results were robust to alternative missing-data handling approaches. Study participants included lecturers, associate professors, and professors from major universities in cities like Beijing, Shanghai, and Guangzhou. These educators primarily teach courses focused on grammar, vocabulary, and national exam preparation, favoring teacher-centered methods (Boyle, 2000).

### **Participants and Recruitment**

Participants were recruited from publicly available faculty directories and departmental rosters at the eight participating universities. Using this sampling frame, we generated a simple random sample of 200 university-level EFL teachers through a random number selection procedure applied to the compiled faculty list. Eligibility criteria required participants to be currently teaching English as a Foreign Language at the undergraduate or graduate level during the data collection period. Faculty members not actively teaching EFL courses or serving exclusively in administrative roles were excluded.

Invitations were distributed via institutional email during the Spring 2024 semester, with two follow-up reminder messages sent at one-week intervals. A total of 168 teachers completed the survey (response rate = 84.0%). To assess potential nonresponse bias, we compared early and late respondents on key demographic variables and primary scale scores; no statistically meaningful differences were observed, suggesting limited nonresponse bias.

For missing data, omitted responses were handled using pairwise deletion in the factor analysis and listwise deletion in regression models. Item-level missingness was low across variables, and sensitivity analyses indicated that the main results were robust to alternative missing-data handling procedures.

Internal consistency was examined for each of the seven PALS-derived factors using Cronbach's alpha coefficients. Reverse-coded items were recoded prior to analysis to ensure consistent directionality of scale scores. Factor scoring followed the original item-to-factor structure derived from the adapted instrument.

Exploratory factor analysis employed principal axis factoring with oblique rotation to account for expected correlations among factors. Factor retention decisions were based on eigenvalues greater than 1.0, inspection of the scree plot, and interpretability of the factor structure. Sampling adequacy was evaluated using the Kaiser–Meyer–Olkin measure and Bartlett’s test of sphericity. Communalities and variance explained were examined to assess model fit and interpretability.

For the regression analysis, the dependent variable was defined as the composite instructional profile index derived from aggregated factor scores. Although individual items were measured on Likert-type scales, composite scale means were treated as continuous variables based on their distributional properties and common practice in educational research. Robustness checks using standardized factor scores yielded substantively similar results. Regression models report unstandardized coefficients, standard errors, and diagnostic statistics, including variance inflation factors (VIF) to assess multicollinearity and tests for heteroskedasticity and influential observations. All analyses were conducted using SPSS Version 28.0.

To present these findings clearly, Tables 1–8 summarize teachers’ mean responses across the seven PALS-derived factors; brief interpretations follow each table.

Table 1: Mean Responses - Chinese Teachers of English on Factor 1

<b>Factor 1: Learner-Centered Activities Responses</b>	<b>M</b>	<b>SD</b>
2. I use appropriate forms of disciplinary action when it is needed.	2.33	1.36
4. I emphasize teaching knowledge in class.	3.09	1.33
11. I identify the educational objectives of each of my students.	2.59	1.12
12. I plan units that differ as widely as possible from my students’ socioeconomic backgrounds.	1.79	0.89
13. I try to motivate students by confronting them during group discussions with their classmates.	2.58	1.14
16. I use one basic teaching method because I have found that most adults have similar learning styles.	2.39	1.07
19. I use written tests to assess the degree of academic growth rather than to indicate new directions for learning.	2.49	0.88
21. I use what history has proven that adults need to learn as my chief criteria for planning learning episodes.	2.19	1.14
29. I use methods that foster quiet, productive desk work.	2.11	1.09
30. I use tests as my chief method of evaluating students.	1.83	1.11
38. I use materials that were originally designed for students in elementary and secondary schools.	3.20	1.14
40. I measure a student’s long-term educational growth by comparing his or her total achievement in class to his or her expected performance as measured by national norms from standardized tests.	2.80	1.34
50. I believe memorization can foster greater autonomy in thinking.	3.56	1.29

Overall responses on Learner-Centered Activities were moderate, with comparatively higher agreement on memorization and the use of teacher-selected materials. These patterns suggested that learner-centered practices coexisted with strong teacher-directed assumptions. The factor profile therefore pointed to a hybrid orientation rather than a consistently andragogical approach.

Table 2: Mean Responses - Chinese Teachers of English on Factor 2

<b>Factor 2: Personalizing Instruction Responses</b>	<b>M</b>	<b>SD</b>
2. I allow senior students more time to complete assignments when they need it.	2.59	1.15
9. I use lecturing as the best method of presenting my subject material to adult students.	1.69	0.50
17. I use different teaching techniques depending on the students being taught.	3.29	0.95
24. I let each student work at his or her own pace regardless of the amount of time it takes him or her to learn a new concept.	2.33	1.19
32. I gear my instructional objectives to match the individual abilities and needs of the students.	3.03	0.95
35. I allow a student's motives for participating in continuing education to be a major determinant in the planning of learning objectives.	3.21	0.75
37. I give all students in my class the same assignment on a given topic.	1.62	0.97
40. I encourage competition among my students.	1.92	1.13
41. I use different materials with different students.	2.84	0.83
49. I encourage a search for real-life examples, develop assignments related to real-life situations, and embed the content of my course in everyday life.	2.46	0.78

Responses indicated moderate personalization, particularly in using different techniques and aligning objectives to student needs. At the same time, items reflecting uniform assignments and limited competition were endorsed at lower levels, suggesting some differentiation without fully individualized pathways. This pattern implied that personalizing practices were present but bounded by standardized course structures.

Table 3: Mean Responses of Chinese Teachers of English on Factor 3 - Relating to Experience

<b>Factor 3 - Relating to Experience</b>	<b>M</b>	<b>SD</b>
14. I plan learning episodes to take into account my students' prior experience.	3.42	0.63
31. I plan activities that will encourage each student's growth from dependence on others to greater independence.	3.12	0.74
34. I encourage my students to ask questions about the nature of their society.	2.82	1.35
39. I organize adult learning episodes according to the problems that my students encounter in everyday life.	3.32	0.97
43. I help students relate new learning to their prior experiences.	4.10	0.89
44. I teach units about problems of everyday living.	3.20	0.84

Teachers reported relatively strong efforts to connect learning with learners' prior experiences and to make learning relevant to everyday problems. The highest endorsement on helping students relate new learning to prior experience suggested that experiential anchoring was a consistent practice. These results aligned with andragogical assumptions about experience as a central learning resource.

Table 4: Participants' Responses to Factor 4 - Assessing Student Needs

<b>Factor 4 - Assessing Student Needs</b>	<b>M</b>	<b>SD</b>
5. I help students diagnose the gaps between their goals and their present level of performance.	2.81	1.19
8. I counsel students informally.	3.12	0.84
23. I have individual conferences to help students identify their educational needs.	3.04	1.17
25. I help my students develop short-range as well as long-range objectives.	3.34	0.84

Mean responses suggested that teachers frequently engaged in needs assessment through conferencing, informal counselling, and goal setting. The results indicated an orientation toward diagnosing performance gaps and supporting short- and long-range objectives. This factor therefore reflected adult-oriented support practices even within an overall teacher-directed system.

TABLE 5 Mean Responses: Chinese Teachers of English on Factor 5

<b>Factor 5: Climate Building Responses</b>	<b>M</b>	<b>SD</b>
18. I encourage dialogue among my students.	3.71	0.77
20. I utilize the many competencies that most adults already possess to achieve educational objectives.	3.21	0.79
22. I accept errors as a natural part of the learning process.	4.11	0.83
28. I allow my students to take periodic breaks during class.	4.12	0.94
48. I design activities that build students' self-esteem and sense of accomplishment while delivering course content.	3.42	1.22

Climate Building received comparatively high ratings, indicating that teachers commonly encouraged dialogue, accepted errors, allowed breaks, and designed confidence-building activities. This profile suggested a supportive classroom climate that could reduce affective barriers to language use. Such conditions are generally conducive to adult learning and communicative risk-taking.

TABLE 6 Mean Responses: Chinese Teachers of English on Factor 6

<b>Factor 6: Participation in the Learning Process</b>	<b>M</b>	<b>SD</b>
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1. I allow students to participate in developing the criteria for evaluating their performance in class.	1.91	1.28
10. I arrange the classroom so that it is easy for students to interact.	3.41	0.98
15. I allow students to participate in making decisions about the topics that will be covered in class.	2.11	1.04
36. I have my students identify problems that they wish to solve.	3.21	1.04
45. I negotiate curricular priorities with my adult students at the beginning of each course I teach.	2.14	1.09
46. I use learning contracts when assessing adult students' learning.	1.08	1.09
47. I involve adult students when planning lessons.	1.13	1.11

Participation scores were relatively low, especially for learning contracts, co-planning, and negotiating curricular priorities. The pattern suggested that students were seldom positioned as co-designers of learning or assessment. This constraint was consistent with hierarchical instructional norms and exam-oriented expectations.

**TABLE 7 Mean Responses: Chinese Teachers of English on Factor 7**

<b>Factor 7: Flexibility for Personal Development</b>	<b>M</b>	<b>SD</b>
6. I provide knowledge rather than serve as a resource person.	1.80	0.89
7. I stick to the instructional objectives that I write at the beginning of a program.	1.50	0.93
26. I maintain a well-disciplined classroom to reduce interference to learning.	1.32	0.43
27. I avoid discussion of controversial subjects that involve value judgments.	2.62	1.63
33. I avoid issues that relate to the student's concept of himself or herself.	2.01	1.43

Flexibility for personal development was the lowest-rated dimension, indicating limited adaptive space once objectives were set. Avoidance of controversial/value-laden discussion and limited attention to learner self-concept suggested a cautious instructional stance. Together, these results implied restricted autonomy and limited developmental flexibility for learners.

**TABLE 8 Mean Responses: All 168 Chinese Teachers of English on the Seven Factors**

<b>All Factors</b>	<b>M</b>	<b>SD</b>
1. Learner-Centered Activities	2.55	1.10
2. Personalizing Instruction	2.50	0.92
3. Relating to Experience	3.13	0.91
4. Assessing Student Needs	3.06	0.98
5. Climate Building	3.71	0.92
6. Participation in the Learning Process	2.13	1.08
7. Flexibility for Personal Development	1.85	1.05

Across factors, Climate Building, Relating to Experience, and Assessing Needs were comparatively stronger, while Participation and Flexibility were weakest. The overall profile indicated that supportive and experience-linked practices existed, but learner agency in planning and evaluation remained limited. This distribution reinforced the conclusion that instruction was predominantly teacher-directed with selective andragogical elements.

Exploratory factor analysis results are summarized below. Consistent with the procedures described in the Methods section, exploratory factor analysis employed principal axis factoring with oblique rotation, and factor retention was guided by eigenvalues greater than 1.0, inspection of the scree plot, and interpretability of the factor structure.

### Factor Loadings

Factors	Learner-Centered Activities	Personalizing Instruction	Relating to Experience
<b>Factor 1</b> (Learner-Centered Activities)	0.793	0.351	0.275
<b>Factor 2</b> (Personalizing Instruction)	0.333	0.780	0.401
<b>Factor 3</b> (Relating to Experience)	0.161	0.492	0.767

- **Factor 1 (Learner-Centered Activities):** This factor emphasizes learner-centered teaching methods, which involve engaging students and considering their backgrounds and needs.
- **Factor 2 (Personalizing Instruction):** This factor focuses on adapting teaching methods to meet individual student needs and encouraging personal relevance in learning.
- **Factor 3 (Relating to Experience):** This factor pertains to the importance of connecting learning to students' prior experiences, enhancing their relevance and understanding of new concepts.

### Summary

#### Regression Model Summary

<b>R-squared</b>	0.748
<b>Adjusted R-squared</b>	0.689
<b>Significant Predictors</b>	Learner-Centered Activities; Relating to Experience; Climate Building
<b>Non-significant Predictors</b>	Assessing Student Needs; Participation in Learning Process

The analysis indicates that Chinese teachers of English generally value learner-centered activities and personalizing instruction, with a significant emphasis on relating teaching practices to

students' experiences. Each factor reflects distinct aspects of instructional practice, highlighting the multifaceted approach required in effective teaching.

The factor loadings suggest three coherent dimensions in teachers' practices, with each factor loading most strongly on its intended construct. This pattern provides preliminary support for construct validity, indicating that the items cluster meaningfully rather than reflecting a single undifferentiated teaching style. These results should be interpreted cautiously given the simplified three-factor presentation and the need for reporting extraction/rotation details.

The regression analysis of the mean responses from Chinese teachers of English regarding their teaching practices yielded the following results:

### Model Summary

- **Dependent Variable:** Mean responses of factors (excluding the first factor for regression).
- **Independent Variables:** Mean responses of the first six factors.

### Key Outputs:

- **R-squared:** 0.748
  - This indicates that approximately 74.8% of the variance in the dependent variable can be explained by the independent variables in the model.
- **Adjusted R-squared:** 0.689
  - The adjusted R-squared, which adjusts for the number of predictors in the model, is 68.9%.

### Coefficients:

Factor	Coefficient	Std. Error	t-value	p-value
Constant	0.928	0.221	4.197	0.001
Learner-Centered Activities	0.497	0.139	3.579	0.001
Personalizing Instruction	0.237	0.164	1.443	0.162
Relating to Experience	0.605	0.145	4.174	0.001
Assessing Student Needs	-0.096	0.183	-0.524	0.609
Climate Building	0.528	0.160	3.295	0.002
Participation in Learning Process	-0.213	0.159	-1.339	0.189

### Significance:

- Factors such as **Learner-Centered Activities**, **Relating to Experience**, and **Climate Building** were statistically significant predictors of the mean responses from Chinese teachers of English.

- Factors like **Assessing Student Needs** and **Participation in Learning Process** did not show a significant impact on the mean responses.

The analysis indicates a strong relationship between certain teaching practices and the overall effectiveness of teaching strategies employed by Chinese teachers of English. Specifically, emphasizing learner-centered activities, relating learning to students' experiences, and building a positive learning climate are crucial factors that significantly influence their instructional practices.

The paragraphs that follow synthesize these quantitative patterns into an integrated narrative, highlighting where andragogical elements appear and where teacher-directed structures remain dominant.

The model explains a substantial proportion of variance ( $R^2 = .748$ ), indicating that the included factors jointly account for much of the overall teaching-practice profile. However, only Learner-Centered Activities, Relating to Experience, and Climate Building are statistically significant predictors in this output, suggesting these dimensions most strongly differentiate instructional practice patterns. Reporting the dependent variable definition and checking multicollinearity assumptions would further strengthen interpretability.

Our exploration resulted in several interesting findings about how EFL teachers approached curriculum and teaching in China.

1. Chinese teachers of English primarily support teacher-centered methodologies. They favor formal testing, direct knowledge transmission, and structured teaching methods over informal or collaborative learning. Memorization is considered effective for promoting autonomous thinking, and teachers prefer adhering to one method of instruction.
2. While teachers strive to meet individual student needs through tailored objectives and self-paced instruction, they rely heavily on traditional lecture methods. In these cases, there is little emphasis on using real-life examples or encouraging students to apply course content to everyday situations.
3. When teachers are not engaged in traditional lecture methods, they do organize activities around real-life problems and encourage students to ask fundamental questions, making learning more relevant to their everyday lives.
4. Teachers place importance on understanding students' needs. They often use individual meetings and informal counseling to help students set short- and long-term objectives, treating students as adults in the learning process.
5. While teachers foster an adult-to-adult relationship and encourage problem identification, they do not involve students in developing criteria for classroom evaluation or curricular priorities.
6. They set fixed objectives at the beginning of the program and focus on maintaining discipline to minimize disruptions. This reflects a provider-driven approach rather than one that facilitates learner autonomy.

7. Chinese teachers of English generally value learner-centered activities and personalizing instruction, with a significant emphasis on relating teaching practices to students' experiences.
8. The analysis indicates a strong relationship between certain teaching practices and the overall effectiveness of teaching strategies employed by Chinese teachers of English. Specifically, emphasizing learner-centered activities, relating learning to students' experiences, and building a positive learning climate are crucial factors that significantly influence their instructional practices. While some andragogical elements are present, the classroom remains largely teacher-centered, with minimal flexibility for individual learning needs.

The findings put the process of teaching EFL in China as being at the intersection of the inertia of long-ingrained, traditional teacher-centered approaches and the recognition of the value of Western andragogical student-centered approaches for effectively building sufficient English competencies to enable adults to properly participate on the global stage. Predictably, there are frictions and contrasts as teachers of EFL in adult settings strive to provide optimal learning conditions to meet the goals of EFL in China. Our findings suggest that, despite the presence of certain learner-centered elements, Chinese teachers of English continue to prioritize traditional, teacher-centered methods—such as memorization and direct instruction—over collaborative or student-centered approaches, reflecting broader systemic and cultural constraints documented in EFL pedagogy literature. The results point to a rigid educational environment where students are expected to adhere to fixed learning objectives aimed at exam preparation. This preference for structured learning may reflect broader cultural expectations of education in China, where content mastery for exams is paramount (rather than content mastery and understanding which enables application in a wide variety of contexts).

The findings revealed that Chinese English teachers continue to prefer formal testing and emphasize memorization as a key teaching technique, aligning with a teacher-centered instructional model. Despite some elements of andragogy—such as personalizing instruction, relating content to students' experiences, and assessing individual needs—teachers largely position themselves as knowledge providers rather than facilitators. They focus primarily on preparing students for exams, often neglecting student-centered methodologies that promote critical thinking and collaboration.

These results give supporting evidence that Chinese teachers primarily engage students at the lower levels of Bloom's taxonomy (1956). In contrast, Western educators are encouraged to foster higher-order skills; the predominant focus in China remains on rote learning and recall, which are insufficient for developing critical thinking abilities. High-achieving students on standardized tests like the TOEFL and GRE often struggle to articulate their thoughts and engage effectively in academic discourse, indicating a gap between knowledge mastery and practical application.

Hess' Depth of Knowledge (DOK) framework reinforces the need for tasks that demand higher levels of understanding. By emphasizing complex and context-rich activities, educators can facilitate the development of advanced cognitive abilities, critical for real-world applications.

Ultimately, fostering an environment that promotes critical discourse and metacognitive skills is essential for the growth and development of learners (Merriam, 2004; Merriam & Baumgartner, 2020). This aligns with the higher levels of Bloom's taxonomy and DOK, where students engage in analysis, synthesis, and evaluation, enhancing their understanding and cognitive capacities. Without a shift towards these pedagogical strategies, the gap between traditional methods and the demands of contemporary English language use will likely persist.

One emerging toolset that has the potential to support EFL learning is Artificial Intelligence (AI), particularly in countries such as China where technology is embraced as a direction for meeting China's ambitions as an economic force on the global stage.

Artificial intelligence is increasingly positioned as a strategic lever for language learning innovation; however, its pedagogical value depends on coherent integration with adult learning principles and local instructional constraints.

### **AI, Andragogy and EFL in Adult Settings in China—Proposed Framework**

The findings presented earlier position adult English as a Foreign Language (EFL) teaching in China at the intersection of deeply embedded teacher-centered traditions and increasing recognition of the value of learner-centered, andragogical approaches. While Chinese EFL educators demonstrate elements of adult-oriented practice—such as personalizing instruction and relating learning to experience—systemic factors including examination pressures, hierarchical teacher–student relationships, and cultural expectations of knowledge transmission constrain the enactment of fully andragogical learning environments. This creates a structural tension: adult learners require opportunities for dialogue, autonomy, and meaningful language use to develop communicative competence, yet instructional systems remain predominantly teacher directed.

Recent advances in generative artificial intelligence introduce a potentially transformative mediational mechanism within this landscape. Unlike earlier computer-assisted language learning tools that primarily supported drill practice or content delivery, generative AI enables natural language interaction, adaptive feedback, and dialogic engagement. These affordances align closely with adult learning principles, particularly self-direction, problem-centered learning, and immediate applicability. A growing body of research indicates that AI-supported language learning environments can enhance learner engagement, provide personalized feedback, and support communicative practice opportunities beyond classroom constraints (Godwin-Jones, 2018; Kessler, 2018; Wang & Petrina, 2013). More recent scholarship also highlights the emerging role of generative AI tools in facilitating conversational practice and formative feedback in second language learning contexts (Li, 2023; Zawacki-Richter et al., 2019).

However, the integration of AI into EFL instruction requires theoretical grounding to ensure pedagogical coherence. Technology adoption without conceptual alignment risks reinforcing existing teacher-centered practices rather than transforming learning processes. Hence, to guide the use of AI in EFL instruction it is desirable to develop a conceptual model integrating andragogy, sociocultural learning theory, self-regulated learning, and EFL pedagogy within the socio-technical conditions of adult education in China. In doing so the framework will facilitate

conceptualization of generative AI not as a replacement for teachers, but as a mediating pedagogical layer that operationalizes andragogical learning conditions by expanding opportunities for dialogue, feedback, and learner agency.

### *Proposed Framework- AI mediated EFL*

Generative AI functions as a pedagogical mediation layer that enables andragogical conditions for adult EFL learning. The framework is centered on perspectives on how AI restructures control, feedback, and dialogue in language learning systems where adults must develop both linguistic competence and learning autonomy. It is a conceptual framework that has potential to be a guide for development of tools and methods.

### *Theoretical underpinnings.*

Four complementary theoretical domains underpin the proposed framework (Figure 1.0).

First, andragogy provides the learner-centered orientation, recognizing adult learners as self-directed individuals whose learning is influenced by prior experiences, readiness linked to social roles, and goal-oriented motivation. These assumptions are particularly relevant in adult Chinese EFL contexts where English proficiency is associated with career mobility, academic advancement, and global participation.

Second, sociocultural theory positions learning as mediated through tools and interaction. Generative AI is seen to function as a mediating artefact that scaffolds language production, supports meaning-making, and extends learners' zones of proximal development through dialogic engagement.

Third, self-regulated learning (SRL) contributes to the process dimension, emphasizing goal setting, monitoring, reflection, and strategy adaptation. Adult learners must develop regulatory capacity to progress beyond dependence on teacher direction, particularly in contexts where opportunities for communicative interaction are limited.

Fourth, formative feedback theory underpins the iterative improvement cycles enabled by AI-generated explanations, reformulations, and corrective feedback, providing immediate opportunities for linguistic refinement.

Together, these theoretical strands support a model in which AI enables pedagogical conditions that are difficult to achieve within traditional teacher-centered systems alone.

*Table 1: Four underpinning theories for the AI-mediated framework for EFL in adult contexts in specific socio-cultural settings*

<b>Domain</b>	<b>What it Contributes</b>
Andragogy	Learner autonomy, relevance, experience integration

Domain	<b>What it Contributes</b>
Sociocultural Theory	AI as mediating artefact; dialogic meaning-making
Self-Regulated Learning (SRL)	Goal–monitor–reflect–adapt cycles
Formative Feedback Theory	Iterative, dialogic, feedforward learning processes

### *Layers of the framework*

The AI mediated EFL framework comprises four interconnected layers across which self-regulated learning is the driving mechanism of ‘action’.

#### *Layer 1 (core)— Adult Learner System*

At the center is the adult EFL learner system, encompassing learner goals, prior linguistic knowledge, motivation, agency beliefs, and metacognitive capacity. Adult learners in China frequently possess substantial grammatical knowledge but limited opportunities for communicative use, making interactive engagement essential.

Variables:

- Goal structures (career, exams, research)
- Prior learning history (often grammar-translation)
- Agency beliefs
- Metacognitive capacity
- Affective state (confidence in speaking, error anxiety)

#### *Layer 2 – AI mediation layer*

Surrounding the learner is the AI mediation layer (Table 2.0), the defining feature of the framework. Generative AI supports learning through mediational functions including adaptive input modification, dialogic interaction, immediate formative feedback, strategy prompting, and affective buffering. Affective buffering refers to the reduction of anxiety and perceived social risk associated with language production through non-judgmental, private interaction, thereby encouraging experimentation and increasing output. These functions collectively operationalize andragogical principles by enabling learners to engage in self-directed, problem-centered language use.

*Table 1 The five instructional affordances of the AI-mediated model for EFL in specific socio-cultural contexts*

<b>AI Function</b>	<b>Pedagogical Role</b>	<b>Andragogical Alignment</b>
Adaptive input modulation	Simplifies, elaborates, rephrases	Builds on prior experience
Dialogic co-construction	Conversation, role-play	Self-directed engagement
Immediate formative feedback	Error explanation, reformulation	Supports task-centered learning
Strategy prompting	“Try using a concessive clause”	Develops metacognition
Affective buffering	Non-judgmental practice space	Reduces fear of failure

### *Layer 3 – Teacher orchestration layer*

The third layer is *teacher orchestration*, which remains essential within AI mediated EFL. Teachers design learning tasks, develop learners’ prompt literacy, provide meta-feedback, align AI activities with curricular objectives, and guide ethical technology use. Rather than diminishing the teacher’s role, AI expands instructional possibilities while teachers maintain pedagogical authority and contextual judgment.

Philosophy: Explicitly reject “AI replaces teacher” narratives and expands instructional bandwidth; teachers maintain epistemic authority

Teacher responsibilities:

- Learning task design
- Prompt literacy instruction
- Feedback arbitration
- Ethical oversight
- Linking AI interaction to curriculum outcomes

### *Layer 4 – Socio cultural-technical context*

The outer layer represents the *socio-technical context*, including examination systems, Confucian educational traditions, institutional expectations, policy

environments, and the socio-economic value of English proficiency. These contextual factors act as boundary conditions shaping both learner motivation and instructional implementation.

In China (or similar contexts), learning is shaped by the following boundary conditions:

- High-stakes testing regimes
- Cultural expectations of structured guidance
- Digital policy environments

### *Institutional AI adoption constraints ‘Mechanism of action’ – Self Regulated Learning*

The framework operates through iterative cycles in which learners define goals, engage in AI-supported language tasks, receive dialogic feedback, reflect on performance, and adjust strategies with teacher guidance. Over repeated cycles, responsibility for learning progressively shifts toward the learner, supporting both linguistic competence and learner autonomy.

The AI mediated EFL framework contributes conceptually by explaining how generative AI may help reconcile tensions between traditional Chinese educational practices and learner-centered adult education approaches. Rather than positioning Western andragogy and Chinese traditions as incompatible, the model suggests that AI can serve as a mediating bridge, enabling learner autonomy while preserving teacher authority and curricular structure. The framework therefore provides a foundation for future empirical research examining effectiveness, implementation conditions, and cultural adaptation of AI-mediated approaches in adult EFL education in China.

## **Conclusion**

The survey results indicate a mixed instructional profile among Chinese university EFL teachers. Scores were highest for Climate Building ( $M = 3.71$ ), Relating to Experience ( $M = 3.13$ ), and Assessing Needs ( $M = 3.06$ ), while Participation ( $M = 2.13$ ) and Flexibility ( $M = 1.85$ ) were comparatively lower. This pattern suggests that supportive classroom climates and experience-linked instruction are more consistently implemented than practices requiring shared control, learner decision-making, and adaptive pacing. Accordingly, conclusions about instructional orientation are best framed in terms of these specific strengths and weaknesses rather than categorical claims of uniformly teacher-centered practice.

These findings should be interpreted in light of several limitations. The sample is not nationally representative, and the study relies on self-reported instructional practices, which may introduce reporting and social desirability biases. In addition, the factor structure is exploratory and should be validated through confirmatory factor analysis using an independent sample. Contextual constraints—such as examination pressures and institutional policy—may also bound generalizability.

Within these boundary conditions, the proposed AI-Mediated Andragogical EFL framework is presented as conceptual and conditional. Generative AI may enable expanded dialogue, adaptive

feedback, and low-stakes practice that could help strengthen Participation and Flexibility, but claims of effectiveness require empirical testing in authentic instructional contexts. Future research should therefore (a) validate the measurement model via Confirmatory Factor Analysis, and (b) conduct targeted pilots designed to improve Participation and Flexibility, using measurable pre/post outcomes (e.g., learner-initiated tasks, observable participation, and language output) alongside implementation-fidelity data. Taken together, these steps provide a staged, evidence-based pathway for evaluating whether AI-supported designs can address the specific instructional dimensions that were weakest in the present findings before recommending large-scale curricular or policy changes.

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