



The Relationship Between Teacher-Student Rapport and EFL Learners' Engagement in Online Scaffolding Setting

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Abstract

Given the breakout of the Covid-19 pandemic, online L2 learning has become more popular than ever so traditional in-person classroom instruction is giving way to virtual learning. The different approaches to virtual L2 learning entail learners' serious engagement to create their own learning pace. Instructors have a lasting effect on the students when they decide on how, where, and how well learners figure out and how they engage in interactions with each other. Engagement is concerned with rapport, which can be reinforced through scaffolding. Fostering rapport is claimed to improve engagement, degree of satisfaction, and collaboration, leading to effective engagement in the learning process. However, on the one hand, the relation between the two variables has not been examined in language learning, and on the other hand, they have not been investigated in an online scaffolding setting. In order to consider the issue, 586 EFL participants from universities in China were asked to take part in the study and they should answer two questionnaires, namely the student engagement instrument, and the teacher-student rapport scale. In so doing, 494 respondents were kept for the main analysis. The correlation between the two constructs through structural equation modeling (SEM) was 0.714, which is considered a significant and strong correlation. In a nutshell, some academic recommendations for educational stakeholders are provided.

Keywords Engagement · Online setting · Positive psychology · Scaffolding · Teacher-student rapport

Introduction

Today, the incorporation of technology in the various aspects of humans is inevitable so different sections have been influenced by technology (Derakhshan & Malmir, 2020). One of these sections is education where technology can affect how students learn. Thanks to

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the advancement of Information and Communication Technology (ICT), there has been a remarkable transition from the traditional in-person mode to online learning (Todo & Budiarta, 2018) and such a shift is obvious in China (Ma et al., 2020). How dynamically learners take part in the online learning context is called engagement which involves the efforts and time devoted by the students to online learning (Ma et al., 2015). Many investigations have considered engagement as a likely robust predictor of learners' academic achievement (Soffer & Cohen, 2019). It seems that engagement has a more effective role in online environments, where learners have no access to support from others (e.g., teachers and classmates) and feel isolated (Dabbagh & Kitsantas, 2012). It is claimed that language engagement foreshadows an L2 learner's success given that it provides him/her with an opportunity to make remarkable progress in L2 classes (Baralt et al., 2016). Indeed, the construct of engagement has been broadly studied in general education given its impact on learners' academic achievement or failure (Mystkowska-Wiertelak, 2020). In addition, teachers and educational administrators have attached special importance to the L2 learners' engagement in any L2 learning context (ESL/EFL classes) (Bond et al., 2020; Derakhshan, Fathi, Pawlak, & Kruk, 2022). Learner engagement has to do with the energy and vitality of the learners in their classes and is reflected noticeably in their behaviors, cognition, or emotions (Wang et al., 2021). Such an engagement is driven by a multitude of physical activities and emotional inspirations, which involve multilayered interactions, participation in learning tasks, and educational environments (Bond et al., 2020; Hoi, 2022).

As for the realization of engagement, as the first stage, forming and maintaining a positive relationship between teacher and learner as a kind of related factor should be taken into account as it can enhance learners' motivation, and engagement (Dotterer & Lowe, 2011). Paying attention to interpersonal relationships and the efforts aimed at enhancing them may have an influential effect on the quality of L2 instruction (Dewaele & Pavelescu, 2021). Indeed, instructors are deemed as one of the essential components of society. This is because teachers can contribute to fostering this supportive relationship with the learners. In this context, the eminence of interaction with them is of enormous importance (Dörnyei & Ushioda, 2013). Undoubtedly, as a multifaceted social organization, a classroom involves complex interactions between teacher and learners; therefore, the ability to take part in social interaction has a key role in learning, resulting in the acquisition of ability and knowledge (Walqui, 2006). In the context of L2 education, interaction plays an essential role given that L2 acquisition and learning occur through the interactive construction of communication between L2 learners (Foote & Trofimovich, 2018). From Vygotsky's perspective, the main contributor to cognitive development is the individual's ability to internalize societal norms and activities through interactions with more knowledgeable others, such as peers with higher levels of intellectual competence (Matusov & Hayes, 2000). Accordingly, teachers need to pave the way for the performance of collaborative tasks in the classes where learners can experience the newly learned theories (Mart, 2018). The constructivist perspective is highly relevant to the context of online learning as in this theory, scaffolding can capture the contribution of the teacher to effective learning that enhance students' engagement (Belland et al., 2017; Nguyen, 2022) characterizes scaffolding as a kind of assistance given by a more capable teacher or peer to a student. As a result, the student can do a task that he/she would not be able to do on his/her own. In recent decades, the term "scaffolding" has been used as an umbrella term for any kind of support (Mercer & Littleton, 2007). Despite the learning mode, whether face to face or online, teachers need to facilitate the learners' transition from

their present level of ability to the higher level of ability. Vygotsky (1987) calls this level Zone of Proximal Development (ZPD) i.e., the level of ability where a learner cannot do something without the support of other people. Teachers should provide the students with the necessary support to enable them to go beyond their ZPD. Teachers make an important contribution to facilitating learning by providing opportunities for effective interactions among the learners aimed at accomplishing tasks.

Although learner engagement has only recently caught the attention of L2 education researchers, and research on student engagement in L2 might be in its infancy, its growing scope and appeal can be seen, which is reflected in the increasing number of articles, theoretical and empirical studies (Dincer et al., 2019; Mystkowska-Wiertelak, 2020). Similarly, the advance in instructor-learner rapport contributes to L2 learners' increased engagement and active participation in online classes (Shakki, 2022). Moreover, the newly developed technologies and the application of electronic curricula can create opportunities for learning and teacher training; however, the inclusion of scaffolding into online-learning settings, which is on the rise globally, is deemed challenging because of the high dependence on teachers and learners (Simons & Ertmer, 2005). Moreover, scaffolding has been extensively studied in both traditional in-person classes and the online environment due to the advancement of technology (e.g., blended, online classes, etc.) (Hoi, 2022; Lascotte, 2018), so this study tries to inspect the correlation between teacher-student rapport and learners' engagement in online scaffolding setting.

Review of the Literature

Student Engagement

L2 learner engagement has to do with the extent to which a student devotes energy and effort to learn a target language (Zhou et al., 2021). Given the broad and complex nature of this concept, there have been different definitions, with investigations focusing on its different constituents. For instance, Hiver, Al-Hoorie, and Mercer (2021) describe learner engagement as an individual's degree of involvement in an L2 learning task, as well as the degree to which an activity, whether mental or physical activity, is goal-oriented. Student engagement in the L2 task is seen as a multilayered construct that is comprised of three interconnected facets: the individual's emotional engagement, the individual's behavioral engagement, and the individual's cognitive engagement (Sang & Hiver, 2021). While learning the new language, in the case of the emotional aspect, the focus is on the learner's affective aspects such as motivation, eagerness, interest, and enjoyment (Phung et al., 2021; Wang & Guan, 2020). This aspect is related to students' perceived attachment, belonging, and eagerness (Nunez & Leon, 2019). The learners with emotional engagement have proved to be more eager about their learning activities and educational context. Indeed, they express more willingness to be in classes and hold positive views about their learning experience (McKellar et al., 2020).

The second facet, namely, behavioral engagement is concerned with the quality and level of L2 students' involvement in the learning tasks and class, as well as their persistence and effort (Carver et al., 2021). This facet is related to learners' real willingness to take part in classes and do homework (Mercer, 2019). Behavioral engagement is echoed by the level and eminence of dynamic involvement (Philp & Duchesne, 2016). The third facet

i.e., cognitive engagement, is related to students' mental processes, including their purposeful devotion and the retention of their attention and intellectual effort (Zhou et al., 2021). Cognitive engagement is closely associated with being exposed to mental challenges and concentrating on one's tasks (Fredricks Blumenfeld, & Paris, 2004). In the case of the L2 classroom, verbal and non-verbal communication are deemed precursors of cognitive engagement (Zhou et al., 2021). The last aspect, i.e., the social one which is not included in some engagement models, is concerned with the quality and level of interactions between interlocutors, as well as their participation which signals the relational nature of L2 learning (Philp & Duchesne, 2016). Highly engaged L2 students show more diligence, alertness, and eagerness for L2 learning in language classes (Mercer & Dörnyei, 2020).

Teacher-student Rapport

The rapport between instructors and learners has been described as friendly, insightful, and sincere relationships between instructors and learners (Frisby, 2019). Therefore, rapport is viewed as a trusting relationship that yields a mutually respectful understanding for both instructor and the learners (Frisby & Gaffney, 2015). This is because of the many enjoyable experiences shared by the teacher and learners. As a relation-related concept, rapport has been found to increase the likelihood of constructive learning results (Frisby, 2019). Caring for others is one of the main constituent elements of rapport, which is characterized by friendliness (Frisby & Gaffney, 2015). Learners perceive rapport as a crucial part of influential education (Burke-Smalley, 2018). Therefore, fostering rapport requires teachers to constantly advocate for learners, have respect for their ideas, and to value their academic efforts (Wilson et al., 2012). In the same vein, Thompson (2018) asserts that teachers need to create an amicable, mutual relationship with the students so that their needs and interests can be taken into account. Rapport contributes to the creation of an enjoyable classroom atmosphere, bringing about pleasant classroom experiences. This, in turn, enhances constructive emotions regarding learning and leads to a better presentation (Delos Reyes & Torio, 2020). Establishing and maintaining the rapport between teacher and learners is an essential feature of effective L2 learning and instruction given the interpersonal and social nature of language classes (Pishghadam et al., 2021). However, the behaviors contributing to forming relationships, such as rapport have been inadequately studied in the context of SLA, where such a relationship is seen as a primary component of successful education (Farrell, 2014). Specifically, the possible contribution of rapport to student engagement in L2 classes was only researched by Culpeper and Kan (2019), with the results showing that an increase in teacher-student rapport led to a growth in L2 students' engagement in university, which encouraged them to post more contents and participate more actively in online classes.

Scaffolding

Sociocultural theory and ZPD can be drawn on by teachers as a theoretical foundation for using scaffolding techniques in their teaching strategy. In Vygotsky's view, learning does not take place in isolation given that a multitude of factors influences the learning process, with social interactions seen as one of the most important factors (Raymond, 2000). According to Vygotsky (1978), scaffolding instruction emphasizes the role played by teachers and other knowledgeable people in promoting the learner's development. This kind of support

can be realized by guiding the learners to reach that next stage or level. Scaffolding, which is also known as “instructional conversation,” has to do with the creation of a discussion controlled by educators to obtain instructional objectives and familiarize learners with the target language (Engin, 2013). It also has come to be called “collaborative dialogue”, described by Swain (2000) as a conversation that drives the students to produce the target language and rejoin it while resolving a problem. According to Pea (2004), the notion of scaffolding has been defined so broadly by scholars in the context of the learning sciences that its real and operational meaning is not clear. In the same vein, Puntambekar and Hübscher (2005) argued that the term “scaffolding” is gradually being used as a synonym for support.

Scaffolding instruction, which involves the support provided by a more experienced person to facilitate the learner’s development, is in line with the student’s ZPD (Chang et al., 2002). ZPD is concerned with the gap between what an individual manages to do on his/her own and the next level where doing or learning something requires the support of others (Raymond, 2000). Indeed, learners can resort to their prior knowledge and internalize new information through being exposed to scaffolding teaching as a teaching tactic. The tasks related to scaffolding instruction target the level that is beyond the current level of the learner (Olson & Platt, 2000). Benefitting from the support provided by more capable others, learners manage to carry out tasks that they used to be unable to do on their own; therefore, such a kind of support helps them through their ZPD (Bransford et al., 2000). It should be noted that the scaffolds are temporary; that is, scaffolds push the ZPD to do things more and more independently (Vygotsky, 1978). According to Vygotsky, as an instructional tool, scaffolding is provided by a teacher in an individual manner, which reinforces a learner’s ability to use his/her previously gained knowledge. Scaffolding can be employed in various content areas for different age groups and grades. As with the scaffolding used by construction workers to support a building, scaffolding in the context of education is viewed as the support provided to learners, which is adapted to their needs in achieving learning objectives (Dinh, 2016).

Relationship Between Teacher Rapport and Engagement in Scaffolding Setting

As a useful instruction and learning strategy in the context of L2 learning, scaffolding encourages students to collaborate in joint activities. Scaffolding is seen both as an instructional tool in learning and as a source of support. Such a kind of support enables learners to improve their knowledge and skills by surpassing the limitations related to traditional learning and obtaining their learning outcomes (Levitt, 2017). For instance, studies examined the main features of scaffolding which deals with teachers’ essential roles in managing support in interaction. It is worth noting that interaction is the main tool whereby learning occurs (Walqui, 2006). Through helping peers, learners try jointly to become creative participants and enhance their understanding. The primary feature is contingency, which has to do with gradual support (Puntambekar & Hübscher, 2005). Contingency entails the instructor’s adapted support based on the existing level of the student’s performance, which must be either at the same or a little higher level (Van de Pol, Volman, & Beishuizen, 2010). Research shows that contingency is positively related to learning since the level of control increases in the case of failure and decreases in the case of learners’ accomplishment (Van de Pol Volman, & Beishuizen, 2012). The next feature is fading which is concerned with the calculated extraction of scaffolding (Jadallah et al., 2011). The next feature is delegat-

ing responsibility from the professional to the learner (Van de Pol et al., 2010). In this movement, the beginner students distance away from other-regulation to self-regulation, which is seen as crucial for the progress of high-order intellectual tasks. This, ultimately, leads to independent activity, which yields internalization (Puntambekar & Hubscher, 2005). Following the sociocultural theory, learning takes place as a socially related process through which instructors' responsibility and ability to advocate for learner autonomy can be enhanced through scaffolding (Huang, 2013).

In addition, a large number of online investigations (Cho & Kim, 2013; Yang, Tsai, Kim, Cho, & Laffey, 2006) indicated that scaffolding provided by instructors in online courses and interactions makes an important contribution to enhancing students' academic engagement. For instance, Cho and Kim (2013) concluded that online scaffolding in social interaction may streamline learner engagement in self-regulated learning. In the same vein, Mullen and Tallent-Runnels (2006) concluded that learners' insight of theoretical and emotional support had a positive correlation with learning, the value placed on a task, and contentment with online courses. Moreover, Yang et al. (2006) indicated that the learners' perceived connectedness with their online teachers led to a high level of perceived self-efficacy and task value among the students in the online learning environment. Moreover, Shea, Li, and Pickett (2006) noted that online teachers' attempts to make interaction easier, such as guiding and giving feedback, have a positive relationship with the learners' perceived connectedness and learning. They stated that the teacher's dynamic function in directing and channeling learners' interaction is an essential predictor of students' engagement in an online setting. Such interactions contribute to shaping the concepts through the students' encounters in a social situation (Bransford et al., 2000). Therefore, students' engagement in social interaction with expert people, including parents, instructors, and classmates, as well as with their environment impacts their success.

Based on research findings, rapport and cooperation between learners and teachers in a collaborative setting and through scaffolding are of enormous importance as it also affects their engagement. A study carried out by King (2014) revealed that comprehensive and prompt feedback provided by the teacher for learners during learning is valuable given that it enabled them to make progress in this process. Moreover, in their study, Thornberg, Forsberg, Chiriac, and Bjereld (2020) examined the effect of teacher-learner rapport on learners' involvement. The results revealed that a solid instructor-learner relationship can enhance students' engagement in the classroom. There has been growing attention to the interpersonal relationship between the teachers and learners given that it enables the learners to deal with their anxiety, and engage in shared activities and tasks (Xie & Derakhshan, 2021). In addition, Belland, Kim, & Hannafin (2013) elaborate on the issues related to the ignorance of motivation in the learning context, scaffolding as an important technique to solve this issue. Scaffolding fosters problem-based learning. They also discuss how scaffolding can foster motivation. Consequently, they concluded that computer-based scaffolds could enhance enthusiasm and commitment.

Method

Participants

Random sampling technique was adopted when selecting the participants. The sample was made up of 586 female and male EFL learners from 6 universities and 2 colleges in Henan and Anhui Provinces in China. Indeed, the sample included 50 male students (8.53%) and 536 female students (91.47%). They were enrolled as undergraduates accounting for 67% and postgraduates accounting for 33% with different majors, such as Mathematics and Statistics, Law, English, Fine Arts, Economic Management, etc., and their ages ranged from 17 to 25 years old. It is worth mentioning that through data screening, 494 respondents were conserved for the main analysis. Before the survey, informed consent was given to all of the participants.

Instruments

Student Engagement Instrument (SEI)

The SEI questionnaire developed by Appleton, Christenson, Kim, and Reschly (2006) consists of 35 items using a 4-point Likert (from strongly disagree to strongly agree). This instrument is claimed to assess the following three sub-categories of emotional engagement: teacher-student connections, the support given by a colleague in connection with studying, and the support is given by the guardian in connection with studying. It also assesses three sub-categories of intellectual engagement, 1- the conditions of school tasks, aims, and aspirations, and innate inspiration. The reliability of this questionnaire was 0.988 calculated through Composite Reliability.

Teacher Student Rapport Scale (T-SRS)

To measure how Chinese EFL learners assess their interactions with their educators, the “*Teacher-Student Rapport Scale*” (T-SRS) (Wilson & Ryan, 2013) was used. The P-SRS is made up of 34 items to which students rely on a 5-point Likert scale (strongly disagree to strongly agree). In this study, the consistency of the scale was found to be 0.965 through Composite Reliability. Items 2, 3, 6, 12, 14, 17, 24, and 33 were scored reversed.

Procedure

Initially, all participants were informed about the purpose of the study. They were all convinced that their personal information would endure private. Consequently, they expressed their consent in writing and they showed their desire to take part in the study. Given the spread of the Covid-19 pandemic, the questionnaires were divided into two sections: T-SRS and SEI. The data were collected and investigated to examine the relationship between the two factors. As far as the questionnaire survey was concerned, an online version named “Questionnaire Star” was used, which has proved to be popular in China. Both Chinese and English versions were used to ensure the participants’ understanding and to guarantee data accuracy. It took a week to gather the data.

Data Analysis

In agreement with the objective of the study the data was analyzed through structural equation modeling (SEM). First, the convergent validity for each construct was ensured for the given context by examining the loadings, average variance explained, and maximum variance explained. The problematic items were excluded. Then discriminant validity was ensured through Fornell and Larcker's criterion. The composite reliability for each construct was also reported. Finally, the correlation between the two constructs was reported based on the existing covariance in the model. The result showed a strong and significant correlation ($r=0.71$, $p<0.01$) between the two variables.

Results

Before commencing the analysis, the data went through some pre-processes to exclude the problematic data. At first, 586 solid answers were gotten from the administration of the questionnaires. No missing answer was found in the data, and the data were checked for patterns. Consequently, 66 cases with odd patterns (35 with constant, 26 with decreasing, and 5 with increasing patterns) were identified and omitted. Then, the standard deviation of participants' answers was calculated and those with values below 0.5 ($N=26$) were excluded as they were regarded as unengaged participants. Hence, as a result of data screening, 494 respondents were preserved for the main analysis.

Construct Validity

Initially, to make sure of the construct validity, a CFA was performed. The model had 2 constructs (teacher-student rapport and student engagement) with items in the second order. Each construct was probed for non-significant loadings in unstandardized estimation and/or low estimates (below 0.5) in standardized estimation. Table 1 shows the results.

As indicated, no non-significant unstandardized estimates were found. Nevertheless, three items (R14 and R17, and R30), from the student-teacher rapport scale, and one item (SE28), from the student engagement instrument, with loadings below 0.5 were excluded. The exclusion criterion was taken from Kline (2016) who explains that such items endanger the convergent validity of the structure. Next, the modification indices with the threshold of 10 were tested and the suggestions that were not contradictory to the literature were applied. Figure 1 delineates the final modified CFA model.

After applying the modifications, the model's goodness of fit was scrutinized. According to Hu and Bentler (1999), for the model to have a goodness of fit, some criteria have to be met. These criteria, in conjunction with the values gained from the data, are reported in Table 2.

The results reported in Table 2 show acceptable to excellent goodness of fit. Next, the composite reliability (CR) and discriminant validity for each factor was examined (Table 3).

As reported, all of the variables had CR values above 0.7, which reveals acceptable reliability. For both constructs the average variance explained (AVE) was above 0.5, indicating the convergent validity. Moreover, the maximum shared variance (MSV) was lower than AVE and the square root of AVE (the bold values in the table) was above the inter-correla-

Table 1 *Unstandardized and Standardize Estimates of the Initial CFA Model*

			Unstandardized				Standardized
			Estimate	S.E.	C.R.	P	Estimate
S.Engagement	<---	Rapport	1.000				0.937
Perceptions	<---	Rapport	1.270	0.075	16.922	0.000	0.962
TSR	<---	Engagement	1.000				0.984
CRSW	<---	Engagement	0.937	0.062	15.187	0.000	0.980
FG	<---	Engagement	0.988	0.062	16.011	0.000	0.962
PSL	<---	Engagement	1.011	0.048	21.038	0.000	0.949
FSL	<---	Engagement	0.934	0.048	19.440	0.000	0.921
R11	<---	S.Engagement	1.000				0.732
R14	<---	S.Engagement	0.958	0.102	9.352	0.000	0.442
R15	<---	S.Engagement	1.267	0.076	16.623	0.000	0.776
R16	<---	S.Engagement	1.164	0.100	11.632	0.000	0.547
R17	<---	S.Engagement	0.728	0.107	6.783	0.000	0.322
R19	<---	S.Engagement	1.307	0.092	14.267	0.000	0.668
R22	<---	Perceptions	1.000				0.860
R25	<---	Perceptions	1.002	0.043	23.056	0.000	0.805
R26	<---	Perceptions	1.090	0.040	27.432	0.000	0.884
R27	<---	Perceptions	1.066	0.036	30.016	0.000	0.923
R28	<---	Perceptions	1.093	0.037	29.787	0.000	0.920
R29	<---	Perceptions	0.990	0.038	25.744	0.000	0.856
R30	<---	Perceptions	0.683	0.075	9.145	0.000	0.396
R31	<---	Perceptions	0.990	0.043	22.827	0.000	0.800
R32	<---	Perceptions	1.022	0.035	29.099	0.000	0.910
SE03	<---	TSR	1.000				0.837
SE05	<---	TSR	1.033	0.087	11.887	0.000	0.505
SE10	<---	TSR	1.145	0.078	14.653	0.000	0.600
SE13	<---	TSR	1.037	0.062	16.800	0.000	0.667
SE16	<---	TSR	0.967	0.041	23.532	0.000	0.839
SE21	<---	TSR	1.157	0.065	17.720	0.000	0.694
SE22	<---	TSR	1.155	0.052	22.313	0.000	0.812
SE27	<---	TSR	1.057	0.052	20.430	0.000	0.767
SE31	<---	TSR	1.022	0.045	22.647	0.000	0.819
SE02	<---	CRSW	1.000				0.628
SE09	<---	CRSW	1.179	0.077	15.227	0.000	0.816
SE15	<---	CRSW	1.054	0.070	14.991	0.000	0.799
SE25	<---	CRSW	0.964	0.065	14.786	0.000	0.784
SE26	<---	CRSW	1.047	0.079	13.311	0.000	0.685
SE28	<---	CRSW	1.028	0.102	10.117	0.000	0.495
SE33	<---	CRSW	1.052	0.070	15.056	0.000	0.804
SE34	<---	CRSW	1.052	0.070	15.014	0.000	0.800
SE35	<---	CRSW	1.162	0.080	14.536	0.000	0.767
SE04	<---	FG	1.000				0.663
SE06	<---	FG	1.092	0.075	14.574	0.000	0.720
SE07	<---	FG	1.011	0.062	16.226	0.000	0.817
SE14	<---	FG	0.967	0.059	16.445	0.000	0.830
SE23	<---	FG	1.138	0.066	17.197	0.000	0.876

Table 1 (continued)

			Unstandardized				Standardized
			Estimate	S.E.	C.R.	P	Estimate
SE24	<---	FG	0.970	0.058	16.730	0.000	0.847
SE08	<---	PSL	1.000				0.828
SE11	<---	PSL	0.896	0.044	20.500	0.000	0.787
SE17	<---	PSL	0.860	0.043	19.833	0.000	0.770
SE19	<---	PSL	0.922	0.052	17.704	0.000	0.709
SE30	<---	PSL	1.014	0.053	19.297	0.000	0.755
SE01	<---	FSL	1.000				0.803
SE12	<---	FSL	1.042	0.056	18.740	0.000	0.764
SE20	<---	FSL	1.014	0.048	21.059	0.000	0.834
SE29	<---	FSL	0.898	0.043	20.641	0.000	0.822

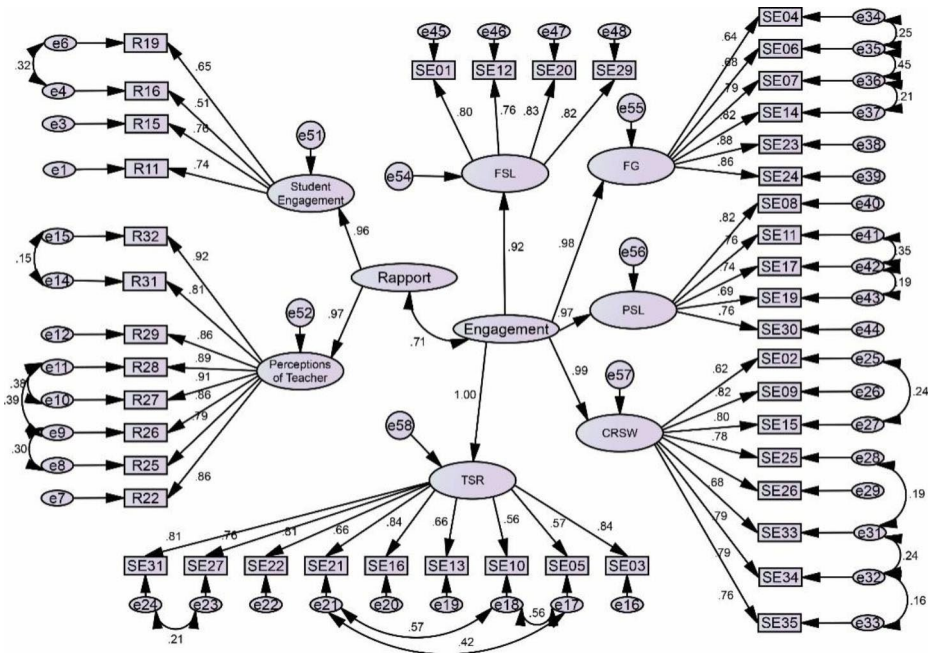


Fig. 1 The Final Modified CFA Model with Standardized Estimates

Table 2 Evaluation of the CFA Goodness of Fit

Criteria	Threshold			Evaluation	
	Terrible	Acceptable	Excellent		
CMIN	2491.986				
df	876				
CMIN/df	2.845	>5	>3	>1	Excellent
RMSEA	0.067	>0.08	<0.08	<0.06	Acceptable
CFI	0.915	<0.9	>0.9	>0.95	Acceptable
TLI	0.905	<0.9	>0.9	>0.95	Acceptable
SRMR	0.043	>0.1	>0.08	<0.08	Excellent

Table 3 Composite Reliability and Discriminant Validity of the Factors

	CR	AVE	MSV	Fornell-Larcker	
				Rapport	Engagement
Rapport	0.965	0.933	0.509	0.966	
Engagement	0.988	0.941	0.509	0.714**	0.970

tions of the factors, representing discriminant validity (Fornell & Larcker, 1981). Finally, the correlation between the two factors was 0.714, which is considered a significant and strong correlation.

Discussion

The results of the study show a significant correlation between the teacher-learner rapport and learners' engagement in online scaffolding in the learning process. The learners had active participation in the L2 process and they came to understand how to solve their difficulties effectively and how to endorse their potential activities through rapport. This enhances self-regulation and intensifies the learning process. It also enhances authentic and substantive engagement in the learning process as a requirement for success. Based on the PP theory, students are eager for engagement in the learning procedure. Given the notable contribution of this construct to L2 success, it has been the focus of many studies (Reeve, 2012). A SDT theory perspective revealed that a high level of learners' engagement in a L2 class is significant since it can predict learners' advancement.

The advantage of scaffolding, as shown by empirical studies in the past, contributes to future development (Santrock, 2018). Investigations conducted recently (Jarvis & Baloyi, 2020; Lascotte, 2018; van de Pol et al., 2012) have concluded that the use of scaffolding results in the learning enhancement in classroom interaction, students' uptake of newly presented knowledge, collaboration among learners, and their higher-order thinking skills. The results of the study are in line with Hughes and Cao (2018) who pinpointed that rapport between instructors and learners fosters learners' academic engagement by rendering the learning more appealing. Meanwhile, Pianta, Hamre, and Allen (2012) believe that a two-way trustful relationship between instructors and learners can foster a sense of belonging among learners, which is advantageous for their behavioral and emotional engagement. Concerning the function of scaffolding in the relation between teacher-student rapport and engagement, it can be stated that students' L2 practice in a reliable learning setting with a more knowledgeable individual brings them many advantages. Sociocultural theory yields a

good framework whereby one can examine the interactions unfolding in classroom. This is because cognitive development which is deemed as one of its main principles is embedded in a social setting. Furthermore, as pointed out by Ellis (2000), this theory deals with the way in which learners carry out a task, as well as how the interaction among students can facilitate and help in the L2 acquisition process.

The strength of the rapport between teachers and learners can make an important contribution to the enhancement of student engagement (Pianta et al., 2012). Indeed, social interaction and cooperation enable students to engage in intricate social tasks and work out new things (Walqui, 2006). Furthermore, students' engagement in a collaborative task facilitated by the support of a proficient person can enhance education (Yildiz & Celik, 2020). The nature of the relationship between an instructor and learners in L2 classrooms is very crucial (Xie & Derakhshan, 2021), given that both L2 educators and students take part in emotionally and relationally reinforcing communication. Indeed, teachers intentionally take advantage of positive interpersonal prompts to positively affect L2 students that can increase the likelihood of favorable academic behaviors, such as engagement (Derakhshan, 2022; Mercer & Gkonou, 2020). Likewise, mutual care between an instructor and students can reduce undesirable emotions, including boredom, anxiety, and fear. This can contribute to fostering engagement among learners (Furrer & Skinner, 2003).

The rapport between learner and teacher, as well as the collaboration between the students themselves, can take place synchronously and asynchronously, with the learners being encouraged to interact with learning materials. Such kinds of interaction occur interpersonally, where both parties are provided with the chance to engage in negotiation for meaning. Synchronous L2 learning, particularly, with the help of innovative technologies, makes it possible for real-time interaction. Within the context of this learning, the teacher serves as a more capable agent who intervenes and support by providing scaffolds, prompts, and encouraging the learning process (Hung, 2019). Besides, the research findings are in line with those studies by (Li, 2012; Smit & Van Eerde, 2013; Van de Pol et al., 2012) that lend support to the efficacy of appropriate support on the part of teachers by providing (as a facilitator) scaffolding can have important implications for learners concerning moving on from the other-regulation to the self-regulation stage. Specifically, such support contributes to the creation of supportive conditions for enhancing learners' comprehension, and engagement in the L2 classes (Ganem-Gutiérrez, 2008). The effect of scaffolding on learning is realized through the teachers' support provided timely interaction, which also leads to learner autonomy (Huang, 2007). The use of scaffolding in teaching in an online environment encourages the learners to practice L2 in connection with their schedule. Also, this kind of teaching can reduce the frustration to meet their special needs if the students avoid taking part in collaborative learning in a virtual learning environment that consequently inspires their motivation and increases their engagement (Liu et al., 2022).

Conclusion and Pedagogical Implications

Social cognitive theory is implemented to regulate the association among students, behavior, and setting which sequentially assists to determine the perseverance of online learners and it also gives prominence to providing an active learning setting via interaction and rapport (Derakhshan et al., 2022). Diverse kinds of online interactions and rapport can be

employed in the online setting such as student-student, student-instructor, and student-content (Arifani et al., 2020). Adopting a modified role, teachers make use of scaffolding to guide the students in developing their knowledge and enhancing their effective learning. Indeed, scaffolding, as one of many instruction strategies, has to do with how teachers prepare EFL learners prior to carrying out the activity, and how the activities are structured. This provides them with the language and guidance required to carry out the activity. It can contribute to improving students' confidence, engagement, and readiness (Timmis, 2019).

There has been an emphasis on scaffolding and its pedagogical implications for in-person teacher-learner interaction where knowledge transformation occurs as learners take insights from the instructor, a more knowledgeable interactant in the educational procedure. More specifically, learning takes place individually following its realization on a social level which can be spotted through diagnostic assessment within the ZPD. Moreover, scaffolding can be useful to L2 instruction and learning in the context of online learning. Indeed, scaffolding has the potential of fostering learners' uptake of L2 skills.

Thanks to the formation of rapport, EFL learners can create the connection between rapport and their engagement in the scaffolding setting. The results of this investigation reveal that in group work, the use of a teacher's support through rapport on the part of students improves students' engagement and consequently learning success. So, as a crucial way to enhance engagement among EFL learners, scaffolding instruction drives instructors to improve their learners' learning more effectively. Especially, EFL instructors are advised to use scaffolding techniques to enhance EFL learners' engagement, which is deemed an essential goal of education (Wang et al., 2021). Acting as an instructor to support the mediation of learners, their commitment and support slow down the student's route to self-regulation. From this perspective, educators must be responsible for the appropriate and adequate support and monitor the EFL learners' engagement in learning. This is because mediation must be internalized by the people, improving their capability to self-regulate their behavior. The studies on the rapport between instructor and learner show how the assistance provided by the teacher can enhance L2 efficiency, providing chances for the negotiation of meaning and the facilitation of communicative exchanges (Danli, 2017).

EFL teachers are also advised to be cognizant of the efficacy of online scaffolding in enhancing the teacher-learner rapport since it leads to learner engagement. Therefore, scaffolding is likely to enhance the level of students' reliance on educators' support. The extent to which learners take up educators' care is claimed to enhance learners' progress as new information is incorporated into their current knowledge schemes (Wittwer & Renkl, 2008). One can see scaffolding as the support provided in consistency with the ZPD. Scaffolding is used as a metaphor in the literature about dyadic interactions, which occur between a teacher and small groups of learners (Smit & Van Eerde, 2013; Van de Pol et al., 2012). Given the increasing need for effective online courses, teachers should be well aware of the features of online education. This would enable them to provide optimized online scaffolding; therefore, an online course with high quality can be developed and presented to improve the learner engagement that brings about success in e-learning. In addition, instructors need to develop thought-provoking and appealing tasks following students' levels and interests. An intimate relationship (rapport) can provide ample opportunities to encourage learners in classroom activities that can foster their participation and excitement for L2 learning. The incorporation of technology can contribute to enhancing online learning and teaching as it helps to provide scaffolding by opening up new opportunities for learners to

jointly co-build their knowledge. This makes it possible for them to increase their autonomy, motivation, and engagement (Reinders & Hubbard, 2012).

The results have implications for EFL material and textbook developers who can design textbooks. These books incorporate techniques used to provide scaffolding to improve teacher-student rapport and engagement. Teachers should use these techniques to stimulate autonomy support by allowing students to ask questions and take part in the debate, discussing multiple problem-solving strategies that all can be conducted through rapport that is a kind of scaffolding and not only cultivate independence in the EFL milieu but also maintain learners' engagement and accordingly accomplishment (Al-Issa, 2014). Furthermore, by providing tasks that can trigger communication, an interactive setting in the classes may be constructed and created in a way that surges students' engagement (Wang et al., 2021).

The results of this paper signal the need for more inquiries in the future, particularly, experimental studies aimed at identifying the types of scaffolding strategies students and teachers can use for enhancing student interaction related to EFL students' engagement. This is because experimental research yields more convincing evidence regarding the impact of scaffolding strategies on learner engagement. Since the present study was carried out in China as an EFL context, the findings may not be generalized to ESL environments. Prospective investigations about this issue should be conducted in an ESL country to see whether or not the same results will be obtained.

Questionnaire

Giving Consent

I hereby declare that I voluntarily participated in this study. I let the researchers use my responses as data as far as my identity remains anonymous. In addition, the researchers guarantee that all information I provide for this study will be treated confidentially.

Yes

No

Demographic Information

Gender:

Male

Female

Age:

Questionnaires:

* Please consider “normal times” when you answer the statements NOT during COVID-19 pandemic.

Teacher Student Rapport

1 (strongly disagree) to 5 (strongly agree)

1 Strongly disagree

2 Disagree

3 undecided (neither agree nor disagree)

4 Agree

5 Strongly agree

1. My professor and I get along

2. My professor is not helpful

3. My professor is inconsiderate
4. My professor is understanding
5. My professor is thoughtful
6. My professor is disrespectful
7. I understand what my professor expects of me
8. My professor is aware of the amount of effort I am putting into this class
9. I respect my professor
10. My professor is a mentor to me
11. My professor encourages questions and comments from students
12. My professor is not friendly
13. My professor is approachable
14. I dislike my professor's class*
15. My professor makes class enjoyable.
16. I want to take other classes taught by my professor
17. My professor's body language says, "Don't bother me".
18. My professor maintains eye contact with me
19. I really like to come to class.
20. My professor and I communicate well
21. My professor is eager to help students
22. My professor is compassionate
23. My professor encourages me to succeed
24. I feel I have learned much less from this professor compared to others I have had in the past
25. My professor is confident.
26. My professor enjoys his or her job
27. My professor cares about students.
28. My professor is enthusiastic
29. My professor is a role model
30. My professor wants to make a difference.
31. My professor is receptive
32. My professor is reliable
33. My professor is unfair
34. My professor will spend extra time going over a concept if students need it.

Student Engagement Instrument(SEI)

1 Strongly disagree

2 Disagree

3 Agree

4 Strongly agree

1. My family/ guardian(s) are there for me when I need them.
2. After finishing my school work I check it over to see if it's correct.
3. My teachers are there for me when I need them.
4. Other students here like me the way I am.
5. Adults at my school listen to the students.
6. Other students at the school care about me.
7. Students at my school are there for me when I need them.
8. My education will create many future opportunities for me.

9. Most of what is important to know you learn in a school.
10. The school rules are fair.
11. Going to school after high school is important.
12. When something good happens at a school my family Guardians want to know about it.
13. Most teachers at my school are interested in me as a person not just as a student.
14. Students here respect what I have to say.
15. When I do school work I checked to see whether I understand what I'm doing.
16. Overall my teachers are open and honest with me.
17. I plan to continue my education following high school.
18. I'll learn but only if the teacher gives me a reward.
19. School is important for achieving my future goals.
20. When I have problems at the school my family/ Guardians are willing to help me.
21. Overall, adults at my school treat students fairly.
22. I enjoy talking to the teachers here.
23. I enjoy talking to the students here.
24. I have some friends at a school.
25. When I do well in school it's because I work hard.
26. The tests in my classes do a good job of measuring what I'm able to do.
27. I feel safe at school.
28. I feel like I have it say about what happens to me at a school.
29. My family/ guardian what me to keep trying when things are tough at the school
30. I am hopeful about my future.
31. At my school teachers care about students.
32. I will learn but only if my family/ Guardians give me a reward.
33. Learning is fun because I get better at something.
34. What I'm learning in my classes will be important in my future.
35. The great in my classes do a good job of measuring what I am able to do

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Declarations

Conflict of Interest The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Ethics approval and consent to participate The studies involving human participants were reviewed and approved by Zhoukou Normal University Academic Ethics Committee. The author provided the written informed consent to participate in this study.

References

- Al-Issa, A. S. (2014). A critical examination of motivation in the Omani English language education system. *Journal of Language Teaching and Research*, 5(2), 406–418. doi: 10.4304/jltr.5.2.406-418.
- Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the student engagement instrument. *Journal of School Psychology*, 44(5), 427–445. <https://doi.org/10.1016/j.jsp.2006.04.002>.
- Arifani, Y., Suryanti, S., Wicaksono, B. H., & Inayati, N. (2020). EFL teacher blended professional training: A review of learners' online and traditional learning interactions quality. *3L: The Southeast Asian Journal of English Language Studies*, 26(3), 124–138. doi:<https://doi.org/10.17576/3L-2020-2603-10>.
- Baralt, M., Gurzynski-Weiss, L., & Kim, Y. (2016). Engagement with language: How examining learners' affective and social engagement explains successful learner-generated attention to form. In M. Sato, & S. Ballinger (Eds.), *Peer interaction and second language learning: Pedagogical potential and research agenda* (pp. 209–240). John Benjamins.
- Belland, B. R., Kim, C., & Hannafin, M. J. (2013). A framework for designing scaffolds that improve motivation and cognition. *Educational psychologist*, 48(4), 243–270. doi:10.1080/00461520.2013.838920.
- Belland, B. R., Walker, A., Kim, N. J., & Lefler, M. (2017). Synthesizing results from empirical research on computer-based scaffolding in STEM education: A meta-analysis. *Review of Educational Research*, 87(2), 309–344. <https://doi.org/10.3102/0034654316670999>.
- Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International journal of educational technology in higher education*, 17(1), 1–30. <https://doi.org/10.1186/s41239-019-0176-8>.
- Bransford, J., Brown, A., & Cocking, R. (2000). *How people learn: Brain, mind, and experience & school*. Washington, DC: National Academy Press.
- Burke-Smalley, L. A. (2018). Practice to research: Rapport as key to creating an effective learning environment. *Management Teaching Review*, 3(4), 1–7. <https://doi.org/10.1177/237929>.
- Carver, C., Jung, D., & Gurzynski-Weiss, L. (2021). Examining learner engagement in relationship to learning and communication mode. In P. Hiver, A. H. Al-Hoorie, & S. Mercer (Eds.), *Student engagement in the language classroom* (pp. 120–142). Bristol, UK: Multilingual Matters.
- Chang, K., Sung, Y., & Chen, I. (2002). The effect of concept mapping to enhance text comprehension and summarization. *The Journal of Experimental Education*, 71(1), 5–23. <https://doi.org/10.1080/00220970209602054>.
- Cho, M. H., & Kim, B. J. (2013). Students' self-regulation for interaction with others in online learning environments. *Internet and Higher Education*, 17(2), 69–75. <https://doi.org/10.1016/j.iheduc.2012.11.001>.
- Culpeper, J., & Kan, Q. (2019). Communicative styles, rapport, and student engagement: An online peer mentoring scheme. *Applied Linguistics*, 41(5), 756–786. <https://doi.org/10.1093/applin/amz035>.
- Dabbagh, N., & Kitsantas, A. (2012). Personal learning environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and higher education*, 15(1), 3–8. <https://doi.org/10.1016/j.iheduc.2011.06.002>.
- Danli, L. (2017). Autonomy in scaffolding as learning in teacher-student negotiation of meaning in a university EFL classroom. *Chinese Journal of Applied Linguistics*, 40(4), 410–430. <https://doi.org/10.1515/cjal-2017-0024>.
- Delos Reyes, R. D. G., & Torio, V. A. G. (2020). The relationship of expert teacher-learner rapport and learner autonomy in the CVIF-dynamic learning program. *The Asia-Pacific Education Researcher*, 30(5), 471–481. <https://doi.org/10.1007/s40299-020-00532-y>.
- Derakhshan, A. (2022). *The "5Cs" positive teacher interpersonal behaviors: Implications for learner empowerment and learning in an L2 Context*. Switzerland, Cham: Springer. Retrieved on July 2022 from <https://link.springer.com/book/9783031165276>
- Derakhshan, A., & Malmir, A. (2020). A critical review of the handbook of technology and second language teaching and learning. *Critical Studies in Texts and Programs in Human Sciences*, 20(8), 271–294. <https://doi.org/10.30465/CRTLS.2020.26044.1571>.

- Derakhshan, A., Doliński, D., Zhaleh, K., Enayat, M. J., & Fathi, J. (2022). A mixed-methods cross-cultural study of teacher care and teacher-student rapport in Iranian and Polish University students' engagement in pursuing academic goals in an L2 context. *System*, *106*, 102790. <https://doi.org/10.1016/j.system.2022.102790>.
- Derakhshan, A., Fathi, J., Pawlak, M., & Kruk, M. (2022). Classroom social climate, growth language mindset, and student engagement: The mediating role of boredom in learning English as a foreign language. *Journal of Multilingual and Multicultural Development*, 1–19. <https://doi.org/10.1080/01434632.2022.2099407>.
- Dewaele, J. M., & Pavlescu, L. M. (2021). The relationship between incommensurable emotions and willingness to communicate in English as a foreign language: A multiple case study. *Innovation in Language Learning and Teaching*, *15*(1), 66–80. <https://doi.org/10.1080/17501229.2019.1675667>.
- Dincer, A., Yesilyurt, S., Noels, K. A., & Vargas Lascano, D. I. (2019). Self-determination and classroom engagement of EFL learners: A mixed-methods study of the self-system model of motivational development. *SAGE Open*. <https://doi.org/10.1177/2158244019853913>.
- Dinh, H. (2016). *The effectiveness of scaffolding in a blended learning course from students' perspective* (A Master's Thesis). University of Oulu, Finland.
- Dörnyei, Z., & Ushioda, E. (2013). *Teaching and researching: Motivation* (2nd ed.). London: Routledge.
- Dotterer, A. M., & Lowe, K. (2011). Classroom context, school engagement, and academic achievement in early adolescence. *Journal of Youth and Adolescence*, *40*(12), 1649–1660.
- Ellis, R. (2000). Task-based research and language pedagogy. *Language Teaching Research*, *4*(3), 193–220.
- Engin, M. (2013). Questioning to scaffold: An exploration of questions in pre-service teacher training feedback sessions. *European Journal of Teacher Education*, *36*(1), 39–54. <https://doi.org/10.1080/02619768.2012.678485>.
- Farrell, T. S. (2014). *Promoting teacher reflection in second language education: A framework for TESOL professionals*. London: Routledge.
- Foote, J. A., & Trofimovich, P. (2018). Second Language Pronunciation Learning: An overview of theoretical perspectives. In O. Kang, R. I. Thomson, & J. Murphy (Eds.), *The Routledge Handbook of Contemporary English pronunciation* (pp. 75–90). London and New York: Routledge.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, *74*(3), 59–109. <https://doi.org/10.3102/00346543074001059>.
- Frisby, B. N. (2019). The influence of emotional contagion on student perceptions of instructor rapport, emotional support, emotion work, valence, and cognitive learning. *Communication Studies*, *70*(4), 492–506. <https://doi.org/10.1080/10510974.2019.1622584>.
- Frisby, B. N., & Gaffney, A. L. (2015). Understanding the role of instructor rapport in the college classroom. *Communication Research Reports*, *32*(4), 340–346. <https://doi.org/10.1080/08824096.2015.1089847>.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, *95*(1), 148–162. <https://doi.org/10.1037/0022-0663.95.1.148>.
- Ganem-Gutiérrez, A. (2008). Micro genesis, method and object: A study of collaborative activity in a Spanish as a foreign language classroom. *Applied Linguistics*, *29*(1), 120–148. <https://doi.org/10.1093/applin/amm032>.
- Hiver, P., Al-Hoorie, A. H., & Mercer, S. (2021). *Student engagement in the language classroom*. Bristol, UK: Multilingual Matters.
- Hoi, V. N. (2022). A synergetic perspective on students' perception of classroom environment, expectancy value belief, and engagement in an EFL context. *Language Teaching Research*, doi:13621688221075781.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *SEM*, *6*(1), 1–55.
- Huang, J. (2007). Teacher autonomy in second language education. *Teaching English in China*, *30*(1), 30–42.
- Huang, J. (2013). *Autonomy, agency and identity in foreign language learning and teaching*. Bern: Peter Lang.
- Hughes, J. N., & Cao, Q. (2018). Trajectories of teacher-student warmth and conflict at the transition to middle school: Effects on academic engagement and achievement. *Journal of School Psychology*, *67*(2), 148–162. [10.1016/j.jsp.2017.10.003](https://doi.org/10.1016/j.jsp.2017.10.003).
- Hung, B. P. (2019). Impacts of cooperative learning: A qualitative study with EFL students and teachers in Vietnamese colleges. *Issues in Educational Research*, *29*(4), 1223–1240. Retrieved on July 2022 from <http://www.iier.org.au/iier29/hung.pdf>
- Jadallah, M., Anderson, R. C., Nguyen-Jahiel, K., Miller, B. W., Kim, I., Kuo, L. J., Dong, T., & Wu, X. (2011). Influence of a teacher's scaffolding moves during child-led small-group discussions. *American Educational Research Journal*, *48*(3), 194–230.

- Jarvis, M. A., & Baloyi, O. B. (2020). Scaffolding in reflective journaling: A means to develop higher order thinking skills in undergraduate learners. *International Journal of Africa Nursing Sciences*, 12(2), 100–195. <https://doi.org/10.1016/j.ijans.2020.100195>.
- King, S. B. (2014). Graduate student perceptions of the use of online course tools to support engagement. *International Journal for the Scholarship of Teaching and Learning*, 8(1), 1–18. <https://doi.org/10.20429/ijstol.2014.080105>.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). New York: The Guilford Press.
- Lascotte, D. K. (2018). Strategies, scaffolding, and social positioning in interaction. *TESOL Journal*, 9(2), 261–277. <https://doi.org/10.1002/tesj.318>.
- Levitt, F. (2017). *Exploring the use of MALL with a scaffolded multi-sensory, structured language approach to support development of literacy skills among second-chance EFL learners at a technological-vocational secondary school in Israel* (doctoral dissertation), University of Sussex, Brighton, UK.
- Li, D. L. (2012). Scaffolding adult learners of English in learning target form in a Hong Kong EFL university classroom. *Innovation in Language Learning and Teaching*, 6(2), 127–144. <https://doi.org/10.1080/17501229.2011.626858>.
- Liu, Z., Hua, J., & Zhang, Z. (2022). Scaffolding instruction in virtual Language Learning. *Journal of Language Teaching and Research*, 13(2), 386–391. <https://doi.org/10.17507/jltr.1302.20>.
- Ma, J., Han, X., Yang, J., & Cheng, J. (2015). Examining the necessary condition for engagement in an online learning environment based on learning analytics approach: The role of the instructor. *The Internet and Higher Education*, 24(2), 26–34. <https://doi.org/10.1016/j.iheduc.2014.09.005>.
- Ma, M., Chen, J., Zheng, P., & Wu, Y. (2020). Factors affecting EFL teachers' affordance transfer of ICT resources in China. *Interactive Learning Environments*, 30(6), 1044–1059. <https://doi.org/10.1080/10494820.2019.1709210>.
- Mart, C. T. (2018). From communicative competence to language development. *International Journal of English Linguistics*, 8(2), 163–167.
- Matusov, E., & Hayes, R. (2000). Sociocultural critique of Piaget and Vygotsky. *New Ideas in Psychology*, 18(2–3), 215–239.
- McKellar, S. E., Cortina, K. S., & Ryan, A. M. (2020). Teaching practices and student engagement in early adolescence: A longitudinal study using the classroom assessment scoring system. *Teaching and Teacher Education*, 89(3), 1–11. doi:<https://doi.org/10.1016/j.tate.2019.102936>.
- Mercer, N., & Littleton, K. (2007). *Dialogue and the development of children's thinking. A sociocultural approach*. New York: Routledge.
- Mercer, S. (2019). Language learner engagement: Setting the scene. In X. Gao (Ed.), *Second handbook of English language teaching* (pp. 1–19). Basel, Switzerland: Springer. https://doi.org/10.1007/978-3-030-02899-2_40.
- Mercer, S., & Dörnyei, Z. (2020). *Engaging language learners in contemporary classrooms*. Cambridge: Cambridge University Press.
- Mercer, S., & Gkonou, C. (2020). Relationships and good language teachers. In C. Griffiths, & Z. Tajeddin (Eds.), *Lessons from good language teachers* (pp. 164–174). Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108774390.016>.
- Mullen, G. E., & Tallent-Runnels, M. K. (2006). Student outcomes and perceptions of instructors' demands and support in online and traditional classrooms. *Internet and Higher Education*, 9(3), 257–266. <https://doi.org/10.1016/j.iheduc.2006.08.005>.
- Mystkowska-Wiertelak, A. (2020). Teachers' accounts of learners' engagement and disaffection in the language classroom. *Language Learning Journal*. doi:<https://doi.org/10.1080/09571736.2020.1800067>.
- Nguyen, Q. N. (2022). Teachers' scaffolding strategies in internet-based ELT classes. *Teaching English as a Second Language Electronic Journal (TESL-EJ)*, 26(1), 1–35. <https://doi.org/10.55593/ej.25>.
- Nunez, J. L., & Leon, J. (2019). Determinants of classroom engagement: A prospective test based on self-determination theory. *Teachers and teaching*, 25(2), 147–159. <https://doi.org/10.1080/13540602.2018.1542297>.
- Olson, J., & Platt, J. (2000). The instructional cycle. In J. Olson, J. Platt, & L. Dieker (Eds.), *Teaching children and adolescents with special needs* (pp. 170–197). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Pea, R. D. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, education, and human activity. *The Journal of the Learning Sciences*, 13(3), 423–451. <https://doi.org/10.1207/s15327809jls1303-6>.
- Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics*, 36(2), 50–72. <https://doi.org/10.1017/S0267190515000094>.
- Phung, L., Nakamura, S., & Reinders, H. (2021). The effect of choice on affective engagement: Implications for task design. In P. Hiver, A. H. Al-Hoorie, & S. Mercer (Eds.), *Student engagement in the language classroom* (pp. 163–181). Bristol, UK: Multilingual Matters.

- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 365–386). Springer.
- Pishghadam, R., Derakhshan, A., Zhaleh, K., & Al-Obaydi, L. H. (2021). Students' willingness to attend EFL classes with respect to teachers' credibility, stroke, and success: A cross-cultural study of iranian and iraqi students' perceptions. *Current Psychology*. <https://doi.org/10.1007/s12144-021-01738-z>.
- Puntambekar, S., & Hubscher, R. (2005). Tools for scaffolding students in a complex learning environment: What have we gained and what have we missed? *Educational Psychologist*, 40(1), 1–12. <https://doi.org/10.1207/s1532698>.
- Raymond, E. (2000). *Cognitive characteristics. Learners with mild disabilities* (pp. 169–201). Needham Heights, MA: Allyn & Bacon, Pearson Education Company.
- Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149–172). New York: Springer.
- Reinders, H., & Hubbard, P. (2012). CALL and autonomy. Affordances and constraints. In H. T. M. Reinders, & M. Warschauer (Eds.), *Contemporary CALL* (pp. 359–375). New York, NY: Continuum.
- Roorda, D. L., Jorgensen, T. D., & Koomen, H. M. (2019). Different teachers, different relationships? Student-teacher relationships and engagement in secondary education. *Learning and Individual Differences*, 75(2), 101761. [10.1016/j.lindif.2019.10](https://doi.org/10.1016/j.lindif.2019.10).
- Shakki, F. (2022). Iranian EFL students' L2 engagement: The effects of teacher-student rapport and teacher support. *Language Related Research*, 13(3), 175–198. [10.52547/LRR.13.3.8](https://doi.org/10.52547/LRR.13.3.8).
- Sang, Y., & Hiver, P. (2021). Engagement and companion constructs in language learning: Conceptualizing learners' involvement in the L2 classroom. In P. Hiver, A. H. Al-Hoorie, & S. Mercer (Eds.), *Student engagement in the language classroom* (pp. 17–37). Clevedon: Multilingual Matters. <https://doi.org/10.21832/9781788923613-005>.
- Sanrock, J. (2018). *A topical approach to life-span development*. McGraw-Hill.
- Shea, P., Li, C. S., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *Internet and Higher Education*, 9(3), 175–190. <https://doi.org/10.1016/j.iheduc.2006.06.005>.
- Simons, K. D., & Ertmer, P. A. (2005). Scaffolding disciplined inquiry in problem-based environments. *International Journal of Learning*, 12(6), 297–305.
- Smit, J., & Van Eerde, D. (2013). What counts as evidence for the long-term realization of whole class scaffolding? *Learning Culture and Social Interaction*, 2(3), 22–31. [10.1016/j.lcsi.2012.12.006](https://doi.org/10.1016/j.lcsi.2012.12.006).
- Soffer, T., & Cohen, A. (2019). Students' engagement characteristics predict success and completion of online courses. *Journal of Computer Assisted Learning*, 35(3), 378–389. <https://doi.org/10.1111/jcal.12340>.
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97–114). Oxford: Oxford University Press.
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97–114). Oxford: Oxford University Press.
- Thompson, C. S. (2018). The construct of respect in teacher-student relationships: Exploring dimensions of ethics of care and sustainable development. *Journal of Leadership Education*, 17(3), 42–60. <https://doi.org/10.12806/V17/I3/R3>.
- Thornberg, R., Forsberg, C., Chiriac, E. H., & Bjereld, Y. (2020). Teacher-student relationship quality and student engagement: A sequential explanatory mixed-methods study. *Research papers in education*, 35(2), 1–20.
- Timmis, I. (2019). Getting learners to speak in the ELT classroom. *JELTIM Journal of English Language Teaching Innovations and Materials*, 1(2), 1–6. <https://doi.org/10.26418/jeltim.v1i1>.
- Todo, M. F. L., & Budiarta, I. W. (2018). Critical discourse analysis on Kompas daily newspaper report on profiteering through the names of President Jokowi and Vice President Jusuf Kalla. *RETORIKA: Jurnal Ilmu Bahasa*, 4(1), 26–37. <https://doi.org/10.22225/jr.4.1.162.26-37>.
- van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher-student interaction: A decade of research. *Educational Psychology Review*, 22(3), 271–296. <https://doi.org/10.1007/s10648-010-9127-6>.
- Van de Pol, J., Volman, M., & Beishuizen, J. (2012). Promoting teacher scaffolding in small-group work: A contingency perspective. *Teaching and Teacher Education*, 28(2), 193–205. <https://doi.org/10.1016/j.tate.2011.09.009>.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Vygotsky, L. S. (1987). Thinking and Speech. In R. W. Rieber, & A. S. Carton (Eds.), *The Collected Works of L. S. Vygotsky, Problems of General Psychology (Vol. 1)* (pp. 39–285). New York: Plenum Press.

- Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism*, 9(2), 159–180. <https://doi.org/10.1080/13670050608668639>.
- Wang, Y., & Guan, H. (2020). Exploring demotivation factors of Chinese learners of English as a foreign language based on positive psychology. *Revista Argentina de Clinica Psicologica*, 29(1), 851–861. <https://doi.org/10.24205/03276716.2020.116>.
- Wang, Y., Derakhshan, L., A., & Zhang, L. J. (2021). Researching and practicing positive psychology in second/foreign language learning and teaching: The past, current status and future directions. *Frontiers in Psychology*, 12, 1–10. <https://doi.org/10.3389/fpsyg.2021.731721>.
- Wilson, J. H., & Ryan, R. G. (2013). Professor–student rapport scale: Six items predict student outcomes. *Teaching of Psychology*, 40(2), 130–133. <https://doi.org/10.1177/0098628312475033>.
- Wilson, J. H., Wilson, S. B., & Legg, A. M. (2012). Building rapport in the classroom and student outcomes. In B. M. Schwartz & R. A. R. Gurung (Eds.), *evidence-based teaching for higher education* (pp. 23–37). American Psychological Association. doi:<https://doi.org/10.1037/13745-002>.
- Wittwer, J., & Renkl, A. (2008). Why instructional explanations often do not work: A framework for understanding the effectiveness of instruction explanations. *Educational Psychologist*, 43(1), 49–64. <https://doi.org/10.1080/00461520701756420>.
- Xie, F., & Derakhshan, A. (2021). A conceptual review of positive teacher interpersonal communication behaviors in the instructional context. *Frontiers in Psychology*, 12, 2623. <https://doi.org/10.3389/fpsyg.2021.708490>.
- Yang, C. C., Tsai, I. C., Kim, B., Cho, M. H., & Laffey, J. M. (2006). Exploring the relationships between students' academic motivation and social ability in online learning environments. *Internet and Higher Education*, 9(3), 277–286. doi:10.1016/j.iheduc.2006.08.002.
- Yildiz, Y., & Celik, B. (2020). The use of scaffolding techniques in language learning: Extending the level of understanding. *International Journal of Social Sciences & Educational Studies*, 7(3), 148–153.
- Zhou, S., Hiver, P., & Al-Hoorie, A. H. (2021). Measuring L2 engagement: A review of issues and applications. In P. Hiver, A. H. Al-Hoorie, & S. Mercer (Eds.), *Student engagement in the language classroom* (pp. 75–98). Bristol, UK: Multilingual Matters. <https://doi.org/10.21832/978178892613-008>.

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