Asian Education Studies; Vol. 7, No. 3; 2022
ISSN 2424-8487 E-ISSN 2424-9033
Published by July Press

Whether Chinese Primary School English Teacher Are Able to Help Students Learn With a Deep Approach

Zhixuan Wang[1]

[1] University College London (UCL), London, United Kingdom

Correspondence: Zhixuan Wang, University College London (UCL), London, United Kingdom.

Received: July 12, 2022 Accepted: August 10, 2022 Online Published: August 31, 2022

doi:10.20849/aes.v7i3.1276 URL: https://doi.org/10.20849/aes.v7i3.1276

Abstract

In order to improve the quality of education, there is a great concern for students' learning methods. Students' learning methods are basically divided into deep and surface methods. The deep approach is seen as the one that is encouraged to be used. However, in the views of the researchers, students in Asian countries tend to prefer to use surface methods of learning. Therefore, the authors would like to critically analyse an innovative teaching activities in a Chinese primary school to investigate whether Chinese primary school English teachers might be able to help their students achieve deep learning through changes in their classrooms.

Keywords: learning approach, deep learning, surface learning, Chinese classroom

1. Introduction

In order to improve the quality of education, it is essential to understand the approaches students learn and the reasons for their choices (Xie et al., 2022). Marton and Saljo (1976) first introduce deep and surface learning methods through a study of student reading. Then, several study groups gradually develop and enrich this theory (Pask, 1976; Entwistle, 1977; Biggs, 1978). However, some problems have emerged, such as treating the surface approach as bad and discouraging students from using it (Scouler, 1998).

This mindset has led to problems such as the Chinese learner's paradox because Chinese students and even Asian students tend to use the surface approach due to cultural factors, whereas they do not seem to do worse than Western students (Kember & Gow, 1991). However, they may also use a deep approach to learning if their learning environment and motivation are moderated, as well as cultural factors, learning environment and motivation affect students' choice of learning approach (Entwistle, 1991; Kennedy, 2002; Dow, 2006). Group work as an activity that might change the learning environment and increase students' intrinsic motivation is an effective way to achieve deep learning (Ramsden, 1992). However, group work has some disadvantages and is resisted by some teachers and students, for instance, time may be wasted, or control of the classroom may be lost (Plummer & Dudley, 1993).

Before studying for my Master of Education, I worked for one year as a primary school English teacher in a Chinese primary school. This essay will later introduce the event which I tried to innovate, different from my previous traditional classroom. In the previous class, I was the class owner, and the students only were the recipients of my information. The students were not very engaged and not interested. Therefore, I tried to innovate my classroom for the first time after seeing some exemplary classrooms. In this transformation, I discovered that my students had moved from a tendency to learn by surface methods to becoming deep learners.

Therefore, this essay will discuss this lesson and provide thoughts for future lessons by analyzing the strengths and weaknesses of this lesson. Firstly, this essay will introduce the development and issues concerning the surface and deep approaches. This will be followed by an analysis of the factors that influence learning methods. Finally, the learning event will be analyzed through the roles of teacher and students, peer support and reward systems.

2. Literature Review

2.1 Deep Learning and Surface Learning

2.1.1 The Development Process of Learning Approach Theory

Learning methods have been categorized into deep learning and surface learning (Dinsmore & Alexander, 2012).

Deep and surface learning approaches are first introduced by Marton and Saljo (1976). Their qualitative study of students' reading found that different students had different learning outcomes using different learning methods. Students who used surface learning methods focused more on memorization. However, those who used deep learning methods focused on exploring the meaning behind the reading and integrating what they read with what they had learned.

After Marton and Saljo (1976), several research groups also focus on the learning approach, such as the Swedish group led by Marton (Marton & Saljo, 1976); the Lancaster group led by Entwistle (Entwistle & Wilson, 1970); the Australian group led by Biggs (Biggs,1978) and also the Richmond group (Pask, 1976). In their research, deep learning is considered where students will attempt to understand the intention and key concepts of learningthe task. Additionally, learners can apply what they have learned to new situations or integrate it with their daily experiences. On the contrary, surface learning refers to the fact that students are generally not interested in the task, and they may not understand the concepts of the task, relying only on memory of concepts that are likely to appear on the test. In addition, knowledge memorized through deep learning may be retained over time, whereas knowledge memorized through surface learning might be forgotten in a short period (Biggs, 1987; Entwiste & Ramsden, 1982; Entwistle, 1986; Kember, 2016).

Except for surface and deep approaches, two new approaches are proposed. Entwistle and Ramsden (1982) add the concept of the strategic approach. Biggs (1979) add the concept of the achieving approach to the surface approach and the deep approach. The strategic approach and the Achieving approach are seen as an approach between the surface approach and the deep approach (Biggs, 1979; Entwistle & Ramsden, 1982). The difference between the two approaches may depend on what the authors consider to be the factors influencing the learning approach. The achieving approach is based on Biggs' (1979) view that learning approaches are related to motivation. The Strategic approach is based on Entwistle and Ramsden's (1982) view that learning approaches relate to learning intention.

However, both approaches are similar. The strategic approach and achieving approach focus on how students organize the learning process, whereas the initial deep and surface learning approaches focus on how students approach the learning task (Volet & Chalmers, 1992; Biggs et al., 2001). Some scholars suggest that the third approach could be incorporated into the deep learning approach (Zeegers, 2002; Entwistle & Mcune, 2004.) Therefore, the two commonly mentioned learning approaches are surface and deep learning. The development of the two methods has been accompanied by some controversy, which will be criticized in the following paragraphs.

2.1.2 Critiques of Learning Methods Theory

The language of deep learning and surface learning is considered controversial (Howie and Bagnall, 2013). From the wording, it might be rapidly perceivable that deep is good and the surface is terrible. Furthermore, the meaning of the two words might be easily identified. However, few articles acknowledge this fact (Haggis, 2003). Therefore, it is probably implicit in this model that students who use surface learning methods will have poor learning outcomes while students who use deep learning will get better results. Many scholars have acknowledged this and support that deep methods are more effective and should be encouraged than surface methods (Scouler, 1998; Biggs, 1999).

This inherent mindset has given rise to a kind of Chinese learner paradox. Some scholars firmly believe that Asian students learn with a surface approach compared with Western students (Kember & Gow, 1991; Biggs, 1989; Ballard & Clanchy, 1984). However, this approach, which has been identified as discouraged, has led many Asian students to achieve extraordinary academic results. In some cases, Asian students will even exceed some western students, who are considered more proficient with the deep approach (Kember, 2000).

Chinese students are considered to rely significantly on rote memorization and lack critical thinking. They are thus identified as surface learners (Cross & Hitchcock, 2007). However, Chinese students use an intermediate approach rather than rote learning (Tang, 1991). Chinese or Asian students use an intermediate approach that combines comprehension and memorization, and they regard memorization as a process of deduction and comprehension (Marton, 1996; Kember, 2000; Mathias et al., 2013). Therefore, from this perspective, the surface approach is not necessarily considered harmful. Because culture may influence the choice of learning approach (Kennedy, 2002), this essay speculates that this paradox may have developed because the model of deep and surface learning was worked out in Western culture. This model may not apply to all contexts.

The surface approach being perceived as bad may also lead to misunderstandings in terms of disciplines. Different disciplines require different learning environments (Lucas & Meyer, 2005). The fundamentals may need to be memorized before they can be understood through the deep approach. Therefore, different subject

content may require different learning methods. It is hard to become proficient without remembering basic vocabulary and grammatical principles when learning a language.

Similarly, when learning scientific content such as mathematics, it is hard to take the next step in calculations without remembering the formulae (Kember, 2016). Kember (2016) claims that the process students use when undertaking extensive memorization is probably a gradual transition from a surface approach to a deep approach. This approach would help students to be able to understand the knowledge after constant repetition of memorization. This essay supports the view that not all subjects need to be used a deep approach initially, as different subjects require different approaches to learning. It may be better for students to use deep learning approaches progressively.

2.2 Factors Influencing Learning Methods

The different cultural backgrounds mentioned above that lead to different approaches to learning reveal that culture may influence learning approaches (Kennedy, 2002; King et al., 2018). In addition to this, the learning environment and motivation may also influence students' learning approaches (Biggs, 1988; Entwistle, 1991; Ramsden, 1992; Dow, 2006).

Biggs (1989) identifies four characteristics of the learning environment that may be responsive to learning: 1) students may need to be aware of and involved in the selection of content; 2) students may need to be active; 3) students may need to interact with others; and 4) students may need to have a good knowledge base, and these characteristics might help students to create a deeper approach. The four perspectives suggest that deep learning is more likely to occur in student-centred learning environments (Hand et al., 1996). The importance of student-centred environments has also been mentioned in studies of Chinese contexts. In a study of secondary school students in Hong Kong, it was found that students preferred to learn in a friendly environment rather than one with more teacher control (Yuen-Yee & Watkins, 1994), and this was supported by Tang (1996).

Students choose the deep learning approach because of the influence of intrinsic motivation (Biggs, 1987). Intrinsic motivation generally refers to the willpower that comes from completing a task and can gain pleasure from it. Furthermore, extrinsic motivation implies that the task is only a means to achieve an extrinsic goal (Baker, 2004). Intrinsic motivation and extrinsic motivation generally reflect a person's goals and interest in the task (Everaert et al., 2017). The more intrinsic motivation a student has, the more that the student may adopt a deep approach to learning (Saljo, 1979).

However, it is still controversial whether learning methods are changed by the above factors (Biggs, 1987; Entwistle and Ramsden, 2015). In other words, perhaps students will choose the same learning methods in different contexts (Biggs, 1987; Duff et al., 2004). Nevertheless, the present article speculates that learning methods are subject to change in response to these changing factors. Because students will face different learning tasks in different contexts, students may change their interest in the learning task. This change might alter the student's motivation to learn. Therefore, a change in one of these factors may cause changes. These changes may lead to an unstable approach to learning for the student.

2.3 Group Work and Learning Methods

Some research has shown that implementing group work may contribute to students' achievement of deep learning (Ramsden, 1992; Hall et al., 2004; Gordon & Debus, 2002). Blatchford et al. (2003: 155) define group work as the "number of students grouped and working together as a team. Although a teacher may be involved in this type of learning, the balance of ownership and control is shifted towards the students themselves". According to Biggs (1989), the need for students to interact with others is one of the four features of the learning environment that help develop a deep approach, as well as Moon (1999), who also identified the creation of learning groups as a way to change the learning environment. Therefore, group work might create an environment for students to help them learn with a deep approach.

Group work is a student-centred approach to teaching and learning (Johnson, 1991) and may help students to become active participants in the classroom (Nichols and Miller, 1994). In this process, students gain more ownership (Ames, 1992) and may be motivated to learn, which increases students' intrinsic motivation to learn (Deci and Ryan, 2000). Intrinsic motivation would drive students to learn with a deep approach (Biggs, 1987). Therefore, in terms of this link between group work and the learning environment and intrinsic motivation, group work would promote students' use of deep learning methods.

Some studies contextualiz the group work in the Chinese context. Jin and Cortazzi's (1998) research in Mainland China show that although group work is used in Chinese classrooms, the format appears to be very different from what is considered in Western. Group communication in Chinese classrooms is arranged in advance by the

teacher. This may be related to the Chinese culture, as Chinese students are trained in the morality of respecting their teachers, since they generally may not challenge or interrupt their teachers (Biggs, 1996; Watkins, 2000). Tang (1996) also mention that Hong Kong students may be engaged in self-motivated group work to complete assignments. Such self-motivated groups also promote students' use of deep methods (Lau et al., 2008). Therefore, this essay argues that group work also occurs in the Chinese context. However, perhaps group work may take different forms due to cultural influences.

However, some research suggests that group work still has some limitations. Many teachers and students are resistant to group work (Bennett & Dunne, 1992; Plummer & Dudley, 1993). Sources of resistance include the fear of losing control in the classroom and wasting too much time on group work. Additionally, in the group work, the more capable and less capable students might not be able to learn from each other, and it might turn out that only the more capable students help the weaker ones (Cohen & Intilli, 1981; Lewis & Cowie, 1993; Baines et al. 2015). Topping (2005) states that a situation of collective ignorance could occur. The discussion could sometimes appear to be out of focus.

Despite these limitations, however, Blatchford et al., (2003) still consider group work an essential option for the future of teaching and learning. This essay agrees with this view. Although there are some limitations to group work, these may be avoided through the teacher's curriculum. Therefore, group work may have more advantages than disadvantages for students, but only if teachers receive some training in group work and use this teaching method appropriately.

The literature review section presents the development of deep learning and surface learning methods and some of the debates and the relationship between group work and deep learning. It also presents some research on both placed in the Chinese context. However, the majority of the research and conclusions mentioned above are presented in the context of higher education. Few relevant studies have been conducted on primary education in China. Therefore, in the next section, this essay will present my teaching event in Chinese primary schools and discuss this experience concerning several pieces of literature.

3. Learning Event

The teaching scenario took place in a Year 3 class of 40 students aged 8 in a Chinese primary school. I was their English teacher in this class. The event was presented as an innovative attempt. Because in previous classes, teachers taught in a very traditional way. I only stood at the front of the classroom to teach, and the students had minimal opportunity to speak in class. The teaching style was similar to that of a cramming class, as there was no interaction between the students and me, and the students were mechanically accepting what I taught. However, English is a language subject, and this subject requires students to communicate. As a result of this traditional form of teaching, students may only be able to grasp the ability to read and write English. Due to the lack of communication, students may not be able to listen or speak very well. After watching some model lessons from other sample schools, I wanted to try to change my teaching style. Therefore, I decided to modify a vocabulary lesson.

In that session, students were given to review some of the store vocabulary, both verbs and nouns, such as 'buy', 'trolley', 'market', and "sell". To make these words more vivid for the students, I made some cards with pictures for them. Firstly, to remind them of the words, I read out the pronunciation and translation of the words. Afterwards, I assigned group tasks, requiring two students to ask each other the meaning and pronunciation of the words. If any of the words were not remembered to help each other write them down. During the first activity, I went around the classroom to observe their understanding of the words. After the discussion, I gave them ten minutes to memorize the words again. I reallocated the groups and put the better students in a group with the worse students according to their mastery of the words.

After the allocation, I arranged a second task in which I asked them to simulate a supermarket scene, with one student playing the role of a seller and the other as a buyer. They were asked to communicate using cards with only pictures, but no word prompts. I told them that they would each have to act out a conversation of about six sentences at the end of the task. Additionally, at the end of all the conversations, the students would have to vote for all the groups that performed. The five groups with the highest number of votes would get a medal. Moreover, I also mentioned that I would observe them if they were conversing fluently, helping each other in the group, and responding positively to each other. I would put two candies on their desks.

After all the groups had finished their performances, I organized a word dictation test since the previous activities had tested their listening, speaking, and reading skills. There was no test on writing skills yet. After the first two discussions, they seemed to have become very familiar with the words, and the test's accuracy rate was a bit higher than the past. Even those students in the class who did not do well in English seemed to be more

active in this lesson than before.

4. Discussion

The most significant difference between this class and my previous traditional classes is students' participation and their ability to grasp the content of the class. I would stand in front of the classroom in my previous classes and teach the class while the students sat in their seats and listened. In the past, a few students even slept through the lesson. I found that some students could not tell me what they had learnt from the lesson during a random check at the end of the lessons. However, because of the change in my approach to the lesson, they could combine the lesson's content with previous content. For example, they could combine the words they learned in the lesson with the sentences before and extend them into a conversation. It might be that the students used a deep approach to learning (Marton & Saljo, 1976). The change in this lesson may have helped the students to make the transition from surface to deep learning.

After the first group task, I left the students ten minutes to memorize the words. This is because the students needed to memorize the words to be better prepared for the next task. When learning English, words need to be remembered as the most fundamental part (Kember, 2016). They may use the surface approach to memorize. However, there is nothing wrong with this because they need to be familiar with the basics in order to support, they're in deep learning.

The learning environment and motivation influence students' choice of learning methods (Biggs, 1988; Entwistle, 1991; Ramsden, 1992; Dow, 2006). In this lesson, I was more of a listener than ever before, and the students changed from listeners to participants compared to before. The model of the classroom was transformed from teacher-centred to student-centred. During the group work and role-play sessions, students increased their interaction with their peers and completed multiple tasks with the help and support of their peers. Furthermore, I interspersed the tasks with a reward system that was not present before. Therefore, this essay will critique my learning event in terms of the role of the teacher, peer support and the reward system.

4.1 The Role of Teacher and Student

A student-centred learning environment is more likely to help students achieve deep learning (Hand et al., 1996). A student-centred classroom considers students as active participants in learning rather than passive recipients of knowledge (De Corte, 2000). The learning environment that Biggs (1989) refers to as helping students use deep methods suggests that students should be active participants in the classroom. In this class, I weakened my role as a teacher and reinforced the role of the students. Such a change increased student engagement. The students actively participated in their learning when they used what they had learned in the role-play session to engage in conversation. Furthermore, the students did the scoring session after the performance. They could reflect on what they had learned in class during the marking process. Such a learning environment helps students gradually achieve a deeper approach to their learning.

A student-centred learning environment requires students to aim for comprehension (Mayer, 2004). Students' gradual understanding of knowledge is a sign of deep learning (Kember, 2016). At the end of one group task, students might not be able to fully comprehend the words. They had only memorized them. Afterwards, during the second group task, the usage and meaning of the words were gradually understood through group conversations and tests. In this way, they may have progressed from a surface approach to a deep approach.

In the traditional Chinese classroom context, the teacher is seen as the center of the classes and demands compliance from the students due to the Confucian culture (Dennehy, 2015). In a student-centred learning environment, the teacher's role changes from a provider of information to a facilitator of learning (Beijiaard et al., 2000; Huang, 2002). When students have to make sense of information independently, they spontaneously adopt a deep learning approach to find connections and meaning between what they are learning (Biggs et al., 2001). In my class, instead of treating the students as if they were only going to receive information, I used classroom activities that made them have to use deep methods so that they could make connections to knowledge on their own.

However, I consider that I did not fully achieve a student-centred classroom. I walked around the classroom while the students were discussing. However, I found that my presence seemed to impact the students significantly. As I stood next to them, trying to catch up on their progress, they seemed to shift their attention from the discussion to me. It was not until I left that they were able to turn their attention back to the discussion again entirely. Galton (2009) also mentions the low impact on the teacher's students occupying a neutral space when they are in conversation.

Therefore, in order to change the pedagogy of teachers, the first thing to do is to change the perceptions of

teachers towards teaching and learning, so that it will be better able to create a student-centred learning environment when they see teaching as helping students to develop (Trigwell et al., 1999). If a student-centred classroom is to be achieved to promote them to use deep learning goals, teachers should realize that they should not be the controller of the classroom. The teacher's role should be to assist the students in their learning. It is necessary to create a sense of student ownership and increase their interest in participating in class to increase their intrinsic motivation (Everaert et al., 2017) and help students achieve deep learning.

4.2 Peer Support and Review

Appropriate group work and deep learning methods are related (Ramsden, 1992; Gordon & Debus, 2002). Biggs (1989) mentions interaction with others as a feature of a deep learning environment. Working in small groups encourages each student to be a facilitator in the learning process of the other students, and students reflect on their learning as they act as facilitators. Students may act as both learners and facilitators during this process in this school environment (Ashwin, 2003). I began by arranging for the students to test each other's mastery of the words in my classroom. As they were tested, they would recall the words from the classroom, and when they tested each other, they would recall the words again at the same pace as each other, presumably reflecting on them.

In the second group activity, I arranged for students to use what they had learnt in a virtual scenario to have a conversation. I had not taught them how to combine sentences and words before. Therefore, in this learning environment, students took more responsibility for their learning (Packham & Miller, 2000). They could review the content repeatedly through discussion (Magolda, 1999). Students are more effectively engaged in deeper learning through this process (Bold, 2008).

Students have more autonomy in group work than traditional classroom formats (Ames, 1992). This autonomy may allow students to generate higher intrinsic motivation and productivity (Swezey et al., 2012). High intrinsic motivation allows students to choose deep learning methods (Biggs, 1987). In the sessions I arranged for group work, I only informed them what tasks they needed to complete, but I did not inform them exactly how to do it and what kind of results they had to get. Thus, they were entirely on their own in deciding how to proceed during the discussion. The active participation of the students in this lesson was something I had not expected before. Most of the students were actively participating and interacting with their peers. This kind of class gave the students more autonomy than before, and they could learn at their own pace, which might be why the students were more active in this lesson.

However, learning together may not necessarily mean that the quality of learning will be improved because participants may expect someone to take over from them in the team (Sears & Pai, 2012). This is the reason why I arranged two-person groups. Because my students were being involved in group work for the first time, I was concerned that if there were many people in a group, some students might be too lazy to speak up. However, if two students were in a group, they had to interact with each other in such a situation. Nevertheless, there were still some issues with my group arrangements.

The reason why many teachers or students are reluctant to work in groups is that students of widely different abilities would be unable to learn from each other, it may be that only the less able students could learn from the more capable ones, yet there is no way for the more able ones to improve (Cohen & Intilli, 1981). This was one of the same concerns when organizing group work, which happened in this event. In the role play group work session, I placed the students with high grades in groups with those with low grades. I found that the students with low grades in the three groups could not respond to the other students' questions because they did not have a good grasp of knowledge. The more impatient students would even drop the conversation. This was not fair to the other student. A group of students seemed to have had previous conflicts, thus making their interactions rigid. In contrast to this group, a group of students were so close that they would spend part of their discussion on their after-school activities. Their discussions were out of focus (Topping, 2005).

These groups may not have achieved deeper learning through group work, as their interaction was weak or unfocused. This did not create a learning environment for deeper learning and did not increase their intrinsic motivation to learn (Biggs, 1989; Deci & Ryan, 2000). These would be points that I did not consider when assigning groups. I grouped them according to their grades and did not note their personalities. Therefore, if I have the opportunity to arrange group activities again in the future, I will choose to arrange each group of students from multiple perspectives, such as personality, grades, and relationships between classmates.

4.3 Reward System

Rewards are recommended as one of the group work components (Sears & Pai, 2012). The quality and

effectiveness of group work depending on the learning task and the reward structure (Vedder & Veendrick, 2003). In group work, extrinsic rewards may create shared goals and positive interdependence in teams (Johnson et al., 2013). Deci and Ryan (2008) indicate that extrinsic motivation may be transformed into intrinsic motivation when rewards may satisfy students' basic psychological needs, thus facilitating deep learning methods (Biggs, 1989). Therefore, students may be tempted by rewards to achieve deep learning when the rewards meet their expectations.

I gave rewards twice during the whole class, firstly during their role play communication, I gave them candies if they were actively helping each other. The second time was when the group that finished in the top five in the final grading would receive a medal. Because my students generally love sweets, sweets are a great temptation for my students. The medals are also an excellent incentive for the students as they can take them home and show them to their parents. This might give them more motivation to participate in the activity.

When I gave groups sweets as a reward, I found that if I gave sweets to any group, the students around that group behaved more positively. Hence, I was worried if they were trying to win sweets rather than interested in what the group was working on. As Cameron and Pierce (1994) suggest, extrinsic rewards might undermine intrinsic motivation. This is because intrinsic motivation arises from engaging in an activity because of it rather than for the reward (Deci & Ryan, 1985).

Additionally, I also found that many students who were not previously interested in my lessons tried to participate as actively as possible for the sweets and medals. For some students who lack intrinsic motivation and find it difficult to find personal meaning in their learning, extrinsic motivation may help them in this situation (Vedder & Veendrick, 2003). Furthermore, when rewards are associated with personal progress and performance, they do not affect students' intrinsic motivation because people attribute the cause of their behaviour to themselves (Ryan and Deci, 2000). Just as my rewards are given out because of their performance, even though my students are motivated to participate in classroom activities for medals and candy, they may be intrinsically motivated to achieve deep learning.

5. Conclusion

This essay has introduced the development and critique of the theory of deep and surface learning methods, which was first proposed by Marton and Saljo (1976), followed by an analysis of the factors that influence students' learning methods, namely the learning environment and motivation. Group work is also a way of promoting a deep approach to learning, as it creates a learning environment that promotes deep learning and increases students' intrinsic motivation (Ramsden, 1992; Biggs, 1989). These theories were then used to analyze an innovative lesson from my previous experience as a teacher. I have observed that most of the students began to learn using the deep approach through the change in the learning environment and increased intrinsic motivation compared to the previous classroom.

However, I have found that there are still shortcomings in the class. For example, although I tended to create a student-centered classroom, I was still concerned about losing control of the classroom, and there was a problem with the allocation of groups being too narrowly based. Through the discussion, I would like to think that my desire to control the classroom will be removed because only in a student-centered learning environment will students have the opportunity to use a deep approach. The classroom should be owned by the students and not the teacher. Moreover, If I have the chance to implement group work activities again. In that case, I will consider it more comprehensively, and I will select suitable group members from the students' point of view and help them achieve deep method learning through group learning.

References

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, (3), 61. https://doi.org/10.1037/0022-0663.84.3.261

Ashwin, P. (2003). Peer facilitation and how it contributes to the development of a more social view of learning. *Research in Post-Compulsory Education*, *8*(1), 005-018. https://doi.org/10.1080/13596740300200137

Baines, E., *et al.*. (2015). The challenges of implementing group work in primary school classrooms and including pupils with special educational needs. *Education*, *43*(1), 15-29. https://doi.org/10.1080/03004279.2015.961689

Baker, S. R. (2004). Intrinsic, extrinsic, and a motivational orientation: Their role in university adjustment, stress, well-being, and subsequent academic performance. *Current Psychology*, *23*(3), 189-202. https://doi.org/10.1007/s12144-004-1019-9

Ballard, B., & Clanchy, J. (1984). *Study abroad: A manual for Asian students*. Longman.

Beijaard, D., *et al.*. (2000). Teachers' perceptions of professional identity: An exploratory study from a personal knowledge perspective. *Teaching and teacher education*, *16*(7), 749-764. https://doi.org/10.1016/S0742-051X(00)00023-8

Bennett, N., & Dunne, E. (1992). *Managing classroom groups*. Simon & Schuster Education.

Biggs, J. (1979). Individual differences in study processes and the quality of learning outcomes. *Higher Education*, *8*(4), 381-394. https://doi.org/10.1007/BF01680526

Biggs, J. (1989). Does learning about learning help teachers with teaching. *Supplement to The Gazette, University of Hong Kong*, *26*(1).

Biggs, J. (1999). What the Student Does: teaching for enhanced learning. *Higher Education Research & Development*, *18*(1), 57-75. https://doi.org/10.1080/0729436990180105

Biggs, J. B. (1978). Individual and group differences in study processes. *British Journal of Educational Psychology, 48*(3), 266-279. https://doi.org/10.1111/j.2044-8279.1978.tb03013.x

Biggs, J. B. (1987). Student Approaches to Learning and Studying. *Research Monograph*, ERIC.

Biggs, J. B. (1988). Assessing student approaches to learning. *Australian Psychologist*, *23*(2), 197-206. https://doi.org/10.1080/00050068808255604

Biggs, J. B. (1996). Western misconceptions of the Confucian-heritage learning culture. *The Chinese Learner: Cultural, Psychological, and Contextual Influences*, 45-67.

Biggs, J., *et al.*. (2001). The revised two-factor study process questionnaire: R-SPQ-2F. *British Journal of Educational Psychology, 71*(1), 133-149. https://doi.org/10.1348/000709901158433

Blatchford, P., *et al.*. (2003). Toward a social pedagogy of classroom group work. *International Journal of Educational Research*, *39*(1-2), 153-172. https://doi.org/10.1016/S0883-0355(03)00078-8

Bold, C. (2008). Peer support groups: fostering a deeper approach to learning through critical reflection on practice. *Reflective Practice*, *9*(3), 257-267. https://doi.org/10.1080/14623940802207022

Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward, and intrinsic motivation: A meta-analyses. *Review of Educational Research*, *64*(3), 363-423. https://doi.org/10.3102/00346543064003363

Cohen, E. G., & Intili, J. A. (1981). *Interdependence and Management in Bilingual Classrooms.* Final Report.

Cross, J., & Hitchcock, R. (2007). Chinese students' (or students from China's) views of UK HE: Differences, difficulties and benefits, and suggestions for facilitating transition. *The East Asian Learner, 3*(2), 1-31.

De Corte, E. (2000). Marrying theory building and the improvement of school practice: A permanent challenge for instructional psychology. *Learning and Instruction*, *10*(3), 249-266. https://doi.org/10.1016/S0959-4752(99)00029-8

Deci, E. L., & Ryan, R. M. (1985). *Motivation and self-determination in human behavior.* NY: Plenum Publishing Co. https://doi.org/10.1007/978-1-4899-2271-7

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

Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains: Correction to Deci and Ryan. https://doi.org/10.1037/0708-5591.49.1.14

Deci, E. L., *et al.*. (2001). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research*, *71*(1), 1-27. https://doi.org/10.3102/00346543071001001

Dennehy, E. (2015). Learning approaches and cultural influences: A comparative study of Confucian and western-heritage students. *Journal of Further and Higher Education*, *39*(6), 818-838. https://doi.org/10.1080/0309877X.2013.869561

Dinsmore, D. L., & Alexander, P. A. (2012). A critical discussion of deep and surface processing: What it means, how it is measured, the role of context, and model specification. *Educational Psychology Review*, *24*(4), 499-567. https://doi.org/10.1007/s10648-012-9198-7

Dow, W. (2006). The need to change pedagogies in science and technology subjects: A European perspective. *International Journal of Technology and Design Education*, *16*(3), 307-321.

https://doi.org/10.1007/s10798-006-0009-7

Duff, A., *et al.*. (2004). The relationship between personality, approach to learning and academic performance. *Personality and Individual Differences*, *36*(8), 1907-1920. https://doi.org/10.1016/j.paid.2003.08.020

Entwistle, N. (1977). Strategies of learning and studying: Regent research findings. *British Journal of Educational Studies*, *25*(3), 225-238. https://doi.org/10.1080/00071005.1977.9973497

Entwistle, N. (1986). Approaches to learning in Higher Education: Effects of motivation and perceptions of the learning environment.

Entwistle, N. J. (1991). Approaches to learning and perceptions of the learning environment: Introduction to the special issue. *Higher Education*, 201-204. https://doi.org/10.1007/BF00132287

Entwistle, N. J., & Entwistle, D. (1970). The relationships between personality, study methods and academic performance. *British Journal of Educational Psychology*, *40*(2), 132-143. https://doi.org/10.1111/j.2044-8279.1970.tb02113.x

Entwistle, N., & Mccune, V. (2004). The conceptual bases of study strategy inventories. *Educational Psychology Review*, *16*(4), 325-345. https://doi.org/10.1007/s10648-004-0003-0

Entwistle, N., & Ramsden, P. (1982). *Understanding student learning: Croom Helm Ltd Provident House Burrell Row Beckenham Kent.* Nichols Publishing Company, New York, NY.

Entwistle, N., & Ramsden, P. (2015). *Understanding student learning (routledge revivals)*. Routledge. https://doi.org/10.4324/9781315718637

Everaert, P., et al. (2017). The relationship between motivation, learning approaches, academic performance and time spent. *Accounting Education*, *26*(1), 78-107. https://doi.org/10.1080/09639284.2016.1274911

Galton, M., Hargreaves, L., & Pell, T. (2009). Group work and whole-class te aching with 11- to 14-year-olds compared. *Cambridge Journal of Education*, *39*(1), 119-140. https://doi.org/10.1080/03057640802701994

Gordon, C., & Debus, R. (2002). Developing deep learning approaches and personal teaching efficacy within a preservice teacher education context. *British Journal of Educational Psychology, 72*(4), 483-511. https://doi.org/10.1348/00070990260377488

Haggis, T. (2003). Constructing Images of Ourselves? A Critical Investigation into 'Approaches to Learning' Research in Higher Education. *British Educational Research Journal*, *29*(1), 89-104. https://doi.org/10.1080/0141192032000057401

Hall, M., *et al.*. (2004). Changing the learning environment to promote deep learning approaches in first-year accounting students. *Accounting Education*, *13*(4), 489-505. https://doi.org/10.1080/0963928042000306837

Hand, L., *et al.*. (1996). Fostering deep and active learning through assessment. *Accounting Education*, *5*(2), 103-119. https://doi.org/10.1080/09639289600000013

Howie, P., & Bagnall, R. (2013). A critique of the deep and surface approaches to learning model. *Teaching in Higher Education*, *18*(4), 389-400. https://doi.org/10.1080/13562517.2012.733689

Huang, H. M. (2002). Toward constructivism for adult learners in online learning environments. *British Journal of Educational Technology*, *33*(1), 27-37. https://doi.org/10.1111/1467-8535.00236

Jin, L., & Cortazzi, M. (1998). Dimensions of dialogue: Large classes in China. *International Journal of Educational Research, 29*(8), 739-761. https://doi.org/10.1016/S0883-0355(98)00061-5

Johnson, D. W. (1991). *Cooperative Learning: Increasing College Faculty Instructional Productivity.* ASHE-ERIC Higher Education Report No. 4, ERIC.

Johnson, D., *et al.*. (2013). *Using Group-based Learning in Higher Education*, p. 187.

Kember, D. (2000). Misconceptions about the learning approaches, motivation, and study practices of Asian students. *Higher Education, 40*(1), 99-121. https://doi.org/10.1023/A:1004036826490

Kember, D. (2016). Why do Chinese students out-perform those from the West? Do approaches to learning contribute to the explanation?. *Cogent Education*, *3*(1), 1248187. https://doi.org/10.1080/2331186X.2016.1248187

Kember, D., & Gow, L. (1991). A challenge to the anecdotal stereotype of the Asian student. *Studies in Higher Education*, *16*(2), 117-128. https://doi.org/10.1080/03075079112331382934

Kennedy, P. (2002). Learning cultures and learning styles: Myth-understandings about adult (Hong Kong)

Chinese learners. *International Journal of Lifelong Education*, *21*(5), 430-445. https://doi.org/10.1080/02601370210156745

King, R. B., *et al.*. (2018). Envisioning a culturally imaginative educational psychology. *Educational Psychology Review, 30*(3), 1031-1065. https://doi.org/10.1007/s10648-018-9440-z

Lau, S., *et al.*. (2008). Task- and self-related pathways to deep learning: The mediating role of achievement goals, classroom attentiveness, and group participation. *British Journal of Educational Psychology*, *78*(4), 639-662. https://doi.org/10.1348/000709907X270261

Lewis, J., & Cowie, H. (1993). Cooperative group work promises and limitations. A study of teachers' values. *Education Section Review-British Psychological Society*, *17*, 77.

Lucas, U., & Meyer, J. H. (2005). Towards a mapping of the student world: The identification of variation in students' conceptions of, and motivations to learn, introductory accounting. *The British Accounting Review*, *37*(2), 177-204. https://doi.org/10.1016/j.bar.2004.10.002

Magolda, M. B. B. (1999). *Creating contexts for learning and self-authorship: Constructive-developmental pedagogy.* Vanderbilt University Press.

Marton, F. (1996). Memorizing and understanding: The keys to the paradox?. *The Chinese Learner: Cultural, Psychological, and Contextual Influences*, 69-83.

Marton, F., & Säljö, R. (1976). On Qualitative Differences in Learning: I-Outcome and Process*. *British Journal of Educational Psychology*, *46*(1), 4-11. https://doi.org/10.1111/j.2044-8279.1976.tb02980.x

Mathias, J., *et al.*. (2013). Challenging the Western stereotype: Do Chinese international foundation students learn by rote?. *Research in Post-Compulsory Education*, *18*(3), 221-238. https://doi.org/10.1080/13596748.2013.819257

Mayer, R. E. (2004). Should there be a three-strikes rule against pure discovery learning?. *American Psychologist*, *59*, 14-19. https://doi.org/10.1037/0003-066X.59.1.14

Moon, J. (1999). *Reflection in learning & professional development: Theory & practice/Jennifer A.* Moon. London: Kogan Page.

Nichols, J. D., & Miller, R. B. (1994). Cooperative learning and student motivation. *Contemporary Educational Psychology, 19*(2), 167-178. https://doi.org/10.1006/ceps.1994.1015

Packham, G., & Miller, C. (2000). Peer-assisted student support: A new approach to learning. *Journal of Further and Higher Education, 24*(1), 55-65. https://doi.org/10.1080/030987700112318

Pask, G. (1976). Styles and strategies of learning. *British Journal of Educational Psychology*, *46*(2), 128-148. https://doi.org/10.1111/j.2044-8279.1976.tb02305.x

Plummer, G., & Dudley, P. (1993). *Assessing Children Learning Collaboratively: Classroom Action Research Studies, and Ideas by Essex Teachers Focusing on Issues of Assessment, National Curriculum and Collaborative Learning*. Essex Development Advisory Service, Education Department.

Ramsden, P. (1992). *Learning to teach in higher education*. Routledge.

Ryan, R. M., & Deci, E. L. (2009). Promoting self-determined school engagement: Motivation, learning, and well-being.

Säljö, R. (1979). Learning about learning. *Higher Education*, *8*(4), 443-451. https://doi.org/10.1007/BF01680533

Scouller, K. (1998). The influence of assessment method on students' learning approaches: Multiple choice question examination versus assignment essay. *Higher Education, 35*(4), 453-472. https://doi.org/10.1023/A:1003196224280

Sears, D. A., & Pai, H.-H. (2012). Effects of Cooperative Versus Individual Study on Learning and Motivation After Reward-Removal. *The Journal of Experimental Education, 80*(3), 246-262. https://doi.org/10.1080/00220973.2011.602372

Swezey, R. W., *et al.*. (2012). Some issues involved in motivating teams. *Motivation: Theory and research.* Routledge.

Tang, C. (1996). Collaborative learning: The latent dimension in Chinese students' learning. *The Chinese learner: Cultural, psychological, and contextual influences*, 183-204.

Tang, K. C. (1991). Effects of different assessment procedures on tertiary students' approaches to studying. *HKU*

Theses Online (HKUTO).

Topping, K. J. (2005). Trends in Peer Learning. *Educational Psychology*, *25*(6), 631-645. https://doi.org/10.1080/01443410500345172

Trigwell, K., *et al.*. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education*, *37*(1), 57-70. https://doi.org/10.1023/A:1003548313194

Vedder, P., & Veendrick, A. (2003). Reward Structure. *Scandinavian Journal of Educational Research*, *47*(5), 529-542. https://doi.org/10.1080/0031383032000122444

Volet, S. E., & Chalmers, D. (1992). Investigation of qualitative differences in university student's learning goals, based on an unfolding model of stage development. *British Journal of Educational Psychology*, *62*(1), 17-34. https://doi.org/10.1111/j.2044-8279.1992.tb00996.x

Watkins, D. (2000). Learning and Teaching: A cross-cultural perspective. *School Leadership & Management*, *20*(2), 161-173. https://doi.org/10.1080/13632430050011407

Xie, Q., *et al.*. (2022). Why do students change their learning approaches? A mixed-methods study. *Educational Psychology*, 1-20. https://doi.org/10.1080/01443410.2022.2049708

Yuen-Yee, G. C., & Watkins, D. (1994). Classroom environment and approaches to learning: An investigation of the actual and preferred perceptions of Hong Kong secondary school students. *Instructional Science*, *22*(3), 233-246. https://doi.org/10.1007/BF00892244

Zeegers, P. (2002). A revision of the Biggs' study process questionnaire (R-SPQ). *Higher Education Research & Development*, *21*(1), 73-92. https://doi.org/10.1080/07294360220124666