

Pros and Cons of Learning Style: an Implication for English Language Teachers

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Abstract

Learning style becomes a familiar theory for English language teachers. With a hypothesis of matching instructions and learning styles resulting in effective learning, many of the English language teachers apply learning style theory within their teaching practices. However, recent studies found that learning style is a myth since there are flaws appearing in the learning style instruments and hypothesis. This study presents in-depth discussions of the pros and cons of learning styles. Also, detailed descriptions about the implication for English language teachers entails at the end of the discussions. This study concludes that English language teachers may focus on (1) assessing students' background knowledge and interests, (2) identifying students' lacks and necessities, (3) providing more engaging teaching media and materials, and (4) boosting students' autonomy, rather than merely getting involved in the raging debates of learning style.

Keywords: *Pros and Cons of Learning Style, Pedagogical Implication, English Language Teachers*

INTRODUCTION

Teaching English is not merely about the matter of how teachers create learning materials and explain them to students. More than that, teachers have to face various ways of their students in learning English. Some students may be active to listen any audios given by the teacher. However, the other students learn best through visualization and movements. This issue refers to the term 'learning style' which is defined as the most preferable way of learning in which the learners feel comfortable to perceive, remember, and use information or knowledge (Ortega, 2009). In this case, teachers have to explore, identify and recognize the students' learning style in order to provide the most suitable way of teaching (Oxford & Anderson, 1995). Thus, teaching methods and materials suiting to the students' learning styles is assumed to result on an effective language learning.

Over the past two decades, many studies have discussed learning style in educational context (Oxford, Holloway & Horton-Murilo, 1992; Reid, 1995; Peacock, 2001; Zhou, 2011; Gilakjani, 2012) and confirmed that learning style is an important aspect to be obeyed by all teachers including English language teachers. Knowing that learning style plays a vital role in instructional processes, English language teachers are encouraged to master the concept of learning style as well as to practice identifying their students' learning styles. Likewise, various instruments for assessing learning styles have emerged and some of the popular instruments include the Felder-Silverman Index of Learning Styles, the Gregorc Style Delineator, Kolb Learning Style Indicator, Dunn & Dunn Productivity Environmental Preference Survey and the VARK Questionnaire (Hawk, 2007). These instruments help teachers to identify their students' learning preferences.

Although learning style is believed as one of the important aspects in instructional process, some studies conversely challenge this idea (Dembo & Howard, 2007; Riener & Willingham, 2010; Newton, 2015; Kirschner, 2017). These studies claimed that there were no strong evidence-based reports showing the significant correlation between learning style, way of teaching and students' achievement. The viewpoint of learning style highlights that teachers should provide multiple ways of teaching including various teaching methods and materials in order to match with the preferred style. However, there are some criticisms against the idea of learning style such as (1) students with tall body are easy to play basketball, not because of they are kinesthetic learners, (2) students learn better when they can relate what they are learning with their prior experiences, knowledge and interest, not because of their learning preferences (3) students may learn based on their preferences – for example, they may choose to learn by watching video, but this does not give impact on how well they learn, and (3) mixing audio-visual media may work but this is not because of addressing different learning styles, instead the media are just successfully attracting the students (Westby, 2019).

Taking into account the different point of views of learning style position and its impact for instructional context, this study provides: (1) general overview of learning style, (2) pros of considering learning style for language learning, (3) cons of considering learning style for language learning and (4) pedagogical implications for English language teachers. The discussions result in a prudent decision for responding to the debate of learning style. Thus, this study expects to be beneficial for ELT teachers, educators and practitioners in considering the employment of learning style in their instructions.

DISCUSSIONS

General overview of learning style

1. Definitions of learning style

What makes learners easy to learn may refer to the concept of learning style since commonly people know learning style as the preferred way of learning. Since 1980s many experts already studied the concept of learning style. They came up with various definitions in accordance with their perspectives. Gregorc (1979) defines learning styles as distinctive and observable behaviors showing some clues of how the people's minds learn or process information. Through the clues, teachers can identify their learners' preferred way of learning. For example, when students show high engagement and motivation in learning English with some visual aid, this indicated that the students are visual learners. Likewise, Dunn and Dunn (1993) define learning style as an individual way to concentrate, process and retain new information. The way may vary for each individual and it is influenced by various stimuli such as environments, emotions, social, physic and psychology.

Different from Dunn and Dunn who rely the concept of learning style based on stimulation, Kolb (1984) defines learning style as the individual orientations in learning regarding to the four basic learning modes in experiential learning theory, namely concrete experience, reflective observation, abstract conceptualization and active experimentation. The experiential theory which refers to an individual learning stages becomes the base of Kolb's learning style model. Moreover, Oxford, Ehrman and Lavine (1991) define learning style as the learners' general approaches that are used to gain new knowledge or information as well as solving new problems. In this case, cognitive, affective, physiological and behavioral aspects contribute to the theoretical base of learning style concept (Wallace & Oxford, 1992). The idea of learning style also influences the field of second language learning. Likewise, some second language acquisition (SLA) experts give ideas about learning style. Dornyei (2005) argues that learning style becomes the representation of our students' learning profile. It can be seen from how our students perceive, interact with and respond to learning materials. It is relevant to the second language learning where different types of learners perform different approaches/ways of learning to achieve the same goal, acquiring a language effectively. This

idea is supported by Selinker and Gass (2008) who agree that learning style refers to ones' preferences in obtaining, processing, and retaining information. In connection to this, language acquisition is successful when learners can easily and quickly understand the target language with the most comfortable way of learning.

Actually, there are others definitions of learning styles proposed by experts which are not listed here. However, Pritchard (2009) summarizes how learning style is defined variously by some experts. Generally, learning style is known as:

- a. A specific way in which an individual employs to learn
- b. Learning modes – the most preferred way for thinking and processing information during the learning process.
- c. Ones' preferred way for acquiring knowledge and skills.
- d. Behavioral actions or habits that an individual employs for learning.

In summary, learning style can be defined as a particular way of learning that the learners prefer to use in order to maximize their learning performance including obtaining, processing, and retaining information/knowledge.

2. Models of learning style

Some models of learning style have been introduced by experts. The models reflect on humans' brains activity (cognitive), humans' senses, and humans' emotions. In the beginning era of learning style popularization, Briggs and Myers (1975) introduce a model of learning style, namely The Myers-Briggs Type Indicator (MBTI). This model classifies learning style into some types based on the derivation of psychological theories. Eight types of learning preferences are presented as follows:

1. Extroverts – refers to learners who like to try new things and love making relationships/friendships/group work with many people.
2. Introverts – refers to learners who are often quiet, thoughtful and not willing to get involved in social communities. This is the opposite of extroverts.
3. Sensors – refers to learners who have strong senses ability. They tend to be always practical, detailed-person, and focusing on facts or procedures.
4. Intuitors – refers to learners who tend to be concept-oriented and imaginative. They like to find the connection of ideas and meaning.
5. Thinkers – refers to learners who have high curiosity and tend to make decision based on logic and rules.
6. Feelers – refers to learners who have strong feelings and they tend to make decision based on their personal considerations.
7. Judges – refers to learners who like to follow plan and rules strictly. They are also decisive and task-oriented.
8. Perceivers – refers to learners who are adaptable to any situations. They are easily to adjust with the changes of their environment.

Different from MBTI which is designed on the basis of psychological theories, Kolb (1984) classifies learning style based on the cyclical process of learning, namely experiential learning. As shown in figure 1. there are four stages of learning:

1. Concrete experience – when learners do or experience something.
2. Reflective observation – when learners think about the connection between their ideas and experiences.
3. Abstract conceptualization – when learners conclude what they are learning based in accordance with their ideas and abstract concepts.
4. Active experimentation – when learners apply what they get from learning process.

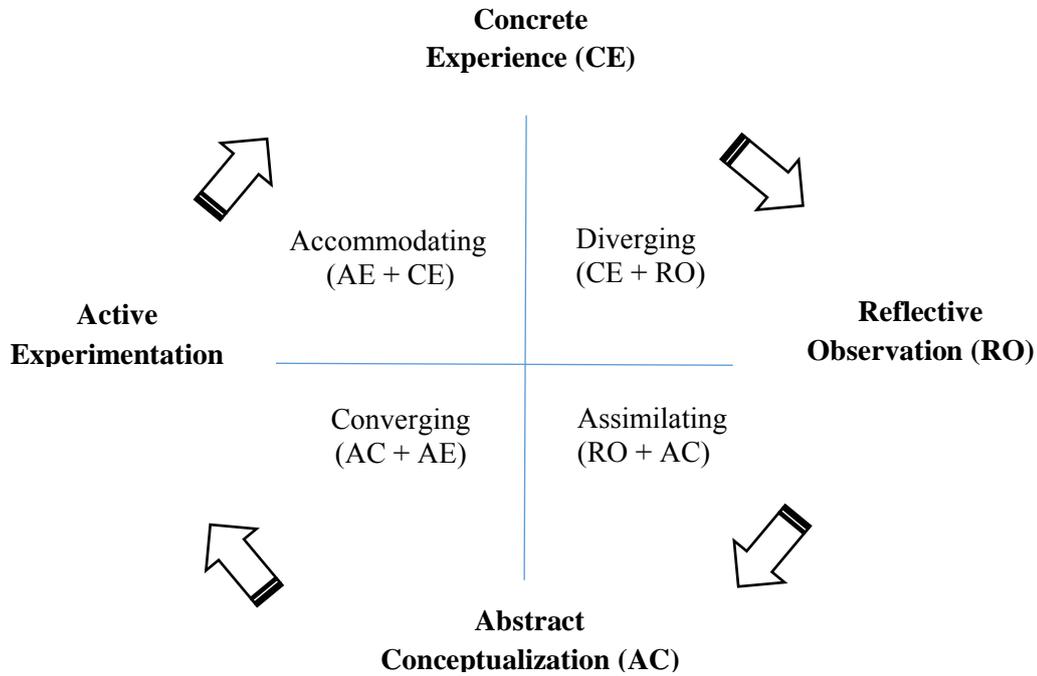


Figure 1. Kolb's learning style model
 Source: author's synthesis on Kolb's experiential learning

Derived from those stages of learning, there are four types of learning style generated by Kolb.

Table 1. The four types of learners based on Kolb' learning style model

Types of learning styles	Description
Diverging (concrete, reflective)	Diverging learners prefer to learn by observing, brainstorming, gathering information. Imaginative and sensitive are their characteristics.
Assimilating (abstract, reflective)	Assimilating learners learn best with well-organized and logical concepts.
Converging (abstract, active)	Converging learners are very concrete. They are best at assembling the practical use of theories and ideas. They prefer to work alone.
Accommodating (concrete, active)	Accommodating learners learn best by doing. They like practical and experiential learning process. Mostly they rely on feelings rather than logic.

Source: author's summary on Kolb' learning style model

Continuing the idea of Kolb's experiential learning, Honey and Mumford (1986) generate another model of learning style which is designed on the basis of people's natural tendency of

learning. The model consists of four distinctive types of learners, namely activists, reflectors, theorists, and pragmatists.

1. Activists – learners who prefer to learn by doing and experiencing. They like to try new challenges in learning. They avoid learning with full of theories, analysis, and reading.
2. Reflectors – learners who love to learn by doing observation and then making reflections. They process knowledge by considering multi perspectives.
3. Theorists – learners who like to think deeply when learning. They enjoy data analysis, concepts, and facts. They involve less feelings in learning and they do not like ambiguous instructions.
4. Pragmatists – learners who learn based on practicality. They always see the application of what they are learning. They do not like too much theories and abstract concepts.

Moreover, Dunn and Dunn (1993) design a model of learning style based on five learning stimuli, namely environmental, emotional, sociological, physical and psychological. The model confirms that the stimuli reflect on learners' preferences for retaining and absorbing information.

Table 2. Dunn and Dunn learning style model

Types of stimuli	Elements	Descriptions
Environmental	Sound, light, temperature, design	Learners learn best based on the environmental situation. E.g. Prefer to learn in quiet or with music/noise, in cool or warm temperature.
Emotional	Motivation, persistence, responsibility, structure	Learners learn best based on emotional attributes. E.g. they persist in doing task or not, they need lots of structure or needs lots of emotional support.
Sociological	Colleagues, self, pair, team, authority, varied	They learn best based on social effects. E.g. they like to learn alone or in group/pair.
Physical	Perceptual, intake, time, mobility	They learn best through their physical aspects. E.g. they may prefer to learn by visual/audio/read/write/movements.
Psychological	Analytic-global, cerebral-preference, reflective-impulsive	They learn based on how they think about information. E.g. they love to think globally or analytically, like to have more reflection or just think rapidly.

Source: author's summary on Dunn and Dunn's learning style model

Next, Gardner (1993) proposes a model of learning style based on humans' intelligences. The model categorized 8 types of learners based on their intelligences.

1. Linguistic – learners who love to gain information through verbal expressions such as texts and conversations.
2. Logical/mathematical – learners who like learning materials related to quantifying things, creating as well as proving hypothesis.
3. Musical – learners who have high ability to gain information in form of sounds or audios. They are good at identifying pitch, tone and rhythm.
4. Spatial/visual – learners who prefer to learn learning materials in form of 3D visualization.

5. Kinesthetic – learners who learn best by involving body movements. They are good at coordinating their body and minds.
6. Interpersonal – learners who have good ability in understanding other people feelings, desires, motivation, and intentions.
7. Intrapersonal – learners who have good capacity for self-management. They really know who they are.
8. Naturalistic – learners who love to learn materials related to nature such as flora, fauna and natural phenomena.

Lastly, Fleming (2001) introduces simpler model of learning style, namely V-A-R-K model. VARK stands for visual, auditory, reading, and kinesthetic. The model classifies learners based on how they perceive information optimally.

1. Visual learners – they learn best through the aid of visual media such as pictures, graphic, and illustrations.
2. Auditory learners – they like to listen to audio such as listening to music, recordings, and oral explanations.
3. Reading learners – they process materials optimally by reading. Therefore, the materials should be in form of texts.
4. Kinesthetic learners – they love movements. They are so energetic. The learning activities should be attractive involving body movements.

As a simple learning style model, VARK is mostly recognized by many teachers. Moreover, due to some limitations, this study only reviews the most frequently used learning style models while other learning style models can be found and explored freely through online resources.

Pros of considering learning style for language learning

Many studies have been conducted to explore the role of identifying students' learning style for optimizing the learning effectiveness. Most of the studies show that matching learning styles and teaching methods/styles gave positive effects in learning process including higher motivation, engagement, and achievement. Peacock (2001) examined the Reid's hypothesis (1987) that a mismatch between learning style and teaching style may result on failure of learning, frustration, and demotivation. He invited 206 EFL students and 46 EFL teachers to participate in his study. Reid's Perceptual Learning Style Preference Questionnaire (PLSPQ) was employed to identify students' learning style and teachers' teaching style. The results of his study supported the Reid's hypothesis that a mismatch between learning style and teaching style gave negative effects on learning. As a result, he suggested that EFL teachers should balance their teaching styles in order to accommodate all of their students' learning styles.

Next, Damrongpanit and Reuntragul (2013) conducted experimental study to see the effects of matching learning styles and teaching styles on students' academic achievement among four subjects, namely Mathematics, Science, English and Thai Language. There were 3,382 ninth-grade students and 440 teachers (110 teachers for each subject) who participated in the study. Honey and Mumford's The Learning Style Questionnaire (LSQ) and Grasha's Teaching Style Inventory were used as the instruments. The data showed that matching learning style and teaching style resulted variously for each subject. The main value is that the match between learning style and teaching style causes positive impact on students' learning progress. Moreover, Akbarzadeh and Fatemipour (2014) examined the match/mismatch between teaching style and learning style preferences of EFL learners. They involved 725 EFL students and 10 English language teachers. The Reid's Perceptual Learning Style Preference Questionnaire (PLSPQ) was employed as the instrument of this study. The results showed that teachers already knew theories about teaching style preferences but they did not apply them to their teaching practices. Based on teaching performances, the teachers neglected their students' learning style. They used fixed teaching style instead of varying the teaching styles in order to accommodate different learning styles. In this case, Akbarzadeh and Fatemipour reminded other English

language teachers to be aware of students' learning styles issues and to teach based on students' learning styles.

Another study comes from Karabuga (2015). He investigated the match/mismatch of learning styles between Prep-Class EFL students and EFL teachers. There were 132 prep-class EFL students and 15 English language teachers participated in his study. For the instrument, he used the Grasha-Riechmann Learning Style Survey and the Grasha Teaching Style Survey. The findings confirm that there should be a match between learning style and teaching style for the sake of accommodating students' different learning preferences.

Lastly, Toyama and Yamazaki (2020) investigated the effects of matching learning style and teaching style on students' English proficiency and learning motivation. Nine EFL teachers and 331 students participated in their study. Meanwhile, the Kolb Learning Style Inventory and the Kolb Educator Role Profile were used as the instruments. The study confirms that matching learning style and teaching style affects on students' English proficiency and learning motivation. Some of the matched groups shows significant effects on proficiency while the others affect on motivation. For example, Accommodating style and Coach role significantly increased English proficiency while Diverging style and Facilitator roles affected students' motivation. In short, the matching effect depends not only on the type of pair but also on the student variables (proficiency and motivation).

Actually, there are still many studies supporting the issue of matching learning style and teaching style. This indicates that learning style concept is already accepted by many people especially language researchers and teachers. It is crystal clear that the concept of learning style looks logical to be applied in educational context. When students learn through the way that they really like, it makes their learning performance optimal and it results on higher achievement. Moreover, clear definitions, frameworks, and instruments make learning style to be looked as a strong and valid theory amidst educational research.

Cons of considering learning style for language learning

When the idea of matching learning style and teaching style is getting popular, some studies appear to criticize the concept of learning style, especially the hypothesis of matching instructions and learning style for an effective learning. The critics mainly focus on two issues namely the validity and reliability of learning style instruments and evidence-based or empirical study proving the learning style hypothesis. Firstly, talking about instruments for assessing students' learning styles, it is an obligatory for every instrument to meet the standard of validity and reliability. Coffield, Moseley, Hall and Ecclestone (2004b) conducted a systematic review on 13 most popular learning style models. The review process was based on psychometric criteria including internal consistency, test-retest reliability, construct validity, and predictive validity. The results showed that only one instrument met the four criteria (Allinson & Hayes cognitive style indicator). In fact, this instrument focused on assessing cognitive style not learning style. Meanwhile, two of the models met three criteria (Vermunt; Apter), three met two criteria (Herrmann; Myers-Briggs personality type indicator; Entwistle), four met just one criterion (Gregorc; Dunn & Dunn; Kolb; Honey & Mumford) and the last three models did not meet any of the four criteria (Stenberg's multiple intelligences; Riding; Jackson). With thorough review, the study confirmed that the concept of learning style was vulnerable since most of the instruments were doubtful. Besides, too many theoretical perspectives among those instruments led to low construct validity (Coffield, et al., 2004a).

Another study investigated the questionnaire items of learning style instruments (Stahl, 1999). The results showed that forced-choices in some instruments lead learners/participants to make the same choices. Everybody prefers to join demonstration in science class not because of they are visual learners, but that good demonstrations are quite proper for explaining the materials. Similarly, when students want to learn how to play basketball, it is better to directly practice playing basketball rather than watching the videos of playing basketball. This is not because the students are kinesthetic, but learning sports require practices (Stahl, 1999). To put in

language learning context, for example, students prefer to read letters/email rather than listening to the story of sending letters/email. This is not because they are linguistic or read/write learners but letters are in form of texts and therefore students learn it by reading or writing letters. Likewise, ones' learning styles may change and this cause problems related to the reliability of the instruments (Stahl, 1999). As there are lots of problems found in the learning style measurement (Kirschner, 2017) and it makes the instruments were questionable (Dembo & Howard, 2007), teachers should consider the idea of identifying students' learning styles. Reading more studies examining the validity and reliability of learning style instruments is totally recommended.

The second issue relates to the idea of matching instructional methods and learning style for achieving an effective learning. This idea is supported by Reid's hypothesis (1987) stating that a mismatch between learning style and teaching style may result on failure of learning, frustration and demotivation. However, many studies criticize that there is no strong evidence or empirical study supporting the idea of matching instructions and learning style. Matching instructional methods and learning style is just a belief without any strong scientific evidence (Kirschner, 2017). A study conducted by Clark (1982) found that low ability students prefer to learn using permissive instructional methods because they want their failures are not too visible. In fact, low ability students need structured instructional methods where more directions and attentions will help them to achieve learning objectives. Meanwhile, high ability students prefer to learn with structural instructional methods since they believe that it will make their efforts more efficient. As a matter of fact, high ability students actually need permissive instructional methods where they will be more active, autonomous and independent in learning. This findings indicated that learning preferences are not always guiding students to what they really need in learning. Learning preferences are just the students' beliefs and it does not automatically reflect on effective learning when the instructions are matched with their preferences. Likewise, Smith, Sekar and Townsend (2002, p. 411) stated "For each research study supporting the principle of matching instructional style and learning style, there is a study rejecting the matching hypothesis".

Furthermore, some factors may cause bias in the idea of matching learning style and teaching style for an effective learning. Students' background knowledge, ability, and interests can interfere the results of matching learning style and teaching style hypothesis (Riener & Willingham, 2010). Having a large of vocabulary mastery will make a student read wider variety of books. Similarly, prior knowledge of some topics of stories results on better performances in reading and understanding the stories. In this case, having good performances in reading are not because the student is a read/write or linguistic learner. In fact, it happens because of their prior knowledge. Likewise, it happens for students' ability and interests. Although dyslexia students learn with matched teaching style and learning style, their achievement results might be not better than other non-disability students with mismatched teaching style and learning style. Similarly, for example, a student is interested in technological topics, fortunately, he/she is identified as a read/write learner, then he/she easily understands texts presenting issue about computer. He/she comprehends the texts easily not because he/she is a read/write learner but rather he/she loves technological issues. Besides, another study conducted by Husmann and O'Loughlin (2018) found that there is no correlation between study strategies, student performances and VARK questionnaire results. Lastly, to sum up the rejection of learning style concept, table 4. shows a list of the researchers, years of research publication and their criticism towards the concept of learning style.

Table 3. Studies rejecting the concept of learning style.

Researcher (s)	Year	Criticisms
Clark	1982	<ul style="list-style-type: none"> Low ability students prefer permissive instructional method, in fact they really need more direction and attention

		<ul style="list-style-type: none"> • High ability students prefer structured instructional methods, in fact they are actually better to learn with permissive methods.
Stahl	1999	<ul style="list-style-type: none"> • Forced-choices in learning questionnaire lead learners to make the same choices. • The level of reading skills may cause bias in the learning style identification.
Smith, Sekar & Townsend	2002 p. 411	<ul style="list-style-type: none"> • “For each research study supporting the principle of matching instructional style and learning style, there is a study rejecting the matching hypothesis”
Coffield, Moseley, Hall & Ecclestone	2004a 2004b	<ul style="list-style-type: none"> • Too many different theoretical perspectives in learning style instruments lead to decrease of construct validity. • The hypothesis of matching learning style and teaching style seems equivocal.
Dembo & Howard	2007	<ul style="list-style-type: none"> • Validity and reliability of learning style instruments are questionable • No evidence-based of getting benefits from matching learning style and teaching style/instructions
Riener & Willingham	2010	<ul style="list-style-type: none"> • Background knowledge, ability and interest become bias within the hypothesis that matching learning style and teaching style leads to an effective learning.
Kirschner	2017	<ul style="list-style-type: none"> • Matching instructions and learning styles is just a belief without strong scientific evidence. • Lots of problems appear in the learning style measurements. • Limited theoretical base supporting the interactions between instructions methods and learning styles. • No significant empirical evidence for supporting the learning style hypothesis.
Husmann & O’Loughlin	2018	<ul style="list-style-type: none"> • There is no correlation between study strategies, student performances and VARK questionnaire results.

Source: author’s summary

Pedagogical implication for English language teachers

A theory is always being valid as long as there are no other studies proving the flaws of the theory along with the official acceptance of many research communities. Similarly, it happens for learning style. Now, learning style becomes a controversy where two sides of researchers are debating the idea of matching learning style with instructional methods for raising an effective learning. One side believes that identifying students’ learning preferences is significantly important because it helps teachers to navigate their teaching styles in accordance with students’ preferred way of learning. Many instruments for assessing learning styles are also introduced. Logically, when students are taught with methods that match to their learning preferences, it will increase their learning performances and result on higher achievement (Gilakjani, 2012). Conversely, the other side claims that lots of learning style instruments are not valid and reliable. Forced-choices in questionnaires may lead learners to make the same choices. Likewise, learners preferred way of learning may change over a period of time (Stahl, 1999).

Besides, background knowledge, ability and interests interfere the results of learning style hypothesis testing (Riener & Willingham, 2010).

As many of our English language teachers are already familiar with learning style and applying learning style to their teaching practices, while learning style is still debatable, we cannot force English language teachers to solely remove learning style from their part of teaching practices. Believing as well as applying the theory of learning style are absolutely their rights. Similarly, Newton and Miah (2017) reported that 32% of their participants (UK higher education academicians) were still willingly continuing to use learning style despite of the controversial issues hitting the learning style theory. However, it is suggested for English language teachers to widen their view points towards the practical use of learning style. English language teachers might focus on other issues contributing the effective learning instead of merely getting involved in the raging debates of learning style. Firstly, assessing students' background knowledge and interests are more valuable than devoting lots of time to assess learning styles (Riener & Willingham, 2010). As the effect of matching instructions and learning styles is still debatable, recognizing students level of prior knowledge as well as their interests for navigating teaching strategies is more feasible and promising to achieve an effective learning. Secondly, related to the previous point, identifying students' lacks and necessities can be very useful for designing more strategic lesson plans. Thirdly, it does not matter whether your students are auditory, visual, kinesthetic, or any other styles, the more important thing that should be done is providing them with more engaged teaching media and materials. Once they are interested and engaged with your teaching, an affective learning process and higher achievement will be obtained not matter what learning styles they belong to. Lastly, an effective learning can also be achieved by pushing your students to be more autonomous. Practicing more learner-centered approach encourages students to be more autonomous. Likewise, employing ICT is also relevant for promoting autonomous learning (Rinekso & Kurniawan, 2020). In conclusion, English language teachers have to be wiser for achieving effective learning.

CONCLUSION AND SUGGESTION

The theory of learning style has been acknowledged in many educational contexts including English language teaching. Yet, some controversial issues encountered the existence of learning style theory. Also, it leads to confusion and sense of incredulity towards the theory. This study purposed to shed light on critical discussions of learning style theory and its pedagogical implication for English language teaching. Thus, it is suggested that English language teachers have to focus more on creating an effective learning rather than devoting time and energy for merely debating the pros and cons of learning style. Four points are suggested to be done by English teachers including (1) assessing students' background knowledge and interests, (2) identifying their lacks and necessities, (3) providing them with more engaging teaching media and materials and (4) pushing them to be autonomous learners. Moreover, further research focusing on investigating English language teachers' awareness of the controversial issue of learning style and their plans for effective learning ought to be carried out.

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