

A study of the relationship between teachers' teaching style and students' classroom participation: A case study of a middle school in China

Yu-shan wang¹, Busaya Vongchavalitkul², Wallaya Chupradit³

Wang-Kun Chen⁴ and Walaiporn Chaya⁵

Received August 18, 2022 & Revise December 14, 2022 & Accepted February 21, 2023

Abstract

This research article to were objective 1)To investigate teaching styles of middle school art teachers in a middle school in China 2)To describe student participation in art classrooms in one middle school in China 3)To determine the relationship between the teaching style of middle school art teachers and students' participation. The data were collected through questionnaires; distributed in 145 students in art classrooms. In order to investigate the relationship between these two variables, correlation and regression analysis were applied. The results revealed that there was a significant relationship between teaching style and student participation. However, according to regression analysis, (1) council or activity style and (2) principal or group style have a significant impact on emotional participation. Authority or presentation style, demonstration or coaching style, counselor or activity mode style, principal or group style and the hybrid or blended style had no significant effect on behavioral participation and cognitive participation. Through the research hypothesis, the influence of middle school art teachers' teaching styles on students' classroom participation was constructed based on an analytical framework that used a case study of a typical teaching style in the art classroom of the Middle School. The analysis found that there were significant

1 MBA Student, Southeast Bangkok college.

2 Asst. Prof Doctor of MBA Program, Southeast Bangkok college.

3 Asst. Prof. Dr. at Education Management Program, Southeast Bangkok college.

4 Assoc Prof Doctor at Southeast Bangkok college

5 Doctor of Business English Program, at Southeast Bangkok college.

E-mail:469971665@qq.com



differences in students' cognitive, behavioral, and affective engagement based on the feedback from the questionnaire data with 145 students participating at a Middle School in China with the same test data variables, which further supports the research hypothesis presented in the introduction section.

Keywords: Teaching style, student participation, correlation and art classroom

Introduction

Teaching and learning are two main components of educational system (UNESCO, 2014) . A competent teacher as well as his/her teaching style determines the effectiveness of the teaching and learning process, and it significantly contributes to achieve learning outcomes (Mazloom, et.al. 2021). In order to guarantee the effectiveness of teaching and learning, teaching styles also need to be considered as an important element in a lesson (Grasha & Hicks, 2000). Learning can be defined as permanent changes in behavior induced by life (Hunt 1979). According to experiential learning theory, learning is the process whereby knowledge is created through the transformation of experience (Arthurs, 2007). The learning environment which is inviting, conducive and fun is essential in teaching and learning (Shaari et. al., 2014). This is because the suitability of a teacher's teaching style (Felder & Henrique, 1995). Grasha (1994) initially identified student learning styles which further develop interest to explore teaching styles. Grasha (1996) further discussed that teachers differ in their ways of teaching; subject content presentation, how to engage students and evaluate student progress.

Research has revealed the relationship between learning style and teaching style. Learning styles is described as how the learners process, absorb and retain information (Lorenzo & Lorenzo, 2013). According to Perry (1994) learning style is regarded as a pattern that learners perceive, interact with, and respond to knowledge consistently. Additionally, learning styles can be referred to as an individual's preferred way of processing new information for effective learning (Huston & Huston, 1995). Dunn described the concept of learning style as a unique way developed by students when he/she was learning new and difficult knowledge (Dunn & Dunn, 1993). The study has also shown that people learn differently, and similarities can be found within these learning styles. When teachers become aware of the ways in which student and teacher personalities affect instruction, they



may be able to better tailor instruction to meet the needs of individuals (Mazloom, et.al. 2021).As discussed, the teaching and learning process of the teachers and students have important implications for effective teaching. For many years educators have recognized the need for alternative teaching strategies to meet the wide variety of students in classrooms. According to Mazloom eet.al (2021) numbers of activities on the part of teacher e.g. classroom management, behavior management, lesson presentation, assessment and feedback can make a learning environment more productive to engage students effectively. Besides teaching styles, a classroom environment is also regarded as the important element for the process of teaching and learning. A classroom environment involved two-way interaction between students and teachers. This type of classroom environment will stimulate learning and makes both the teachers and students feel satisfied, which eventually leads to effective learning process. According to Wade (1994), most students can obtain the benefits such as the enjoyment of sharing ideas with others and learn more if they are active to contribute in class discussion. Nevertheless, as we often hear from the academic world, students still do not actively participate or become passive in the classroom despite encouragements and use of various teaching methods by the instructors to stimulate active participation from the students. (Stephan, R. M. . 2007) The previous studies related to teaching styles are very rare in Chinese teachers in the middle school level, specifically the relationship between the teaching styles and student classroom participation. Therefore, it was very interesting to seek for answering questions of what are the teaching styles among those teachers and if there is a relationship between teaching styles and of student participation in the learning process

Research objectives

This research addresses three main objectives as follows.

1. To investigate teaching styles of middle school art teachers in a middle school in China
2. To describe student participation in art classrooms in one middle school in China
3. To determine the relationship between the teaching style of middle school art teachers and students' participation

Literature Review

1 Theoretical Background of Teaching Style



1.1 Definition of teaching styles.

The teaching styles, also called teaching methods, are considered to be the general principles, educational, and management strategies for classroom instruction (Abubakar, A. , & Abdalla, S. . 2018) . Many researchers give the definition of teaching style differently. Peacock (2001) defines the teaching style as the way a person teaches by nature, habitual, inclination or even a custom that is used to convey information and skills in the classroom. Grasha (1996, 2002) says that teachers' teaching styles represent the pattern of needs, beliefs, knowledge, performance, and behavior based on philosophies and thoughts when they are teaching in the classroom setting. According to Brown (2001) teaching styles are referred to as teachers' personal behaviors to deliver knowledge. Additionally, Sun and Wang (2007) maintain that teaching styles are authoritarian, democratic, and laissez faire. The proper working facilities make teachers more productive, comfortable and competent (Ijaduola, 2007; Ijaduola, 2010; Ijaduola, 2011). In short, effective and capable teacher and his/her teaching styles mainly determine the effectiveness of teaching-learning process and significant enough to achieve learning outcome (Aypay, 2011) . Consequently, it is essential to assess the relationship between teachers' teaching performance and class management and students' classroom participant in order to measure changes in individual students' level of achievement (Chalkley, T. W. , & Nicholas, D. . 1997) .

1.2.Types of teaching styles

Grasha (2002) developed a model of teaching styles into five categories including : Expert, Formal Authority, Personal Model, Facilitator and Delegator. Grasha also elaborated clusters of teaching styles which represents different teaching methods related to each cluster. Moreover, he emphasized to utilize blend of teaching styles to gain the desired outcomes of teaching and learning while teaching in a classroom (Vaughn, L. , & Baker, R. . 2001) . In the blog Teaching Styles: Everything you need to know about teaching methods and strategies, by Bohren (2019); there are five main types of teaching styles and methods. This study was based Boren's categorization, thus the following section details each type of teaching styles.

The Authority, also known as the lecture style,



Authority, also known as the lecture style involves a traditional presentation of lesson to the students, therefore it is teacher-centered with a long lectures and one-way communication in the classroom. Students need to take notes and memorize of what being said to absorb information. Therefore this style, teachers are active, and students are passive. This teaching method is a problematic model because there is very little or no interaction with teachers, which will make students feel bored or sleepy. Therefore, this style is a better method for adult learners and more mature students (Gasha, 1994).

Demonstration or coaching style

Demonstrator method, known as the coaching style, is similar to the lecture style. It is a formal authority role that a teacher maintains authority in the classroom and coaches students using gateways like multimedia presentations, class activities and demonstrations. (Toh, R. Q. E. , Koh, K. K. , Lua, J. K. , Wong, R. S. M. , Quah, E. L. Y. , & Panda, A. , et al. 2022) This style is appropriate for subjects such as music, art, and physical education because the demonstration helps students to acquire a full understanding of the subject. However, it is little individual interaction between the teacher and student which does not meet the personalized needs.

The facilitator styles or activity style

The facilitator style, also recognized or action method, promotes self-learning, helps students develop critical thinking skills and retain knowledge that leads to self- realization through peer-to-teacher learning. In contrast to the lecture style, teachers ask students while students try to answer by themselves. The goal is for students to develop a deeper understanding of the topic by using self- discovery and develop problem-solving skill (Rasmussen, C. L. . 1996) . Therefore this teaching style is suitable for teaching science and similar subjects in small classroom settings because the teacher as facilitator needs to interact with students on an individual basis.

The Delegator style, or group method

The delegator style, or group method, is used for school subjects that require group work, lab-based learning, or peer feedback in certain language learning classes such as creative writing and debate, and science classes such as biology and chemistry. The teacher acts as a delegator, becoming an observer to promote peer collaboration and encourage student-to-student learning.

Hybrid method, or blended learning,



Hybrid method, also known as blended learning is integrated teaching style that incorporates personal preferences, individual personalities, and specific interests into their teaching (Kark, S. A. , & Higgins, J. K. . 2009) . It enables teachers to adjust their styles according to students' needs and appropriate themes. It is suitable for English, science, and religion classes because it incorporates extra-curricular knowledge into a developed, deeper knowledge of a particular topic.

1.3 Classroom participation.

Classroom participation is defined as playing an active role in all in-class activities. In an EFL context, such activities might include brainstorming activities, games, quizzes, surveys (in-class or within the institution during lesson time) group debates, role plays, simulations, collaborative creative writing, presentations, and speeches.(Crosthwaite, Daniel, & Meeker, 2015, p.2). Weaver and Qi (2005), insist that ‘students who actively participate in the learning process learn more than those who do not (p. 570). Dallimore et al. (2010) further discuss that students’ comfort when participating in classroom discussion is positively related to learning. Similarly, Lei et.al. (2021) define classroom participation in terms of ‘student engagement’ claim that students being actively involved in their learning tasks and activities leading to effective school changes and improvement in academic achievement students with poor graded. It appears that students who are actively participate in school activities will have a positive impact on students, therefore improve their engagement in classroom activities and indirectly affect students’ academic achievement.

Additionally, Fredericks, Blumenfeld and Paris (2004) proposed that school participation is a multidimensional structure composed of behavior, emotion and cognitive components. Drawing on the works of Connell (1990), Furrer and Skinner (2003), Walker (1997) and Zimmerman (2000), Ben-Eliyahu, Moore, Dorph and Schunn (2018), they defined each of these components as follows:

Behavioral participation .

Behavioral participation is referred to as behavior engagement as behaviors such as effort, persistence, concentration, attention, asking questions, and participation in learning activities. It also refers that how and to what extent the students are active, paying attention, putting effort and showing persistence . Moreover, Fredricks et al.(2004) also



described behavioral engagement are observable behaviors that can easily be seen by the teacher, such as task accomplishment and participation in learning activities.

Emotional participation

Emotional participation refers to positive and negative reactions to teachers, class fellows and learning activities. It also indicates students' emotional reactions such as happiness, interest, enjoyment and values students reactions towards teachers. Students reveals emotional engagement when they reflect emotional responses to learning activities Emotional engagement is a combination of positive emotions like students' interest and happiness in class and negative emotions are boredom and anxiety (Morozov, A. , Herrenkohl, L. R. , Shutt, K. , Thummaphan, P. , & Scalone, G. . 2014) .

Cognitive participation

Cognitive participation according to Frederick et.al. indicates self-regulation and use of learning ; students use self-regulating strategies or metacognitive strategies to plan, monitor, and evaluate their cognition to gain mastery over task (Pintrich&De Groot, 1990; Zimmerman, 1990) and apply learning approaches such as rehearsal, summarize and elaborate to remember, organize and understand the material (Fredricks et al., 2004). In brief, the review of literature above discussed showed that students' overall participation depends to what extent they are involved behaviourally, emotionally and cognitively in the classroom activities.

Research Method

Research design

This study used descriptive-survey method aiming to examine teachers' teaching styles and students' participation in a middle school in China. It also sought to find a correlation between two variables: teachers' teaching styles and students' classroom participation (Bell, R. R. , et al 1964) . Descriptive means that surveys are made in order to discover some aspects of teacher's teaching style and the word survey denotes an investigation of a field to ascertain the typical condition is obtaining. The researchers used a survey questionnaire consisting of 3 parts: background information of the respondents, students' classroom participation, and teachers' teaching style as well as open ended part. Data were also collected through observations, interviews, students' class work and other student outputs. The questionnaires were administered before and after ESL strategies were



applied. Observation refers to what he/she sees taking place in the classroom based on student's daily participation. Student interviews were done informally before, during, and after classes. Several categories affecting motivation were being presented in the questionnaire.

Sample.

The sample was 145 students in the junior middle school. a middle school in China. The data from the survey questionnaire were obtained and analyzed using software program. SPSS

Results

Analysis of results from the questionnaire.

This study conducted a survey study on the impact of teachers' teaching style on junior high school art classroom participation, using offline questionnaires. A total of 150 questionnaires were collected in this offline survey, and some answers that obviously do not meet the requirements were targeted and eliminated. Through the treatment of outliers and missing values, 145 valid questionnaires that meet the requirements were finally determined. The effective recovery rate of the questionnaire is 96.67%, which is greater than the general requirement of 50% and 60% in academia.

Demographic analysis

According to the survey results, the basic situation of the sample is described as follows.

Table 1 Demographic Characteristics of Participants

Participants'		Number	Percentage
Characteristics		of	(%)
		Participants	
Gender	Male	72	49.70
	Female	73	50.30
Age	12	11	7.60
	13	37	25.50
	14	52	5.90



	15	40	27.60
	Over 15	5	3.40
Class level	First year	35	24.10
	Second year	83	57.20
	Third year	27	18.60

As shown in Table 1, among the respondents, men accounted for 50.30%, women accounted for 49.70%, and the proportion of men and women was basically 1:1. The respondents were mainly aged 14, 13 and 15, accounting for 35.90%, 27.60% and 25.50% respectively; The number of people aged 12 or over 15 is relatively small, accounting for 7.60% and 3.40% respectively. The grade level of the respondents is mostly concentrated in the second grade, accounting for more than 50%, about 57.20%; The second is grade one, accounting for 24.10%; At least the third grade, accounting for 18.60%.

Answer for research objective 1: Teaching styles of middle school art teachers in a middle school in China

To discover teachers' teaching styles, the semi- interview was conducted to 3 art teachers in the middle school, the interview questions included “What do you think of your art teaching style is?”, What is the specific performance?, Do you think the teaching style of art teachers will affect students' interest in learning art?, and Do you think the teaching style of art teachers can be improved?”, What methods can be improved with them. The data were analyze descriptively by referring to the questionnaire formulated by Professor He Wen on the effective teaching style of Shanghai Normal University. The findings were presented in Table 2 and Table 3

Table 2 The Findings of the Interview Data of Teachers' Teaching styles of Art Middle School

Number	Teaching Styles for Coding	Frequency
1	have a fine sense of humour	
2	Rigorous logic	
3	conscientious	



4	Teacher-student interaction
5	Care for students
6	Clear teaching objectives

The art teaching and research group of the school, art teachers believe that the establishment of humorous classroom is the first priority to carry out teaching activities. Strict logical teaching and serious teaching and interactive teaching mode are more popular among teachers than caring for students and teaching with clear teaching objectives. Art teachers think that students prefer humorous teachers in class. In a happy and active atmosphere, teachers will have more passion to teach. In addition, some individual teachers mentioned that they should pay attention to clear teaching objectives, and art teachers should be student-centered, care for the growth of students, which is also the performance of active teaching style.

As can be seen from Table 3 humorous teachers score 4 points in the eyes of students, ranking the first place. The second is the caring and sharing teaching style, the second is the innovative and exploratory teaching style, and the last is the rigorous and logical teaching style. According to the statistics, the humorous and active teaching style has the highest score in the eyes of the students. It is inferred that one teacher belongs to humorous and active teaching style; 2 teachers belong to caring and sharing teaching style; 3 teachers belong to innovative and exploratory teaching style.

Table 3 Overall Situation of Art Teachers' Teaching styles in the Eyes of Students



Teaching style	Teacher's name	Number of items (score)	M	S.D	precedence
Humor active	1	4	20.54	16.28	1
Rigorous logic	NA	1	12.15	7.03	2
Care and sharing	2	3	18.74	9.87	3
Innovative exploration	3	2	15.26	8.44	4

Answer for research objective 2: Student participation in art classrooms in one middle school in China.

To describe students' participation in art class room of the junior high school, the data from the survey questionnaire were analyzed in 3 aspects of students' classroom participation comprising behavioral participation, cognitive participation and emotional participation Fredericks, Blumenfeld and Paris (2004). Generally, the average value of the equivalent table is (1.00-1.50) = very low participation, (1.51-2.50) = low participation, (2.51-3.50) = medium participation, (3.51-4.50) = high participation, (4.51-5.00) = very high participation. By measuring the average value and standard deviation score of each of the three dimensions, the respondents' participation in junior high school art class is determined. The results were presented in Table 4.

Table 4 Students' Classroom Participation in Three Aspects of Students' Classrooms Participation

1. Behavioral participation				
Teaching style	Item number	Average value	Variable	Sort
Care and sharing	2, 3, 5	3.22	whole-hearted	3
Humor active	4, 6, 7	3.65		2
Innovative exploration	1, 8	3.76		1
2. Cognitive participation				
Teaching style	Item number	Average value	Variable	Sort



Care and sharing	9,10,13	2.74		1
Humor active	11,12, 16	2.35	Tired of feeling	3
Innovative exploration	14, 15	2.63		2
3. Emotional participation				
Teaching style	Item number	Average value	Variabl e	Sort
Care and sharing	17,19, 21	3.22		3
Humor active	18, 24, 25	3.95	Fun feeling	1
Innovative exploration	20,22, 23	3.86		2

As shown in Table 4, students have certain different scores for different teaching styles of art teachers. In the student behavioral participation, the innovative and exploratory teaching style have the highest score, with an average score of 3.76, followed by a humorous and active teaching style, with an average score of 3.65. Care-sharing type had the lowest score, with an average score of 3.22. This shows that in the art teaching class, the junior middle school students invest the most in the influence of the behavioral investment activity of the innovative and exploratory art teachers' teaching style, and under the influence of the "concentration" variable, the students have the highest degree of investment and rank first.

According to the students' cognitive participation, the teaching style of humor had the lowest score and the greatest influence on the students, with an average score of 2.35. Followed by innovative exploratory teaching style, an average score of 2.63. Finally is love sharing teaching style, ranked last, the average score of 2.74. This shows that in junior middle school art classroom students' cognitive participation, students relatively like humor active classroom atmosphere, and love sharing art classroom atmosphere is easy to cause students to learn tired, thus tired.

For students' emotional participation, the humorous teaching style has the highest the most under the "fun sense" variable, with the average of 3.95. Innovative and exploratory



teaching style ranked second, with an average score of 3.86. According to the data in the table, it can be analyzed that in the pursuit of "fun" in class, the humorous, active and innovative and exploratory teaching style is far beyond the caring and sharing teaching style. Therefore, it is easier to create classroom situations and attract students' interest in learning.

Answer Hypothesis: There is relationship between the teaching style of the middle school art teachers and students' participation

Correlation analysis.

Correlation analysis is to analyze two or more variable elements to test the correlation between variables, to compare the correlation degree between two or more variables. The next step of correlation analysis can be carried out only when there is a connection between related variables. By observing the value of correlation coefficient, we can get the direction and degree of linear correlation between dependent variables and independent variables, and preliminarily judge whether there is a collinear relationship between independent variables. The significance level is used to determine whether there is correlation between independent variables and dependent variables. When the correlation coefficient between the quantity of independent variable and dependent variable is very high, it indicates that there is a strong correlation between them.

If the correlation between two variables is low, the correlation coefficient between these two variables is usually less than 0.4; If there is a strong correlation between the two variables, the correlation coefficient between the two variables is usually greater than or equal to 0.4 and less than 0.7; If there is a strong correlation between two variables, the correlation coefficient between these two variables is usually greater than or equal to 0.7. In this case, further multicollinearity testing is required.

From the following correlation analysis table, the respondents' behavior participation and demonstration or coaching style (correlation coefficient $r=0.183$, significance $p=0.027$), counselor or activity style (correlation coefficient $r=0.225$, significance $p=0.006$), client or group style (correlation coefficient $r=0.295$, significance $p<0.001$), The hybrid or blended style (correlation coefficient $r=0.247$, significance $p=0.003$) show positive correlation.

The cognitive participation of respondents and the way of counselors or activities (correlation coefficient $r=0.247$, significance $p=0.003$), clients or groups (correlation coefficient $r=0.250$, significance $p=0.002$), The hybrid or blended style (correlation coefficient $r=0.273$, significance $p=0.001$) showed positive correlation.



The respondents' spiritual participation and demonstration or coaching style (correlation coefficient $r=0.267$, significance $p=0.001$), counselor or activity style (correlation coefficient $r=0.378$, significance $p<0.001$), client or group style (correlation coefficient $r=0.428$, significance $p<0.001$), the hybrid or blended style (correlation coefficient $r=0.315$, significance $p<0.001$) showed positive correlation.

Table 5 The Results Correlation Analysis between Teaching Styles and Students' Classroom Participant

		Authority or lecture style	coaching style	Demonstration or or style	Facilitat or or activityr style	Delegato hybrid or groupblended style	The or
Behavioral participation	Pearson Correlation	-.103	.183*		.225**	.295**	.247**
	Sig. (2-tailed)	.218	.027		.006	.000	.003
	N	145	145		145	145	145
Cognitive participation	Pearson Correlation	-.031	.069		.247**	.250**	.273**
	Sig. (2-tailed)	.711	.412		.003	.002	.001
	N	145	145		145	145	145
Emotional participation	Pearson Correlation	-.138	.267**		.378**	.428**	.315**
	Sig. (2-tailed)	.099	.001		.000	.000	.000
	N	145	145		145	145	145

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Regression analysis

The above correlation analysis only shows the nature and degree of correlation between variables, while regression analysis can determine the specific mathematical form of correlation between variables. Only when there is a high correlation between variables, it is meaningful to carry out regression analysis to find the specific form of correlation. If there is



no correlation between variables, the variables need to be eliminated in regression analysis. Therefore, three regression models can be established after the above correlation scores: model 1 takes the behavioral participation as the dependent variable, demonstration or coaching, counsellor or activity mode, principal or group, The hybrid or blended styles the independent variable, and excludes the irrelevant authority or presentation style; Model 2 takes cognitive participation as the dependent variable, counsellor or activity mode, principal or group, The hybrid or blended style as the independent variable, and excludes irrelevant authority or presentation style, demonstration or coaching; Model 3 takes emotional participation as the dependent variable, demonstration or coaching, counselor or activity mode, principal or group, The hybrid or blended style as the independent variable, and excludes irrelevant authority or presentation style.

The results of regression analysis are shown in the following table: in model 1, the independent variables demonstration or coaching, counselor or activity mode, principal or group, The hybrid or blended style are not significant for the t-test of the dependent variable behavioral participation, indicating that demonstration or coaching, counselor or activity mode, principal or group, The hybrid or blended style have no significant impact on behavioral participation. Combined with the above correlation analysis, it can be considered that authority or presentation style, demonstration or coaching, Council or activity mode, principal or group, The hybrid or blended style have no significant impact on behavioral participation.

In model 2, the independent variables Council or activity mode, principal or group, The hybrid or blended style are not significant for the t-test of the dependent variable cognitive participation, indicating that Council or activity mode, principal or group, The hybrid or blended style have no significant impact on cognitive participation. Combined with the above correlation analysis, it can be considered that authority or presentation style, demonstration or coaching, Council or activity mode, principal or group, hybrid or hybrid have no significant impact on cognitive participation.

In model 3, the independent variables counselor or activity mode, principal or group have a significant t-test for the dependent variable emotional participation, indicating that counselor or activity mode, principal or group have a significant impact on emotional participation.



Table 6 Regression analysis of Teaching Styles and Students' Classroom Participation

	Model1:		Model2:		Model3:	
	Behavioral participation		Cognitive participation		Emotional participation	
	B	t	B	t	B	t
Demonstration or coaching	.047	.961			.063	1.120
Facilitator or activity style	.044	.770	.084	1.438	.151	2.273*
Delegator or group style	.127	1.487	.081	.981	.255	2.601*
The hybrid or blended style	.078	1.075	.112	1.526	.055	.660
Constant	2.571	9.124**	2.357	8.329**	1.423	4.391**
F	4.258**		5.226**		10.706**	
R Square	.108		.100		.234	

** .p<0.01, * .p<0.05

Conclusions Discussion and Suggestions

The influence of teachers' teaching style on the participation of junior high school students in art classroom is real. There are many factors that affect students' classroom participation in the process of art classroom teaching in junior high school. The main question of this study is the influence of the teaching style of junior high school art teachers on the students' participation in art classroom, that is, under which teaching style, students are most interested in art learning in the classroom. The analysis shows that the respondents have a high degree of participation in the behavior of the junior high school art class; the respondents' cognitive participation and emotional participation in the junior high school art class are moderate, which needs to be improved.

In terms of junior high school art teaching, there is also a lack of systematic research on the influence of classroom participation due to the similarities and differences in the



teaching styles of junior middle school art teachers in junior high school students. Li (2012) published by the theory of teaching style in teaching art, based on the formation of teaching style, the relationship between teaching style, teaching style and teaching schools and learning style, learning and create the basic method of teaching style, the concept of teaching style, meaning, carrier and teaching style characteristics and type and the influence on student development of nine categories are elaborated in detail. The fifth chapter of the book, "The Influence of teaching style on students 'development", lists the influence of teachers' teaching style on students in five aspects, which plays a guiding role in the study of art teachers' teaching style. And Qi yuhui (2014) in southwest university's doctoral thesis "research on the phenomenon of" marginal "in classroom teaching from the widespread" marginal "in classroom teaching, demonstrated in teaching practice teachers are usually through their own unique teaching style and influence on students, is to influence students to" marginal " is an important factor. In addition, Zeng Qi (2017) published the paper "Analysis of the Current situation of Student 'Classroom Participation and Educational Countermeasures-thinking on students' Subject participation", which takes students 'classroom participation as the discussion object, and believes that improving students' classroom participation is an important entry point to realize the goal of practical teaching subject education. By analyzing the current situation of students 'classroom participation, it is pointed out that the misunderstanding of improving students' classroom participation is to establish the corresponding concept of students' classroom participation.

Additionally, the University of North Carolina of Arthur J.S Reed (Arthea J.S.Reed), and Verna E.Bergman (Verna E.Bergemann), a professor, published in 2019 in "Classroom Participation, Observation and Reflection," is a tutorial handbook for school normal university students and novice teachers, The book is divided into five chapters, And to teach teachers how to understand students. The research on "observing students" has great, Examples and methods of structural and reflective observations are listed directly, Dr. Schultz (Katherine Schultz, University of Pennsylvania), titled "Silence and Sound, is a monograph on the phenomenon of" classroom participation in middle school students' silence " in the United States, The authors begin with a general overview of the general meaning of classroom participation and silence, It is concluded that the reasons for students' silence in class vary by background and occasion. This book discusses in detail four aspects: participation and silence in class, the form and function of silence, silence and speech in class,



students' silence and participation in the course, and finally gives eight inspirations from students' silence in class. Based on the analysis of the silence of students in classroom participation, the book provides an objective reference to understanding the differences between students' classroom participation in education from the perspective of American education and has made good research progress (Wang, Degol & Henry, 2019).

Suggestions and Future Research

The influence of teachers' teaching styles on middle school students' art classroom participation is real. There are many factors that influence students' classroom participation in the middle school art classroom teaching process. The main question of this study was the effect of middle school art teachers' teaching styles on students' art classroom participation, i.e., under which teaching styles students' interest in classroom art learning is highest. Through the research hypothesis, the influence of middle school art teachers' teaching styles on students' classroom participation was constructed based on an analytical framework that used a case study of a typical teaching style in the art classroom of the Middle School. The analysis found that there were significant differences in students' cognitive, behavioral, and affective engagement based on the feedback from the questionnaire data with 145 students participating at a Middle School in China with the same test data variables, which further supports the research hypothesis presented in the introduction section.

New Knowledge form Research

A study of the relationship between teachers' teaching style and students' classroom participation: A case study of a middle school in China New Knowledge form Research had necessary to develop methodological recommendations to provide art teachers with theoretical and practical knowledge and guidance on how to enhance their teaching styles to promote student engagement in the art classroom. This would have a significant positive impact on secondary art classrooms.

References

Aypay, A. (2011). The Adaptation of the Teaching-Learning Conceptions Questionnaire and Its Relationships with Epistemological Beliefs. *Educational Sciences: Theory and Practice*, 11(1), 21-29.



- Bell, R. R. , Solomon, D. , Bezdek, W. E. , & Rosenberg, L. . (1964). Teaching styles and learning. *American Sociological Review*, 29(4), 627.
- Ben-Eliyahu, A., Moore, D., Dorph, R., & Schunn, C. D. (2018). Investigating the multidimensionality of engagement: Affective, behavioral, and cognitive engagement across science activities and contexts. *Contemporary Educational Psychology*, 53, 87-105.
- Bohren, A. (2019). Teaching Styles: Everything you need to know about teaching methods and strategies. Retrieved on 06 August 2020 from, <https://blog.cognifit.com/teaching-styles>.
- Chalkley, T. W. , & Nicholas, D. . (1997). Teachers' use of information technology: observations of primary school classroom practice. *Aslib Proceedings*, 49(4), 97-107.
- Crosthwaite, R.P, Bailay, D.R. & Meeke, A. 2015). Assessing in-class participation for EFL: considerations of effectiveness and fairness for different learning styles. *Language Testing in Asia* (2015) 5 (9), 1-19. :9 DOI 10.1186/s40468-015-0017-1.
- Dallimore, EJ, Hertenstein, JH, & Platt, MB. (2010). Class participation in accounting courses: Factors that affect student comfort and learning. *Accounting Education*, 25(4), 613–629.
- Dunn, R. S., & Dunn, K.J. (1979). Learning styles/teaching styles: Should they... can they... be matched? *Educational Leadership*, 36(4), 238- 244.
- Grasha, A. F. (1994). A matter of style: The teacher as expert, formal authority, personal model, facilitator, and delegator. *College Teaching*, 42(4), 142-149. 16.
- Grasha, A. F. (2002). *Teaching with style: A practical guide to enhancing learning by understanding teaching and learning styles*. Alliance Publishers.CA.
- Grasha, A. F. (1996). *Teaching with style: A practical guide to enhance learning by understanding learning and teaching style*. *College Teaching*, 48, 1-12.
- Grasha, A. F & Hicks, N. Y. (2000). Integrating teaching styles and learning style with instructional technology. *College Teaching*, 48(1), 2-15.
- Kark, S. A. , & Higgins, J. K. . (2009). Integrated method of teaching cooking and reinforcing cooking skills. U.S. Patent Application No. 11/828,184, US20090029326 A1.



- Lei, H., Cui, Y. & Zhou, W.(2018). Relationships between student engagement and academic achievement: A Meta-Analysis. *Social Behavior and Personality*. 46(3), 517-528. <https://doi.org/10.2224/sbp.7054>.
- Lorenzo, A.R., & Lorenzo, B.U. (2013). Learning styles of teacher education students: Basis in improving the teaching-learning process, *Procedia-Social and Behavioral Sciences*, 10(3), 595-605.
- Morozov, A., Herrenkohl, L. R., Shutt, K., Thummaphan, P., Vye, N., Abbott, R. D., & Scalone, G. (2014). Emotional engagement in agentic science learning environments. Boulder, CO: International Society of the Learning Sciences.
- Perry, C. (1994). Students' learning styles: Implications for teacher education. The 24th Annual Meeting of the Australian Teacher Education Association, Brisbane, Australia.
- Rasmussen, C. L. (1996). Qualitative problem solving strategies of first order differential equations: the case of Amy. In *Electronic Proceedings of the Fifth Conference on the Teaching of Mathematics*.
- Shaari, A. S., Yusoff, N. M., Ghazali, I. M., Osman, R. H., & Dzahir, N. F. M. (2014). The relationship between lecturers' teaching style and students' academic engagement. *Procedia-Social and Behavioral Sciences*, 118, 10-20.
- Stephan, R. M. (2007). Legal Framework of Groundwater Management in the Middle East (Israel, Jordan, Lebanon, Syria and the Palestinian Territories). In *Water resources in the Middle East* (pp. 293-299). Springer, Berlin, Heidelberg.
- Sun, M.Y., & Wang, C.H. (2007). The relationship between teacher discipline and students' learning motivation in school. *Journal of Primary and Secondary Education Research*, 18, 165-193.
- Toh, R. Q. E., et al. (2022). The role of mentoring, supervision, coaching, teaching and instruction on professional identity formation: a systematic scoping review. *BMC Medical Education*.
- UNESCO (2014). Teaching and learning: achieving quality for all; EFA global monitoring report, 2013-2014. available on <https://unesdoc.unesco.org/ark:/48223/pf0000225660>
- Vaughn, L. , & Baker, R. . (2001). Teaching in the medical setting: balancing teaching styles, learning styles and teaching methods. *Medical Teacher*, 23(6), 610-612.
- Walla, L. A. (1988). Relationship of Teaching Styles and Learning Styles to Classroom Environment . Theses, Dissertations, & Student Scholarship: Agricultural Leadership,



Education & Communication Department. Retrieved from
<https://digitalcommons.unl.edu/aglecdiss/70>

Weaver, RR, & Qi, J. (2005). Classroom organisation and participation: College students' perceptions. *Journal of Higher Education*, 76(5), 570–601.

Wang, M. T., Degol, J. L., & Henry, D. A. (2019). An integrative development-in-sociocultural-context model for children's engagement in learning. *American Psychologist*, 74(9), 1086-1102. <https://doi.org/10.1037/amp0000522>

