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An Intervention to Improve Students' Class Engagement of Art Department in China

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Abstract

This paper aims to enhance student class engagement. The four objectives of the action research are as follows: 1)To diagnose the current situation of the focal organization on student class engagement, 2)To design and implement organizational development intervention (ODI), 3)To determine the differences between pre-ODI and post-ODI of students' autonomy, relatedness, usefulness, interest and student class engagement, and 4)To investigate the relationship of students' autonomy, relatedness, usefulness, interest and student class engagement. The target group is the 45 students who study "Visual Communication Design" major in Art Department of Heilongjiang International University in China. Mixed research methods are adopted to collect and analyze the data. The Pair sample T-test shows that there is significant difference in students' autonomy, relatedness, usefulness, interest and student class engagement between pre-ODI and post-ODI. The studies show that there is a positive relationship between students' autonomy, usefulness, interest, relatedness and student class engagement. The qualitative analysis of students' reflection reports and classroom observation feedback by three instructors justified how the ODIs employed in this research. Based on the findings, further actions should be carried out to have a greater impact on the long-term development.

Keywords: Organization Development Intervention, autonomy, relatedness, usefulness, interest, student class engagement

JEL Classification Code: C83, I21, I23

1. Introduction

Nowadays, the world's pattern is continually shifting and society is advancing at a breakneck pace. Education, as a fundamental component of social developing, is also evolving and improving. As a result, it proposes higher standards and more serious challenges for the development of higher education, as well as higher requirements for improving teaching quality.

In the context of "diverse educational environments in today more interconnected multicultural world," improving teaching quality has long been a hot topic in the advancement of higher education (Kahn, 2013). One of the challenges that educators confront today is student boredom, lack of enthusiasm, and low student engagement (Groves et al., 2015), which is also the key to improving teaching quality. Educators' interest in student participating in class instruction has grown since the late 1990s (Bryson & Hand, 2007). Educators are also aware that many kids are bored, disinterested, and unmotivated (Ahlfeldt et al., 2005). With the passage of time, from enrollment to graduation, the degree of student participation has a declining trend. Similarly, in the past, teachers were in charge of all teaching

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activities in art design classrooms. Classroom instruction evolves in accordance with the instructional ideas devised by teachers. Teachers have unmatched authority when it comes to teaching. Students passively accept it as a result of education is the degree to which students participate in their enthusiasm for learning.

Therefore, the topic of the research is an intervention to improve students' engagement in Art Department. Clearly, one significant determinant of the quality of higher education. Teachers should encourage and guide pupils to participate fully in classroom instruction. This way, it can help students in self-awareness during the learning process and facilitate the transfer of knowledge to practice, thereby laying the groundwork for personal development. Wu and Teng (2020) underlined that if educators wish to fulfill the goal of students' growth and development, they must spend more efforts to research and improving students' classroom engagement in order to improve higher education teaching quality.

The researcher discovered that most study on student class engagement in the United States and elsewhere is concentrated in mathematics, physics, English, and other topic classrooms. Currently, there are few studies on art design class engagement. The only studies are primarily focused on theory and there is a lack of empirical systematic study.

Student engagement has become increasingly important in the evaluation of undergraduate education and teacher quality as experiential learning and student-centered ideas have grown in popularity. Stefanou et al. (2004) presented a more practical teaching technique, namely the learner-centered approach, in which teachers serve as "side guides." Shull (2014) emphasized the move from a "instructional" to a "learning" paradigm, in which higher education institutions' roles shifted from "places of instruction" to "places to produce learning." Students who participate in class activities are more likely to pay attention in class, have more time to study well, and seek help from others when needed (de Jong et al., 2013).

The study of students' class participation is not only a theoretical review and investigation, but also a practical diagnosis and assistance for college students. The elements have great theoretical and practical importance, and they also give decision-making reference and practical assistance for student development and the advancement of higher education quality. From the foregoing, it is clear that the specific objectives of the research are how to apply effective teaching strategies to improve students' class engagement.

1.1 The Need for Action Research

The requirement for action research might be considered in light of the preceding background introduction and preliminary diagnosis. For higher education, Supply-Side Reform implies delivering high-quality graduates to society to match the needs of the global market. The core of Supply-Side Reform of Higher education in China is to increase teaching quality and train high-quality graduates. Therefore, student participation is recognized as one of the most essential aspects impacting the outcomes of higher education. The high degree of College Students' classroom involvement suggests that students are willing to participate in classroom instructional activities under the guiding of teachers. However, lastly, some institutions or colleges did emphasis on teaching quality, but the effects were not pleasant as predicted. HIU can be seen as one of these institutions, the university highlights the importance of teaching quality and student participation, because these are major concerns that HIU has faced and required to overcome. If these challenges are not thoroughly and successfully handled, they would not only have an impact on the quality of teaching, but would also limit the school's organizational development. As a result, a systematic inquiry through action research is deemed necessary in order to address the identified difficulties.

1.2 Research Objectives

- To diagnose the current situation of the focal organization on student class engagement.
- To design and implement an appropriate organizational development intervention for improving students' autonomy, relatedness usefulness, interest and student class engagement.
- To determine the differences between pre-ODI and post-ODI of students' autonomy, relatedness usefulness, interest and student class engagement.
- To investigate the relationship of students' autonomy, relatedness usefulness, interest and student class engagement.

1.3 Research Questions

- What is the current situation of students' autonomy, relatedness usefulness, interest and student class engagement?
- What are the appropriate organizational development interventions to improve students' autonomy, relatedness usefulness, interest and student class engagement?
- What are the differences between pre-ODI and post-ODI of students' autonomy, relatedness usefulness, interest and student class engagement?
- What is the relationship of students' autonomy, relatedness usefulness, interest and student class engagement?

2. Literature Review

2.1 Autonomy

When students have autonomy over some aspects of their education, they feel empowered (Reeve & Jang, 2006a).

According to Self-Determination Theory, humans must have autonomy, competence, and relatedness in order to be motivated (Ryan & Deci, 2000).

Jones (2009) suggests that teachers strategize their activities and lessons that students have some suggestions. Students should have a say in the pace of the lessons, the development of class activities, and the topics they will study, according to him, and the teacher should provide rationales for any guidelines or instructions given to them (Jones, 2009).

2.2 Relatedness

Relatedness refers to a sense of being connected to others, caring for others, and being connected to your community (Ryan & Deci, 2000).

Instructors should show students that they concern about whether or not they complete the course objectives satisfactorily. The key to designing for caring is for learners to believe that the instructor is interested in their progress. The instructor's concern for the students' well-being is a crucial part of caring about their learning. In higher education, students' well-being is usually only considered when a personal issue conflicts with course requirements.

Self-Determination Theory is a related theory, as previously said, everyone seeks to meet three internal psychological needs: the need for capability (Harter, 1978; White, 1963), the desire for autonomy (Deci, 1975), and the need to generate relatedness (Baumeister & Leary, 1995). Relatedness, according to Ryan and Deci (2000), is the sensation of being connected to others, caring for others, having others care for you, and being connected to your community. As a result, relatedness is described in this thesis as both scholarly and personal.

2.3 Usefulness

The term "usefulness" refers to the perceived value that students place on teachings in relation to their current and/or future aspirations (Wigfield & Eccles, 2000a). Teachers utilize instructional tactics to assist students comprehend why the subject they are learning is important for their short and long-term goals, as well as to give activities connected to future occupations and real-world experiences.

This component is derived from the expectancy-value theory (Eccles & Wigfield, 1995; Kauffman & Husman, 2004; Wigfield & Eccles, 2000). The expectancy-value theory, proposed by Eccles et al. (1983), shows that expectations for success and values have a direct impact on achievement choices. Because the researcher's empirical examination is focused on usefulness, the thesis will keep the discussion engaged on that area. The usefulness of a work is determined by how well it fits into an individual's goals (Wigfield & Eccles, 2000).

2.4 Interest

Teachers can utilize teaching strategies to benefit students by building their interest in specific content and making learning experiences enjoyable for them (Hidi & Renninger, 2006). Instructors should make sure their classroom activities and/or course subjects are engaging for their students. It is critical for instructors to recognize that they have the ability to affect their students' interests. Additionally, instructors should also consider how to implement elements of instruction that develop students' long-term interest in the course subject (Jones, 2009).

The four-phase model established by Hidi and Renninger (2006) is beneficial for understanding individual interest development. Individual interest is based on situational interest, which is regarded sequential. Individual interest emerges as students gain content knowledge and value material. Thus, activities meant to attract students' attention quickly, such as those with lots of audio or visual aspects, may spark situational interest but not individual interest unless students also obtain the requisite content knowledge and value it (Hidi & Renninger, 2006).

2.5 Student Class Engagement

The amount of time and energy a student invests in educationally meaningful activities, as well as the effort institutions put forth to use effective educational approaches, is referred to as student class engagement (Kuh, 2003).

Kuh (2003) proposed a comprehensive framework for student involvement, which includes three aspects: cognitive engagement, behavioral engagement, and emotional engagement. When a student is involved in a learning activity, behavioral engagement relates to their attention, effort, and persistence (Skinner et al., 2009). The term "emotional involvement" refers to how someone feels, such as "interest, delight, and enthusiasm" (Fredricks et al., 2004). Furthermore, cognitive engagement relates to the motivation for learning as well as the application of methods during the learning process (Hidi & Renninger, 2006).

Overall, the benefits of combining behavioral, emotional, and cognitive engagement to describe student class involvement will exceed those of a single component.

2.6 The Relationship Between Variables

Reeve and Jang (2006) makes an attempt to explore the relationship between student autonomy and engagement.
Researchers investigates how teachers with autonomy-supportive styles motivate their students compared to those with a controlling style in a study of 72 pairs of preservice teachers enrolled in a teacher certification program at a large university (Reeve & Jang, 2006). According to the findings, students' views of autonomy are favorably correlated with autonomy-supportive style instruction. Furthermore, the evidence shows that students' perceptions of autonomy are linked to all three interest outcomes: enjoyment, engagement, and performance (Reeve & Jang, 2006). Other evidence Hill (1991) has found that an autonomy-friendly atmosphere can predict student academic engagement and accomplishment.
In studies of teacher efficacy and student responsiveness, perceived caring regularly shows as a significant variable impacting student engagement, teacher credibility, and student accomplishment (Cooper & Miness, 2014; Finn et al., 2009). Interactions with students, support for personal and academic concerns, fair treatment in the class, responding to and encouraging students, smiling and being "warm," and efforts to learn about students' experiences have all been linked to a teacher's perceived concern (Cooper & Miness, 2014). As a result, relatedness has a significant influence on student engagement in class.
LeMay (2017) analyzed the relationship between motivation, self-regulation, and engagement. One research indicated that the following components of motivation were all significantly positively connected with engagement among sophomores: intrinsic goal orientation, usefulness, and perceived autonomy support. Johnson and Sinatra (2013) studied the relationship between usefulness, engagement, and success among 166 college students in a study published in 2013. This study reveals that when teachers place a premium on assignment utility, student engagement increases.
Schraw (1997) investigated the relationship between interest and engagement using four-phase interest theory. In a study of 181 undergraduates participating in an introductory educational psychology class, Schraw (1997) looked at the role of situational interest in literary material.
He discovered that students are fascinated by many features of literary works, and that this fascination is linked to personal engagement characteristics (Schraw, 1997).

2.7 Literature Related to Organization Development Intervention

2.7.1 Organizational Development

Effective communication, issue solving, participation in decision-making, conflict resolution and power sharing are just a few of the skills that can be developed via the process of improvement. Career design is another skill that can be developed through this process. In order to improvement the organization, it is necessary to focus on the process of improvement, which involves good communication, issue solving, involvement in decision-making, resolving conflict, power sharing, and, among other things, the process of career planning.

2.7.2 Lewin's Model of Change

Lewin (1992) proposed a three-step transition model: unfreezing, changing, and refreezing. This approach introduces a simple and practical method for change management. People participating in change can better grasp the process and characteristics of the various stages by breaking change into three stages, allowing them to develop effective change management methods.

The first phase in the change model, according to Lewin (1992), is "unfreezing the present situation or status quo." The organization should comprehend and realize the need for change at this level, and be willing to disrupt the status quo and develop a new model. After that, after everyone have "unfrozen," it's time to "move." The purpose of the "moving" step is to assist people in adapting to transitory imbalances and moving toward transformation. People begin the "refreezing" step: the reform of the "institutionalized" when they accept change and eventually establish a new behavior model. The specific performance, such as the new organizational structure and the release and deployment of the new management system, is described here.

2.7.3 Organization Development Intervention

Organization development intervention (ODI) was defined by Pascarella (2006) as "a series of activities, actions, and events designed to help an organization improve its performance and effectiveness." In the context of organizational change, intervention may be described as the implementation of planned activities that are designed to bring about or foster a change process inside a continuous system of organizations.

2.8 Specific Organization Development Interventions

2.8.1 Appreciative Inquiry

According to Stowell (2012) , Appreciative Inquiry(AI) is a paradigm of change that seeks out the best in individuals or organizations by actively questioning and eventually realizes the long-term development of both. To accomplish the common development of individuals, groups, and organizations, it is important to emphasize the good elements and potential of an organization rather than focus on its problems and shortcomings.

2.8.2 Goal Setting

According to Locke and Latham (2002), goal setting theory states that the goal is derived from a purpose and needs, that the goal can transform people's needs into motivation, that the goal can cause people's actions to operate in an appropriate way, and that the goal has an impact on the persistence of the behavior. People assess their own behavioral performance with regard to their stated goals during the process, and they modify and corrections in order to achieve their objectives.

2.8.3 SOAR

The SOAR (strengths, opportunities, aspirations, and results) analysis is a strategic planning technique that helps a company focus on its existing strengths and future vision while formulating strategic goals (McLean, 2017). It involves all levels and functional areas of a company, and it focuses on "what is currently being done successfully," rather than perceived threats and/or shortcomings.

2.8.4 Coaching and Mentoring

Coaching and mentoring have been acknowledged as crucial and helpful intervention approaches in organization development programs (Garvey et al., 2010). The goal of coaching and mentoring is to promote individual performance and involvement in various aspects of learning. They are used to engage people through promoting, resolving issues, and encouraging persistence in people. During the process, people might adjust their goals based on the circumstances. Through observation and discussion, the mentor can assist them in gaining a better understanding of their experiences.

2.8.5 Team building

Team building is a term that refers to a sequence of structural adjustments and team incentives designed to maximize team performance and production (Tuckman & Jensen, 2010). Team building should be a process of successful activities. Participants gain mutual trust and are willing to tackle the main challenges affecting the team's capacity to perform exceptionally well as a result.

2.9 Conceptual Framework

The factors were chosen based on the preliminary diagnosis and SWOT analysis findings, as well as the discussion of theories and studies. Students' autonomy, relatedness, usefulness, and interest have been shown to be independent variables that can enhance student class engagement. According to the literature review, the dependent variable is student class engagement, which is consisted of emotional, cognitive, and behavioral engagement as described by Kahu and Nelson (2017). On the independent variables, the OD intervention will be carried out.

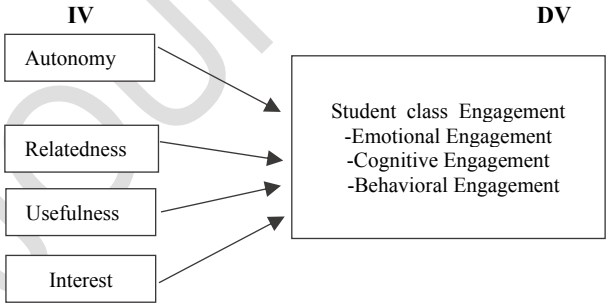

Figure 1: Conceptual Framework

2.9 Research Hypothesis

H1: Autonomy has a significant impact on student class engagement.

H2: Usefulness has a significant impact on student class engagement.

H3: Interest has a significant impact on student class engagement.

H4: Relatedness has a significant impact on student class engagement.

H5: There is a significant difference between pre-ODI and post-ODI on autonomy.

H6: There is a significant difference between pre-ODI and post-ODI on usefulness.

H7: There is a significant difference between pre-ODI and post-ODI on interest.

H8: There is a significant difference between pre-ODI and post-ODI on relatedness.

H9: There is a significant difference between pre-ODI and post-ODI on student class engagement.

3. Research Methods and Materials

3.1 Research Design

Pre-ODI Stage

During this stage, the researcher used semi-structured interviews, questionnaires, observations, and SWOTAR analysis to assess the general situation of Visual Communication Design major students' autonomy, relatedness, usefulness, interest, and engagement. A convenience sample of three instructors from the Department of Art and seven sophomores participated in the semi-structured interview. The questionnaire was given to 200 Art Department Sophomores and Juniors. After collecting and analyzing preliminary data, the researcher made recommendations to major stakeholders and designed ODIs appropriately.

ODI Stage

The researcher conducted effective OD interventions for the targeted organization based on the outcomes of the pre-ODI stage. The researcher constructed four-month OD interventions, with the experimental group accepting standard training. The primary goal of OD interventions was to increase students' autonomy, relatedness, usefulness, and interest, which in turn increased student class engagement. Thus, as organizational development interventions, Training, Appreciative Inquiry, Goal Setting, Coaching and Mentoring, and Team Building were employed at this period.

Post-ODI Stage

The same survey methods were used to collect data at the post-ODI phase, and the results were compared to the data collected at the pre-ODI stage to determine whether the interventions enhanced student autonomy, relatedness, usefulness, interest, and student class participation. A monthly meeting was also arranged for students to get a reflection report and discuss ways to improve. The consultant revised the action plan based on the findings in order to promote autonomy, relatedness, usefulness, interest, and student class engagement.

3.2 Population and Sample

This study focused on HIU students who had studied in the Art Department. According to the qualitative research approach of "purposive sampling," the researcher chose students from a Sophomore' class in the Art Department's Visual Communication Design major as the target groups. the target sample was assigned as the experimental group (N=45), Table 1 shows numbers of the participants.

Table 1: numbers of the participants

Description	Numbers of the Students	Percent
Male	38	84%
Female	7	16%
Total	45	100%

3.3 Research Instrument

It was necessary to use mixed research methods in this research. In this study. Survey questionnaires were administered as pre- and post-tests for quantitative data collection in order to measure the entry level of each group prior to the ODI and to determine the change degree at the end of the semester. Self-reflection, interview and classroom observations by three teachers were used for qualitative data. For both pre-ODI and post-ODI stages, researchers employed the same questionnaire, interview questions, and observation checklist.

To ensure the questionnaire's reliability, the researchers ran a pilot test with 30 students. Cronbach's alpha was calculated using the software SPSS (26.0) to determine the questionnaire's internal consistency, which was comprised of Likert-type scales and items. Cronbach's alpha values were autonomy.878, relatedness.929, usefulness.942, interest .957; behavioral engagement .901, emotional engagement .918, cognitive engagement .968. It suggested that the scale as a whole had a high degree of internal consistency. The questionnaires were found to be reliable for use depending on the results of the above reliability analysis.

Table 2: The Cronbach's Alpha test result of the survey questionnaires (N=30)

Variables	Number of Items	Cronbach's Alpha in pilot study (*N*=30)
Autonomy	5	.878
Relatedness	6	.929
Usefulness	5	.942
Interest	6	.957
Emotional Engagement	4	.918
Cognitive Engagement	4	.968
Behavioral Engagement	4	.901

To ensure validity, five experts from organization development and information technology analyzed the questions, provided suggestions, and revised the questions based on the comments and with expert approval.

For the interview questions, the Index of Item Objectives Congruence (IOC) test was used to determine which interview questions were congruent with the study's objectives and definitions of words. Three experts in the field of education evaluated the interview items using the test quality and Index of Item-Objectives Congruence (IOC) forms. IOC values greater than or equal to 0.5 are considered acceptable. As a result, each item in this study received a score greater than 0.5, indicating that it was accurately interpreted.

3.4 OD Interventions Design

Training was used for instructors to assist them in the planning and design of teaching-learning activities, as well as unleash instructors' potential.

Using appreciative inquiry to express to children realistic and positive expectations for success and change, and then to motivate each student to develop an individualized learning plan.

The instructor provided opportunities for students to participate in activities that showed how what they were learning was useful for their future job or long-term goals in order to improve the utility value of class learning, and given student empowerment in certain aspect of the course. Instructors were advised to implement team building into their teaching and learning process. In addition to boosting students' interest and engagement, relatedness, team building can also help them develop the capacity to work well with others and improve their chances of finding a job later in life.

3.5 Data Collection and Analysis

This study used a combination of quantitative and qualitative research methods. Interviews, questionnaires and observations were utilized to collect data for future study. These techniques of data collecting were supplied twice, both pre-ODI and post-ODI phases, in order to evaluate whether or not the ODI had any effect on student class engagement, autonomy, relatedness, usefulness and interest.

The purpose of this research was to identify the effects of autonomy, relatedness, usefulness, and interest on student class engagement using planned ODIs. To evaluate the relationship between the selected variables, research questions and hypotheses were established based on the purpose of the study.

Pearson correlation analysis, paired sample t-test, and content analysis were utilized to examine data from the pre- and post-ODI stages of the study to assess the hypotheses.

Table 3: The Summary of Research Process

No	Research Objectives	Research Instrument	Result
1	To diagnose the current situation of the focal organization on students' autonomy, relatedness, usefulness, interest and student class engagement.	Questionnaires, Semi-structural interview, Observation	Low student's autonomy, relatedness usefulness, interest and student class engagement
2	To design and implement an appropriate organizational development intervention for improving students' autonomy, relatedness, usefulness, interest and student class engagement.	Workshop, Activities	Training, AI, Goal setting, Mentoring, Team Building, Coaching
3	To determine the differences between pre-ODI and post-ODI of students' autonomy, relatedness, usefulness, interest and student class engagement.	SPSS data analysis, Content Analysis	There is a significant difference in all variables between Pre-ODI and Post-ODI.
4	To investigate the relationship of students' autonomy, relatedness, usefulness, interest and student class engagement.	SPSS data analysis, Content Analysis	There is a significant relationship between independent variables and dependent variable.

The impact of each variable on the dependent variable tested using multiple linear regression. The testing data will be used to support the ODI design and test hypothesis 1-4. The following table demonstrates the relationship between the independent variables and student class engagement (see Table 4).

Table 4: The Result of MLR

Variables	Standardized Coefficients Beta	Sig.	ANOVA Sig.
Autonomy	.146	.000	.000b
Relatedness	.145	.000	
Usefulness	.116	.017	
Interest	.533	.000	
Dependent Variable: Student class engagement			
R Square:	.943		

MLR results show that R square is 0.943, indicating that 94.3 percent of the listed independent factors can explain the dependent variable. A Sig. Value of less than 0.05 indicates that the relationship is significant. To sum up, the independent variables have the significant influence on student class engagement. the results of MLR testing supported H1 to H4. Additionally, Interest has the greatest influential ability on student class engagement with 53.3%, and followed by autonomy, relatedness and usefulness.

4. Results and Discussion

4.1 Result of Quantitative Data Analysis

The results indicate that there is a significant difference between the mean scores of Pre and Post-ODI of student's autonomy, relatedness, usefulness, interest and student class engagement.

Table 5: The Summary of Quantitative Data Analysis(N=45)

Variable	Question	Stage	Mean	Std. Deviation	Sig. (2-tailed)
Autonomy	1	Pre-ODI	2.49	.549	.000
		Post-ODI	4.51	.549	
	2	Pre-ODI	2.51	.589	.000
		Post-ODI	4.56	.546	
	3	Pre-ODI	2.51	.661	.000
		Post-ODI	4.49	.549	
	4	Pre-ODI	2.53	.548	.000
		Post-ODI	4.49	.626	
	5	Pre-ODI	2.51	.626	.000
		Post-ODI	4.51	.589	
Relatedness	1	Pre-ODI	2.56	.503	.000
		Post-ODI	4.62	.490	
	2	Pre-ODI	2.73	.495	.000
		Post-ODI	4.49	.589	
	3	Pre-ODI	2.64	.609	.000
		Post-ODI	4.60	.539	
	4	Pre-ODI	2.82	.716	.000
		Post-ODI	4.56	.503	
	5	Pre-ODI	2.73	.580	.000
		Post-ODI	4.60	.580	
	6	Pre-ODI	2.76	.645	.000
		Post-ODI	4.51	.589	
Usefulness	1	Pre-ODI	2.80	.548	.000
		Post-ODI	4.64	.529	
	2	Pre-ODI	2.76	.712	.000
		Post-ODI	4.58	.583	
	3	Pre-ODI	2.98	.690	.000
		Post-ODI	4.84	.367	
	4	Pre-ODI	2.76	.609	.000
		Post-ODI	4.53	.588	
	5	Pre-ODI	2.73	.751	.000
		Post-ODI	4.89	.318	
Interest	1	Pre-ODI	2.82	.614	.000
		Post-ODI	4.56	.624	
	2	Pre-ODI	2.69	.668	.000
		Post-ODI	4.76	.435	
	3	Pre-ODI	2.64	.570	.000
		Post-ODI	4.64	.570	
	4	Pre-ODI	2.82	.576	.000
		Post-ODI	4.58	.583	
	5	Pre-ODI	2.78	.560	.000
		Post-ODI	4.67	.522	
	6	Pre-ODI	2.71	.695	.000
		Post-ODI	4.64	.570	
Emotional Engagement	1	Pre-ODI	2.53	.661	.000
		Post-ODI	4.64	.570	
	2	Pre-ODI	2.38	.684	.000
		Post-ODI	4.71	.506	
	3	Pre-ODI	2.31	.633	.000
		Post-ODI	4.58	.657	
	4	Pre-ODI	2.40	.618	.000
		Post-ODI	4.56	.586	
Cognitive Engagement	1	Pre-ODI	2.49	.757	.000
		Post-ODI	4.58	.621	
	2	Pre-ODI	2.71	.695	.000
		Post-ODI	4.67	.564	
	3	Pre-ODI	2.60	.720	.000
		Post-ODI	4.60	.618	
	4	Pre-ODI	2.44	.967	.000
		Post-ODI	4.60	.618	
Behavioral Engagement	1	Pre-ODI	2.40	.939	.000
		Post-ODI	4.60	.654	
	2	Pre-ODI	2.40	.618	.000
		Post-ODI	4.62	.614	
	3	Pre-ODI	2.56	.659	.000
		Post-ODI	4.64	.529	
	4	Pre-ODI	2.87	.661	.000
		Post-ODI	4.71	.506	

4.2 The Result of Qualitative Data Analysis

Each participant in the experimental group was given the team building self-reflection report at the end of the session. Based on the self-reflection report data, team building enhanced participants' autonomy, relatedness, usefulness, and interest in the experimental group: There was a lot of flexibility in terms of what students could do in their group projects, including the ability to choose their own topics and products, as well as the ability to voice their own ideas and suggestions (N=41);There were 77% participants (N=35) in this study, all of whom said that their instructors and peers cared about them; 83% participants (N=38) thought that working in teams to complete projects was an accurate imitation of a real-world work experience.;73% of participants (N=33) said that they were more enthusiastic about the project than at the beginning.

Significant factors that contributed to student participation in team projects and team development included the following: Establishing clearly defined roles and duties among the group members (N=36). Gaining practical information and abilities, such as how to run an engaging class, give a good presentation, and make a good PPT (N=33); Topic, product design, and presentation of the product are all entrusted to the student's discretion (N=33); Team meetings to talk and determine what to do next, increased efficiency (N=30); Other team members appreciated effort, ideas, or contributions (N=33); Developing a sense of teamwork and collaboration helped set the foundation for a successful career (N=30).

Students' autonomy, relatedness, usefulness, interest, and engagement in the classroom were all analyzed by three instructors in the classroom observation method. Each of the three observers was given a classroom observation checklist, which contained three sections: instructions, issues to observe, and feedback. Using a five-point scale, the observers scored each of the mentioned factors. The following is the summation of the three observers' feedback.

"Through teacher-student interaction, I could observe that teachers encourage learners to join in class. In order to stimulate the students' interest in learning, the teacher would plan several activities. Student enthusiasm in learning grew as they were given a variety of options for engaging in the assignment during class time. The teacher was always willing to assist his students in any way he could, and he always treated them with respect and care. He frequently moved around the classroom, bending over to answer inquiries from students." (observer 1)

"I observed the shift from a teacher-centered to a student-centered classroom. The instructor's teaching technique was crucial in increasing student autonomy, relatedness, usefulness, interest, and participation in class. When preparing the lessons, the instructor considered the autonomy, interest, and other variables of the students, and created a variety of exercises to meet their needs. The ability of students to learn independently improves over time." (observer 2)

"I observed changes in student engagement, interest, relatedness, teaching and learning approaches. Cooperation with peers and the instructor fostered an engaged learning environment. The classroom activities engaged students' cognition, emotions, and interests, and made learning more enjoyable." (observer 3)

4.3 Hypothesis Testing

According to Table 5, the post-ODI mean of autonomy, relatedness, usefulness, interest, and student class engagement was greater than the pre-ODI mean. Additionally, the paired sample T-test result indicated that the variables' Sig (2-tailed) values were 0.00. As a result, the results agree the following hypothesis:

H1: Autonomy has a significant impact on student class engagement.

H2: Usefulness has a significant impact on student class engagement.

H3: Interest has a significant impact on student class engagement.

H4: Relatedness has a significant impact on student class engagement.

H5: There is a significant difference between pre-ODI and post-ODI on autonomy.

H6: There is a significant difference between pre-ODI and post-ODI on usefulness.

H7: There is a significant difference between pre-ODI and post-ODI on interest.

H8: There is a significant difference between pre-ODI and post-ODI on relatedness.

H9: There is a significant difference between pre-ODI and post-ODI on student class engagement.

5. Conclusions and Recommendation

The results demonstrates that there is a significant relationship between students' autonomy, relatedness, usefulness, interest and student class engagement in Art Department.

The implementation of ODI in this study has a significant improvement on above four variables. Students' autonomy, relatedness, usefulness, interest can be implemented as the main set of indicators to measure student class engagement.

The quantitative findings reveal significant differences between pre-ODI and post-ODI stages on students' autonomy, relatedness, usefulness, interest, and student class involvement. After interventions, the average score of each variable rises, which is also supported by self-reflection report and researcher's observation.

ODI has a beneficial impact on autonomy, relatedness, usefulness, and interest according to the findings of the study, which also shows that it increases student class engagement.

However, because the current research is limited to a single experimental group of Visual Communication Design majors, it is required to broaden the scope of the study to include the entire focal organization in order to have a greater impact on the organization. In addition, the organization can establish corresponding functional departments to carry out organizational development interventions on a regular basis throughout the school, as well as a new monitoring and evaluation system in collaboration with the original department to ensure the long-term viability and stability of the transformation.

Due to HIU's semester system, organizational development took place over a four-month period. Afterwards, intentional organizational development interventions should be sustained to sustain the improvements that have already occurred.

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