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Dr. Manoj Kumar

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FOREWORD

I am pleased to put into the hands of readers Volume-4; Issue-4: 2022 (July-August, 2022) of “**Journal of Humanities and Education Development (JHED) (ISSN: 2581-8651)**”, an international journal which publishes peer reviewed quality research papers on a wide variety of topics related to, Humanities and Education development. Looking to the keen interest shown by the authors and readers, the editorial board has decided to release print issue also, journal issue will be available in various library also in print and online version. This will motivate authors for quick publication of their research papers. Even with these changes our objective remains the same, that is, to encourage young researchers and academicians to think innovatively and share their research findings with others for the betterment of mankind. This journal has DOI (Digital Object Identifier) also, this will improve citation of research papers.

I thank all the authors of the research papers for contributing their scholarly articles. Despite many challenges, the entire editorial board has worked tirelessly and helped me to bring out this issue of the journal well in time. They all deserve my heartfelt thanks.

Finally, I hope the readers will make good use of this valuable research material and continue to contribute their research finding for publication in this journal. Constructive comments and suggestions from our readers are welcome for further improvement of the quality and usefulness of the journal.

With warm regards.



Dr. Manoj Kumar

Editor-in-Chief

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Effective Assessment of Solutions to improve the quality of Teaching of Candidate art for Students (Training System) at People's Security Academy

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People's Security Academy, Vietnam

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Abstract

To improve the quality of teaching martial arts of the People's Police to students at the People's Security Academy. The topic used 05 routine research methods in sport and physical education to evaluate the effectiveness of solutions. The experimental subjects are 160 second and third-year students of 3 majors at the People's Security Academy, divided into 2 control and experimental groups, the experimental period is carried out in the academic year 2020-2021 from May September 2020 to July 2021. After experimenting with research methods in sports, the thesis has shown the effectiveness, superiority, and science of 09 solutions to improve the quality of martial arts teaching. People's Police for students at the People's Security Academy.

Keywords— Evaluation of effectiveness, Teaching quality, People's Public Security Martial Arts.

SOURCE OF THE ARTICLE

The article is extracted from the doctoral thesis in education “Research on solutions to improve the quality of teaching martial arts of the People's Police to students (training system) at the People's Security Academy, conducted at the Institute of Public Security”. Sports Science, defended April 2022.

I. ASK THE PROBLEM

Over the years, the People's Security Academy has constantly innovated the quality of teaching martial arts of the People's Public Security, meeting the increasing requirements of the reality of crime prevention. However, the reality of martial arts training of the people's police shows that there are still many limitations and shortcomings that have not been overcome such as: For students, the practice capacity is not good, tactical thinking and ability Technical application to combat situations is not close to reality, not flexible. The program content and learning materials are old, not up to date with the techniques of modern martial arts; The teaching method of the lecturer is not attractive...which significantly affects the students' interest in practicing, so the quality of martial arts teaching at the Academy has not been excellent lately.

This poses great challenges for the Academy of Military, Martial Arts, and Sports Departments in martial arts training. Therefore, finding solutions to improve the quality of teaching People's Public Security martial arts for students at the People's Security Academy and at the same time evaluating the effectiveness of solutions is essential in the training period. current creation of the Academy.

II. RESEARCH METHODS

In the research process, we use the following research methods: Research method and document synthesis; Methods of pedagogical observation; Interview method; Experimental method of pedagogy; Statistical Mathematical Methods.

III. RESEARCH RESULTS AND DISCUSSION

3.1. Applying solutions to improve the quality of teaching martial arts of the People's Police to students (training system) at the People's Security Academy

3.1.1. Experimental organization

Experimental method: The thesis uses the self-comparison experimental method.

Experimental subjects: The experimental process was conducted on 160 students of the 2nd and 3rd years of the People's Security Academy in three majors: Reconnaissance and protection of social security; Internal security reconnaissance and investigative security.

Experimental period: 1 year (the school year 2020-2021): From September 2020 to July 2021. Divided into 2 phases: Phase 1: From September 2020 to February 2021; Phase 2: From March 2021 to July 2021 at the People's Security Academy.

In the context of the Covid-19 epidemic situation, with the management of students and students (100% of accommodation is concentrated among students), staff and lecturers are strict despite the complicated development of the Covid-19 epidemic. However, the school still appropriately organizes face-to-face teaching to ensure both completion of the program and prevention of the Covid-19 pandemic. Therefore, the application of the selected solutions to practice is convenient, unaffected, and throughout a school year, only Solution 9 is more or less affected by the epidemic situation. Therefore, we still experiment with this solution according to the planned plan, but because of the strong impact of the Covid epidemic in phase 2 of the experimental process, the thesis will not evaluate its effectiveness.

Before experimenting, the thesis proposed to the Faculty of Military, Martial Arts, and Sports to ask for the policy of the Academy's Board of Directors to be allowed to experiment and apply the selected solutions. With the consent of the Academy's Board of Directors, we carefully presented the content, the implementation method, the coordination unit...the solutions in front of the direct leader, the Martial Arts team, and the lecturers in the Faculty to clarify the content and application method of each experimental solution in practice as well as support the lecturers in the entire process of implementing the solutions.

The thesis evaluates the quality of teaching martial arts of the People's Police before the experiment takes place at the beginning of the first semester of the school year 2020-2021 (September 2020) and after the experiment at the end of the semester. 2 academic years 2020-2021 (July 2021).

3.2. Evaluating the effectiveness of solutions to improve the quality of teaching People's Public Security martial arts for students (training system) at the People's Security Academy

3.2.1. Before the experiment

Before the experiment (September 2020), the thesis checked the quality of teaching martial arts in the People's Public Security through the assessment of students and teachers by self-assessment by the criteria set by the thesis. selected.

The test results are presented in Table 1 and Table 2.

Table 1 shows that: The results of the pre-experiment assessment, which are self-assessed by the lecturers through the teaching quality assessment criteria, show that: Out of the 20 survey criteria, 7 criteria are rated as "Good". " and 13 criteria as "Normal", of which the highest rating at "Good" is criterion number 9 "Supervising and evaluating students' practice activities in class" with 4.00 points. and the lowest is in 2 criteria 19, 20 "Students are interested in the lessons of the People's Police martial arts course and Students are satisfied with the learning assessment method of the People's Public Security martial arts course".

Table 2 shows that the results of the pre-experiment assessment of the students who assessed the students' evaluations were not quite similar to the self-evaluated instructors, most of the criteria for assessing the quality of martial arts of the public security lecturers Students rated it as average. Specifically, in the 20 criteria, there are 4 criteria rated as "Good" and 16 criteria as "Normal", in which the highest-rated criterion (3.59 points) is the 4th criterion "Teaching" martial arts teachers have a clear and easy to understand the method of communication", and the lowest-rated criterion is the 19th criterion (3.06 points) "Students are interested in the lessons of the People's Public Security martial arts class "

If we compare the results of the pre-experimental assessment of lecturers and students by the χ^2 index on the number of criteria at the level of "Good" and "Normal" (Table 3), basically teachers and students have a good assessment. equivalent price $\chi^2=0.54$ with $P>0.05$.

Table 3. Comparing the evaluation of the quality of teaching martial arts of the People's Public Security at the People's Security Academy before the experiment between lecturers and students

Evaluate	Lecturers	Student	χ^2	P
Normal	13	16	0.54	>0.05
Good	7	7		

3.2.2. After the experiment

In July 2021, after finishing 1 year of experimenting with the application of selected solutions of the thesis, we evaluated the quality of teaching martial arts in the People's Public Security through the evaluation of students and students. lecturers self-assess by the criteria selected by the thesis. The results are presented in Table 4 and Table 5.

Table 4 and Table 5 show that: At the time of 1 year of experimental study, the results of the quality inspection of teaching martial arts in the People's Public Security were rated as good or better by the lecturers and students on the scale. measure Likert. The lecturer evaluates the results with 2 criteria being "Very Good" and 18 criteria being rated as "Good", in which the highest score (4.29 points) is in the 4th criteria "Having a method of communication is clear and easy to understand" and the 14th criterion "Students' learning

outcomes are assessed accurately and fairly" and the lowest score is 3.43 in the 12th criterion "Students assessment methods" encourage the development of students' practical skills.

As for the assessment results of students, there is 1 criterion of "Very Good" with 4.36 points, which is also the 4th criterion "Teachers have a clear and understandable method of communicating" and 19 criteria of the category " Good" has a score of 3.82 (Criterion 18 The objectives of the course have been met after the end of the course) to 4.15 (Criterion 2 The lecturer always shows enthusiasm in teaching).

It must be said that the evaluation results of teachers and students regarding the quality of teaching martial arts of the People's Police after the experiment are similar in terms of the number of "Good" and "Very good" evaluations. ($\chi^2= 0.062$ với $P>0.05$) – Table 6.

Table 6. Comparing the evaluation of the quality of teaching martial arts of the People's Public Security at the People's Security Academy before the experiment between lecturers and students

Evaluate	Lecturers	Student	χ^2	P
Normal	2	1	0.062	>0.05
Good	18	19		

Compare the results after the experiment and before the experiment.

To evaluate the effectiveness of the solutions, we compare the results after the experiment and before the experiment.

Table 7. Comparison of the evaluation of the quality of teaching martial arts of the People's Public Security at the People's Security Academy after and before the experiment between lecturers and students

Evaluate	Lecturers		Student	
	Before experiment	After experiment	Before experiment	After experiment
Very good	0	2	0	1
Good	7	18	4	19
Normal	13	0	16	0

Table 7 shows that: Both teachers and students assessed that the quality of martial arts teaching was better after the experiment than before the experiment.

IV. CONCLUSION

The effectiveness of the solutions was evaluated after 1 year of experimental study, and the difference was statistically significant. The solutions selected by the thesis have been effective in improving the quality of martial arts teaching of the People's Police at the People's Security Academy, the practical application is completely appropriate and effective.

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APPENDIX

Table 1. Results of evaluation of the quality of teaching martial arts of the People's Public Security at the People's Security Academy by the lecturers, before the experiment (n=7)

No	Evaluation Criteria	Instructor self-assessment					Total	Score Average	Score Rating
		5	4	3	2	1			
Implement rules and regulations									
1.	Always strictly follow class time	1	2	4	0	0	25	3.57	Agree
Attitude, interest in students									
2.	Open-minded, enthusiastic in teaching, and respecting students' opinions	0	3	3	1	0	23	3.29	Normal
3.	Always show enthusiasm in teaching	0	2	5	0	0	23	3.29	Normal
Teaching methods									
4.	Have a clear, easy-to-understand communication method	1	3	3	0	0	26	3.71	Agree
5.	Always pay attention to the effective use of teaching aids	0	1	4	2	0	20	2.86	Normal
6.	Always relate lessons to real-life situations so that students can easily acquire knowledge	1	2	3	1	0	24	3.43	Agree
Classroom management and organization skills									
7.	The goal and content of the martial arts course were announced before learning	0	2	4	1	0	22	3.14	Normal
8.	Informed about the form and method of pre-study assessment	0	2	3	2	0	21	3.00	Normal
9.	Monitor and evaluate students' classroom practice activities	2	3	2	0	0	28	4.00	Agree
10.	Allocate and use class time appropriately and effectively	0	2	3	2	0	21	3.00	Normal
Methods of testing and evaluation									
11.	Student learning outcomes are assessed in a variety of ways	0	3	3	1	0	23	3.29	Normal
12.	A learning assessment approach that encourages the development of students' practical skills	0	2	4	1	0	22	3.14	Normal
13.	Exam questions, and reasonable testing in terms of duration and content, have synthesized the knowledge learned	0	2	4	1	0	22	3.14	Normal
14.	Student learning outcomes are assessed accurately and fairly	2	2	3	0	0	27	3.86	Agree

Student satisfaction									
15.	The people's police martial arts class is really useful	1	3	3	0	0	26	3.71	Agree
16.	Introduced and updated textbooks and reference materials to help students understand or expand their understanding of the course	0	1	4	2	0	20	2.86	Normal
17.	The People's Public Security Martial Arts course provides the necessary knowledge and practical skills for students' future careers.	2	2	3	0	0	27	3.86	Agree
18.	Course objectives have been met at the end of the course	0	2	2	3	0	20	2.86	Normal
19.	Students are interested in the lessons in the People's Public Security martial arts class	0	1	3	3	0	19	2.71	Normal
20.	Students are really satisfied with the learning assessment method of the People's Public Security martial arts module	0	1	3	3	0	19	2.71	Normal

Table 2. Results of assessing the quality of teaching martial arts of the People's Public Security at the People's Security Academy assessed by students, the time before experiment (n=160)

No	Evaluation Criteria	Student reviews					Total score	Medium score	Evaluate
		5	4	3	2	1			
Implement rules and regulations									
1	Teachers always strictly follow class time	30	64	44	16	0	570	3.56	Agree
Attitude, interest in students									
2	Martial arts instructors are open-minded, enthusiastic about teaching, and respect students' opinions	19	48	56	29	8	521	3.26	Normal
3	Martial arts instructors always show enthusiasm in teaching	10	68	69	13	0	555	3.47	Agree
Teaching methods									
4	Martial arts instructors have a clear and easy-to-understand method of communication	21	78	35	26	0	574	3.59	Agree
5	Martial arts instructors effectively use teaching aids	15	56	60	15	14	523	3.27	Normal
6	Martial arts instructors relate lessons to real-life situations	20	63	40	27	10	536	3.35	Normal
Classroom management and organization skills									
7	You are informed about the objectives and content of the course before studying	30	54	44	19	13	549	3.43	Agree
8	You are informed about the form and method of pre-study assessment	0	43	98	19	0	504	3.15	Normal
9	Martial arts instructors supervise and evaluate students' classroom practice activities	23	58	46	26	7	544	3.40	Agree
10	Martial arts instructors allocate and use class time appropriately and effectively	24	43	53	28	12	519	3.24	Normal
Methods of testing and evaluation									
11	Student learning outcomes are assessed in a variety of ways	14	35	69	32	10	491	3.07	Normal
12	A learning assessment approach that encourages the development of students' practical skills	8	41	57	34	20	463	2.89	Normal
13	Exam questions, and reasonable testing in terms of duration and content, have synthesized the knowledge learned	16	43	46	43	12	488	3.05	Normal
14	Student learning outcomes are assessed accurately and fairly	23	47	65	19	6	542	3.39	Normal
Student satisfaction									

15	The people's police martial arts class is really useful	15	47	65	21	12	512	3.20	Normal
16	Martial arts instructors have introduced and updated textbooks and references to help students understand or expand their understanding of the course.	15	52	64	21	8	525	3.28	Normal
17	The People's Public Security Martial Arts course provides the necessary knowledge and practical skills for students' future careers.	14	39	64	31	12	492	3.08	Normal
18	Course objectives have been met at the end of the course	18	43	57	28	14	503	3.14	Normal
19	I am interested in the lessons in the People's Public Security martial arts class	9	48	59	32	12	490	3.06	Normal
20	I am really satisfied with the learning assessment method of the People's Public Security martial arts course	14	51	56	31	8	512	3.20	Normal

Table 4. Results of evaluation of the quality of teaching People's Public Security martial arts at the People's Security Academy by the lecturers' self-assessment, after 1 year of experimental training (n=7)

No	Evaluation Criteria	Instructor self-assessment					Total score	Medium score	Evaluate
		5	4	3	2	1			
Implement rules and regulations									
1	Always strictly follow class time	2	3	2	0	0	28	4	Agree
Attitude, interest in students									
2	Open-minded, enthusiastic in teaching, and respecting students' opinions	1	4	2	0	0	27	3.86	Agree
3	Always show enthusiasm in teaching	2	4	1	0	0	29	4.14	Agree
Teaching methods									
4	Have a clear, easy-to-understand communication method	2	5	0	0	0	30	4.29	Agree
5	Always pay attention to the effective use of teaching aids	1	4	2	0	0	27	3.86	Agree
6	Always relate lessons to real-life situations so that students can gain knowledge easily	2	4	1	0	0	29	4.14	Agree
Classroom management and organization skills									
7	The goal and content of the martial arts course were announced before learning	1	4	2	0	0	27	3.86	Agree
8	Informed about the form and method of pre-study assessment	0	4	3	0	0	25	3.57	Agree
9	Monitor and evaluate students' classroom practice activities	2	4	1	0	0	29	4.14	Agree
1	Allocate and use class time appropriately and effectively	1	4	2	0	0	27	3.86	Agree
Methods of testing and evaluation									
1	Student learning outcomes are assessed in a variety of ways	0	4	3	0	0	25	3.57	Agree
1	A learning assessment approach that encourages the development of students' practical skills	0	4	2	1	0	24	3.43	Agree
1	Exam questions, and reasonable testing in terms of duration and content, have synthesized the knowledge learned	2	3	2	0	0	28	4.00	Agree
1	Student learning outcomes are assessed accurately and fairly	3	3	1	0	0	30	4.29	Agree

Student satisfaction									
1	The people's police martial arts class is really useful	2	4	1	0	0	29	4.14	Agree
1	Introduced and updated textbooks and reference materials to help students understand or expand their understanding of the course	0	5	2	0	0	26	3.71	Agree
1	The People's Public Security Martial Arts course provides the necessary knowledge and practical skills for students' future careers.	2	3	2	0	0	28	4.00	Agree
1	Course objectives have been met at the end of the course	1	4	2	0	0	27	3.86	Agree
1	Students are interested in the lessons in the People's Public Security martial arts class	1	4	2	0	0	27	3.86	Agree
2	Students are really satisfied with the learning assessment method of the People's Public Security martial arts module	0	4	3	0	0	25	3.57	Agree

Table 5. Results of assessing the quality of teaching martial arts of the People's Public Security at the People's Security Academy assessed by students, time after 1 year of experimental study (n=160)

No	Evaluation Criteria	Student reviews					Total score	Medium score	Evaluate
		5	4	3	2	1			
Implement rules and regulations									
	Teachers always strictly follow class time	34	108	18	0	0	656	4.1	Agree
Attitude, interest in students									
	Martial arts instructors are open-minded, enthusiastic about teaching, and respect students' opinions	40	102	15	3	0	659	4.12	Agree
	Martial arts instructors always show enthusiasm in teaching	43	98	19	0	0	664	4.15	Agree
Teaching methods									
	Martial arts instructors have a clear and easy-to-understand method of communication	65	87	8	0	0	697	4.36	Agree
	Martial arts instructors effectively use teaching aids	35	81	44	0	0	631	3.94	Agree
	Martial arts instructors who relate lessons to real-life situations	39	91	28	2	0	647	4.04	Agree
Classroom management and organization skills									
	You are informed about the objectives and content of the course before studying	43	81	34	2	0	645	4.03	Agree
	You are informed about the form and method of pre-study assessment	42	90	27	1	0	653	4.08	Agree
	Martial arts instructors supervise and evaluate students' classroom practice activities	45	92	23	0	0	662	4.14	Agree
0.	Martial arts instructors allocate and use class time appropriately and effectively	34	88	38	0	0	636	3.98	Agree
Methods of testing and evaluation									
1.	Student learning outcomes are assessed in a variety of ways	35	93	32	0	0	643	4.02	Agree
2.	A learning assessment approach that encourages the development of students' practical skills	29	87	44	0	0	625	3.91	Agree
3.	Exam questions, and reasonable testing in terms of duration and content, have synthesized the knowledge	35	92	33	0	0	642	4.01	Agree

	learned								
4.	Student learning outcomes are assessed accurately and fairly	43	94	23	0	0	660	4.13	Agree
Student satisfaction									
5.	The people's police martial arts class is really useful	36	95	29	0	0	647	4.04	Agree
5.	Martial arts instructors have introduced and updated textbooks and references to help students understand or expand their understanding of the course.	37	80	43	0	0	634	3.96	Agree
7.	The People's Public Security Martial Arts course provides the necessary knowledge and practical skills for students' future careers.	29	78	53	0	0	616	3.85	Agree
8.	Course objectives have been met at the end of the course	32	67	61	0	0	611	3.82	Agree
9.	I am interested in the lessons in the People's Public Security martial arts class	43	76	41	0	0	642	4.01	Agree
0.	I am really satisfied with the learning assessment method of the People's Public Security martial arts course	35	87	38	0	0	637	3.98	Agree

The Influence of Positive Self-affirmation towards Malaysian ESL Students at Tertiary Level of Education

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Abstract

Positive self-affirmation when identified as value affirmation helps alleviate negative self threat among students' when practiced in the right way which in turn boosts their self-esteem and thus motivation which eventually enables them to achieve an excellent result in their academic performance especially in the context of this study, the ESL reading classroom. Therefore, this study will be looking at the direct effect between positive self-affirmation, motivation and self-esteem towards ESL students' academic performance in the ESL classroom and based on a review of several studies that was done previously on self-affirmation, motivation and self-esteem towards Malaysian ESL students' academic performance, it was found out through a review on the results and discussion of previous studies that there is a positive significance between positive self-affirmation, self-esteem and motivation towards Malaysian ESL students' academic performance in the ESL classroom.

Keywords— self affirmation, self-esteem, motivation, ESL students, higher learning

I. INTRODUCTION

Positive affirmations are utterances that assert the truth of something. To put it another way, positive affirmations are statements that a person repeats to themselves to express how they wish to be. Positive affirmations are words or statements that are intended to challenge and eliminate negative or harmful beliefs (Betsi Sites & Tchiki Davis, 2022).

To begin with, the use of positive affirmation in an individual's daily life will help uplift an individual's mood and therefore helps them to be able to focus on the task that they are going to attempt in their everyday lifestyle. Hence, in regards to the use of positive self affirmations, there are several benefits that an individual can gain especially in the context of this study which are Malaysian ESL students in the ESL classroom. To further elaborate, the first benefit of positive self-affirmation towards ESL students in the Malaysian ESL classroom is that it motivates them to act based on their goals and the more positive their goals are, the more it enables them to act in a positive way. For instance, if their goal is to achieve an A grade for an English lesson and gained it, the more they would practice positive self-affirmation in their life because their positive goals enables them to want to acquire more positive results

at the end of the day through positive self affirmation (Richard de Souza, n.d).

In addition, the second benefit of positive self-affirmation is that it helps them to concentrate or pay attention to their goals in order to achieve a positive goal result at the end of the day which enables them to improve their self-esteem and confidence in the ESL classroom. Furthermore, the third benefit that Malaysian ESL students' can benefit through the use of positive self-affirmation in the ESL classroom is that it enables them to change a negative thought into a positive thought which eventually would boost their self-esteem and makes them feel good about themselves and finally, the last benefit that Malaysian ESL students' can gain from using a positive self-affirmation in the ESL classroom is that through the use of positive self-affirmation it helps boost students' subconscious mind into a new belief that enables them to stay positive all the time through the use of positive thoughts and affirmations (Richard de Souza, n.d)

Therefore, this study aims to explore and identify the influence of positive self-affirmation towards Malaysian ESL students at Tertiary level of Education by looking at the effect of positive self-affirmation towards Malaysian ESL students' self-esteem and academic performance in the

ESL reading classroom which will be fully elaborated in this study.

In regards to the use of positive self-affirmations among tertiary levels of education in Malaysia, there are a few research gaps that can be identified through the use of positive self-affirmation in the Malaysian ESL classroom which answers the statement of the problem of this current research study. To begin with, the first research gap that will be discussed in this study is educational inequality among Malaysian ESL students which receives much attention in academic research and policy formation whereby there is an increasing amount of educational inequality among the minority students' in Malaysia in the ESL classroom due to their poor socioeconomic background. This is further proven through a study done by Boskey (2017) who states that the socioeconomic status does really have a significant impact on the mastery of English language among Malaysian ESL students as it is based on the level of parental education which are usually maternal and occupation which is usually paternal and the family income (Hoff, 2013; Bradley & Corwyn, 2002; Considine & Zappalà, 2002). In addition, there have been other definitions that have used the term "economic deprivation" to refer to general living conditions such as home type, medical treatment, and income level (Völkel, Seabi, Cockcroft & Goldschagg, 2016; Ginsborg, 2014). SES can alternatively be defined as "one's access to financial, educational, and social resources, as well as the social positions, advantages, and prestige that these resources confer" (Pace, Luo, Hirsh-Pasek & Golinkoff, 2017, p. 287).

Furthermore, many studies have shown that people from low socioeconomic origins are more likely to be subjected to hazards such as neglect, abuse, and limited educational possibilities (Pace et al., 2017) whereby when compared to students from higher socioeconomic situations, students from such backgrounds are more likely to struggle with the English language. In addition, according to existing research, students from low-income families are more likely to have poor literacy abilities due to a lack of access to literacy materials and having parents who are not highly educated (Frechette, 2013). Similarly, many pupils from low socioeconomic origins have lower levels of English language abilities than those from higher socioeconomic backgrounds (Hoff, 2013; Phon, 2017).

Moreover, according to existing research, students from low-income families are more likely to have poor literacy abilities due to a lack of access to literacy materials and having parents who are not highly educated (Frechette, 2013). Similarly, many pupils from low socioeconomic origins have lower levels of English language abilities than those from higher socioeconomic backgrounds (Hoff, 2013; Phon, 2017). These students are considered to be exposed

to greater "risks" as a result of their poor family poverty, which can harm their English language development. These dangers include a lack of parental education, a lack of supportive learning tools, and unfavourable learning conditions at home. Parental education is a critical component in a child's literacy development as the quality of an individual literacy in the English language depends on the quality of the English literacy among the parents of the individuals.

Therefore, poor socioeconomic status of these students encourages them to have a negative thinking pattern which would not aid them in learning the English language especially in the Malaysian ESL classroom. Hence, in order to curb these students' negative thinking patterns, it is essential for ESL teachers to practice and use positive self-affirmation in the ESL classroom so that it would aid and motivate them to learn the English language and thus become a proficient English language learner in the ESL classroom.

In addition, the second research gap that could be identified through the use of positive self-affirmation among Malaysian ESL students' in the tertiary level of education is stereotype threat. To begin with, stereotype threat refers to the threat that people experience in a given situation when they believe they are at risk of conforming to a negative stereotype about a group to which they belong is known as stereotype threat (Steele & Aronson, 1995). The threat of stereotypes decreases performance in a variety of situations, including academic achievement. According to a meta-analysis (Walton & Spencer, 2009), negatively stereotyped students who were under stereotype threat performed on average better than 0.5 points higher.

Additionally, the fear of stereotypes, in particular, has been found to lower kids' academic performance. A rigorous verbal test was administered to French undergraduate students in one research (Croizet & Claire, 1998) where low-SES students who were told that the test was a measure of verbal intelligence fared worse than those who were told it was an investigative tool for investigating lexical hypotheses, whereas higher-SES students performed equally well regardless of what they were told. Other research (Browman, Destin, Carswell, & Svoboda, 2017; Désert, Préaux, & Jund, 2009; Good, Aronson, & Inzlicht, 2003; Spencer & Castano, 2007) have found similar impacts in low-SES kids ranging from 6-year-olds to college students.

Furthermore, the maladaptive responses which are aimed at defending a persons' self-integrity, as a sense of themselves for being a 'good and adequate' person are thought to cause the detrimental impacts of stereotype threat (Cohen & Sherman, 2014) which are denial of the threat

(Epton, Harris, Kane, Koningsbruggen, & Sheeran, 2015), concretization of construal levels (Sherman et al., 2013), increased vigilance (Murphy, Steele, & Gross, 2007), increased stress (Creswell, Dutcher, Klein, Harris, & Levine, 2013), and allocation of executive function, thus reducing its availability for other tasks are examples of these maladaptive responses (Hall, Zhao, & Shafir, 2014; Johns, Inzlicht, & Schmader, 2008).

Therefore in order to avoid these maladaptive responses, it is essential for an individual to strengthen their self-integrity in domains that are unrelated to the threat, a process known as 'self-affirmation'. This is because many studies have indicated that self-affirmation does act as an effective buffer against psychological threat in many situations, including in educational settings such as colleges (see e.g. Harackiewicz et al., 2013; Kinias & Sim, 2016; Martens, Johns, Greenberg, & Schimel, 2006; Miyake et al., 2010; Shapiro, Williams, & Hambarchyan, 2013; Silverman, Logel, & Cohen, 2013; Tibbetts et al., 2016) which eventually would boost their self confidence and esteem when learning the English language in the Malaysian ESL classroom amongst their peers.

In addition, the purpose of this study aims to explore the use of positive self-affirmation among Malaysian ESL undergraduate students at a tertiary level of education towards their self-esteem and academic performance in the ESL reading classroom.

1.2 Research Objectives

1. To identify the use of positive self-affirmation towards Malaysian ESL students' self-esteem in the Malaysian ESL reading classroom.
2. To identify the use of positive self-affirmation towards Malaysian ESL students' academic performance in the Malaysian ESL reading classroom.
3. To identify the use of positive self-affirmation through motivation as the mediator towards Malaysian ESL students' academic performance in the ESL reading classroom.
4. To identify the use of self-esteem towards Malaysian ESL students' academic performance in the ESL reading classroom
5. To identify the use of self-esteem through motivation as the mediator towards Malaysian ESL students academic performance in the ESL reading classroom.
6. To identify the use of self-esteem through positive self-affirmation in the ESL reading classroom

1.3 Research Questions

1. How does the use of positive self-affirmation in the Malaysian ESL reading classroom affects Malaysian ESL students self-esteem in the ESL reading classroom ?
2. How does the use of positive self-affirmation in the Malaysian ESL classroom affect Malaysian ESL students academic performance in the ESL reading classroom?
3. How does the use of positive self-affirmation through motivation as the mediator affects Malaysian ESL students' academic performance in the ESL reading classroom?
4. How does self-esteem affect Malaysian ESL students' academic performance in the ESL reading classroom?
5. How does self-esteem through motivation as the mediator affect Malaysian ESL students academic performance in the ESL classroom?
6. How does self-esteem affect the use of positive self-affirmation among Malaysian ESL students' in the ESL reading classroom towards their academic reading performance in the ESL classroom?

1.4 Research Hypotheses

1. There is no significant difference between the use of positive self-affirmation and Malaysian ESL students' academic performance in the ESL reading classroom.
2. There is no significant difference between the use of self-esteem and Malaysian ESL students academic reading performance in the ESL classroom.
3. There is no significant difference between the use of positive self-affirmation and motivation as the mediator towards Malaysian ESL students' academic performance in the Malaysian ESL classroom
4. There is no significant difference between self-esteem and motivation as the mediator towards Malaysian ESL students' academic performance in the Malaysian ESL classroom.

II. PRELIMINARY LITERATURE REVIEW

2.0.1 The Influence of Positive Self-affirmation towards Malaysian ESL Students Self-esteem in the ESL classroom

To begin with, according to the APA Journal of Psychology, self-affirmation refers to any behavior that

confirms the moral and adaptive adequacy of the self while self-esteem based on the Sociology Department of the University of Maryland refers to a positive or negative orientation toward oneself; an overall evaluation of one's worth or value. Therefore, based on the existing literature review on previous studies on the relationship between positive self-affirmation and the self-esteem of students' in the ESL classroom, it was found out that the two previous studies in regards to self-esteem resulted in a negative result between self-esteem and the pleasure at the misfortunes of others or better known as schafreunde.

Additionally, when there are no positive self-affirmation included, it allows students' to have a low self-esteem due to the negative self threat imposed by those high achiever students in the ESL classroom. In addition, in another study conducted by Rogers, 1951 as cited by Maxwell & Bachkirova, 2010 reveals that spontaneous positive self-affirmation have been regarded with a greater level of happiness among individuals especially Malaysian ESL students' in the context of this study (Emmanuel,2018). Furthermore, in a recent study that was conducted among participants in sending virtual positive self-affirmation through mobile apps showed an increasing level of self-esteem among those participants through pre and post experimental study (Lynelle Arquiza,2020). Hence this indicates that positive self affirmations when being self imposed on students' benefits them in the long run and helps them to feel confident when learning especially in the Malaysian ESL tertiary classroom.

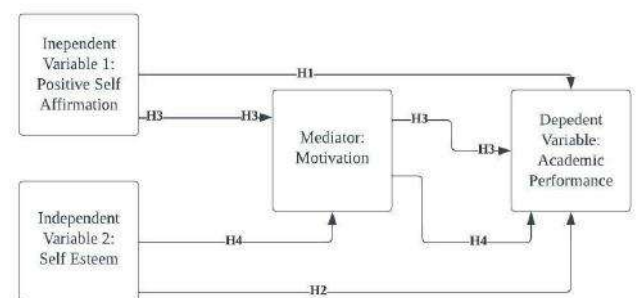
2.0.2 The Influence of Positive Self-affirmation towards Malaysian ESL Students Academic Performance in the ESL Classroom

To begin with, the use of positive self-affirmation among ESL students does largely impact their grades in the ESL classroom which especially in the context of this study, the ESL reading classroom. This is due to the stereotype threat which threatened especially weaker students in the ESL reading classroom and thus make them to not be able to achieve positive grades in their ESL reading classroom when compared to the high achiever ESL students. Additionally, based on 330 studies that have been conducted previously, it was found out that negative stereotypes among ESL students in the ESL classroom impaired their cognitive performance in the ESL classroom specifically in the context of this study, the ESL reading classroom (Hayes et.al,2019)

Additionally, the achievement difference between underrepresented ethnic minority students and majority students, first-generation college students and continuing-generation college students, and men and women in science and math classes could possibly be attributed to stereotype

threat (Walton and Spencer,2009) which in the end causes these underrepresented minority students when being affected with the negative stereotypes are unable to perform well in the ESL classroom. Therefore, in order to avoid these negative stereotypes, especially among underrepresented minorities in the ESL classroom, it is essential for the educators to practice positive self affirmations among their students' particularly in the ESL classroom so that the ritual of imposing negative self threat towards the minority students could be avoided.

2.0.3 Conceptual Framework of Positive Self-affirmation and Self-esteem towards Malaysian ESL Students Academic Performance in the ESL Classroom.



III. METHODOLOGY

3.0.1 Research Design

This study uses a descriptive qualitative quasi experimental research design where participants of this study would need to answer an open ended survey pertaining to their self-esteem and positive self-affirmation as well as observation by the researcher when this study is being conducted.

3.0.2 Data Collection

The method in which the data of this study will be collected is through a review of various data based on similar studies that is related to the present study on positive self affirmation, self-esteem and academic performance in the reading classroom.

3.0.3 Analysis of Data

The data collected in this study will be analyzed manually through a qualitative research design by reviewing the results and discussion section of each research study that is similar to the current study conducted by the researcher of this study that relates to positive self affirmation, self-esteem and academic performance in the ESL reading classroom with regards to the effect of positive self-affirmation and self-esteem in the ESL classroom among Malaysian ESL students'.

IV. RESULTS AND DISCUSSION

The results and discussion of this study will be based on a review of various results and discussion that have been conducted previously that is in line with the first research hypothesis of this current research study. The research study by Wilco W. Dijk, Guido M. Van Koningsburgen, Joap W. Duwerkkek, and Toka M. Wesseling (2020) on the effect of positive self-affirmation towards ESL students' self-esteem in the ESL classroom is the first review of the result and discussion section that will be analysed in this current research study that answers the first research hypothesis on self-affirmation and self esteem. Additionally, people with low self-esteem experienced greater self-threat than than high self-esteem participants with a $B=-0.86$, $t=-5.00$, $p<.001$. Finally, the link between self-esteem and schadenfreude was not significant after controlling for self threat ($B=-0.05$, $t1$, $p=.82$). Participants who felt self threatened reported greater schadenfreude than those who felt self threatened with a $B=0.38$, $t=2.96$, and $p=.004$ respectively. The researcher's research on stereotype threat, self-esteem, schadenfreude, and self-affirmation revealed an indirect relationship that is estimated to lie between -0.62 and -0.09 with a 95% confidence interval. Because zero is not within the 95% confidence interval, it can be inferred that the indirect relationship is statistically significant, which means that the indirect relationship is statistically significant.

In addition, with regards to the present research of this study that contributes to the existing research of this study which is on schadenfreude indicates in the first findings that individual differences in self-esteem affects the experience of schadenfreude whereby two earlier studies on schadenfreude and self-esteem yielded inconsistent results.

Feather (1994) also found that those with low self-esteem had more positive opinions concerning the failure of high achievers. Additionally, Smith et al. (1996) showed that self-confidence had nothing to do with schadenfreude in yet another study.

But by demonstrating both mediating and moderating variables in the relationship between variables, the current study adds to the body of literature by demonstrating a strong inverse association between self-esteem and schadenfreude.

Furthermore, the second finding of this study on scahadenfreude and self-esteem shows that scadenfreude can be a reaction to self-threat, which supports earlier research in which self-threat was manipulated and was found to increase scahdenfreude. Thirdly, the findings of this study, which is related to the research being conducted by the researcher of this study, offer a novel demonstration

that self-affirmation reduces schade. Therefore, the current research offers compelling evidence in favour of the idea that schadenfreude can be driven by a desire for self-improvement and protection.

Additionally, Camilla During and Donna C. Jeosop (2014) found that the results of their study examining the relationship between positive self-affirmation and self-esteem support the hypothesis that self-esteem eventually moderates the impact of self-affirmation manipulation based on responses that are pertinent to health risk information. Additionally, based on the results, it was shown that participants with poor self-esteem who were subjected to self-affirmation manipulation showed a more positive attitude and intention toward exercise in addition to less derogation of health risk information. High self-esteem individuals had no effect on the results of the self-affirmation manipulation, on the other hand (Camilla During and Donna C. Jeosop, 2014).

Additionally, Camilla During and Donna C. Jeosop (2014) found that the results of their study examining the relationship between positive self-affirmation and self-esteem support the hypothesis that self-esteem eventually moderates the impact of self-affirmation manipulation based on responses that are pertinent to health risk information. Additionally, based on the results, it was shown that participants with poor self-esteem who were subjected to self-affirmation manipulation showed a more positive attitude and intention toward exercise in addition to less derogation of health risk information. High self-esteem individuals had no effect on the results of the self-affirmation manipulation, on the other hand (Camilla During and Donna C. Jeosop, 2014).

Additionally, a study by Darmawati, Dewi Mufidatul Ummah, and Andi Augusten Arrifin (2020) on the impact of positive self-affirmation techniques on students at the PGPAUD FKIP at Khairun University will be examined in this study as a third study related to self-affirmation and self-esteem based on its findings and discussion. Based on the experimental study carried out by these three researchers as mentioned above in this study, it was discovered that before the affirmation technique was imposed on the study participants, their level of confidence was very low, with 70% of them having very low self-esteem and 16.66% being in the depressive disorder category. In addition, the level of confidence or self-esteem of the respondents rose after these participants received treatment in the three sessions of the affirmation technique, which brings us to the definition of the affirmation technique, which refers to the method to change an illogical or irrational message that is altered through positive statements or affirmations that are made and expressed repeatedly by oneself, or in other words, it refers to the

ability of a subject to successfully use positive statements or affirmations.

In light of these three findings, it is possible to draw the following conclusion: The technique of self-affirmation has demonstrated its effectiveness to many people, especially on those who have problems with themselves to feel good about themselves after using the positive self-affirmation technique as this method technically affects the imagination of the participants in their subconscious mind and if the subconscious mind is strong, the results obtained from self-affirmation will be optimal to balance between the negative and the positive thoughts.

Additionally, the researcher's current research study, which is based on self-affirmation, self-esteem, and ESL students' academic performance in the ESL reading classroom, included three reviews of the findings and discussion sections from earlier studies that had a similar theme. These studies were related to the second research hypothesis of this research study, which was concerned with self-affirmation and ESL students' academic performance in the ESL classroom.

The first review on the result and discussion section for the second research hypothesis based on the prior study that will be reviewed in this study is by Cheng Hong Liu et al. (2018), which states that the results obtained through the research conducted by Cheng Hong Liu et al. (2018) were primarily close with their prediction whereby participants who received a neutral personality feedback were predicted by the OACSW, which stands for others approval contingency of self worth as to have a stronger tendency to confront on the task and have better performance in the academic performance.

However, because it was unrelated to their performance, the OACSW tended to make negative predictions about the individuals who received favourable personality feedback when the task was presented to them. Additionally, the results showed that attribute affirmation is not helpful for students' motivation and performance for a difficult learning task in students with a high OACSW, despite the fact that, in accordance with the self-affirmation theory, self-affirmation may be useful in boosting students' performance and motivating them to approach a difficult learning task.

Based on the results of the two experiments done on the respondents, it was determined that participants who did not receive self-affirmation had a positive correlation between their propensity to approach the task and their performance. The positive correlation between OACSW and individuals' propensities to confront the task and performance, on the other hand, flattened and even turned

adversely for participants who felt confident in themselves. Thus, it can be concluded that self-affirmation may not be helpful in enhancing motivation and performance among high OACSW students, which translates literally as an increase in their eagerness for approval. The less effective self-affirmation is in inspiring these students to take on a difficult task and improving their performance because the performance of these students is dependent on their self-efficacy.

Thus, it might be said in a nutshell that self-affirmation would make high OACSW participants sense less relevance and value in completing the difficult work and is therefore ineffective in improving their dispositions to complete the task and performance. Consequently, this demonstrates that self-affirmation may be ineffective and even harmful for students' motivation and performance because it has certain traits that would cause them to concentrate on getting positive feedback instead of negative feedback from others, which is in line with the positive self-affirmation theory.

Furthermore, Beng Huat Se et al study 's from 2022 indicated that stereotype threat is one of the key factors contributing to students' low self-esteem, which in turn affects how well they perform academically in the ESL classroom. Additionally, the SES background of these children may potentially be a factor in their subpar academic performance, particularly in the setting of the study's ESL classroom (Fell and Hewstone,2015). As a result, one of the main causes of the decline in academic achievement in ESL classrooms is stereotype threat and low SES background.

Another study by Cheng Hong Liu in 2021 discovered that participants with positive personality feedback have a larger propensity to take on difficult tasks than participants with neutral personality feedback. But when it comes to individuals who are credited, affirm participants show a lesser propensity to take on the difficult task associated with non affirmed participants. As a result, this demonstrates that having an attribute that is affirmative may lessen the propensity to confront a difficult task. This conclusion can be drawn from the fact that some participants are positively motivated to complete a difficult task while others are not, which is in contrast to the first review of the results and discussion section in this study. Therefore, it can be inferred that using an intervention like motivation will help students' urge to engage in the ESL classroom by increasing their self-esteem, which in turn benefits their academic achievement.

Additionally, recent research by academics shown that stereotype threat and students' socioeconomic backgrounds do play a significant role in enhancing ESL students' academic performance in ESL classrooms.

Therefore, in order to prevent negative stereotype threat, educators must adopt a fundamental approach to motivating and disciplining their students by establishing a set of rules among their students. This can be done through positive self-affirmation techniques that can be taught to students and internalised daily until it becomes a habit among students. As a result, students' aspirations would be boosted.

Therefore, as a conclusion, internalising positive self-affirmation and promoting kindness among students in the educational setting would help foster self-esteem through the emergence of citizens with a vast amount of E.Q, such as empathy, and thus allow for the creation of a society that stands for kindness and togetherness, which in turn allows every individual to be in harmony with themselves.

A study by Stein Mayr et al. (2019) found a positive relationship between students' academic performance and motivation as the catalyst towards students' academic performance in a positive way in the ESL classroom, which forms the basis for the third research hypothesis that will be tested to demonstrate the effect of motivation towards Malaysian ESL students' self-esteem and academic performance. In addition, a different study by Sevgi Topcu and Mavilena Z. Leana Tascilar (2016) found that both motivation and self-esteem have been seen as important characteristics in identifying a positive academic results as researchers have found that there is a positive correlation between motivation and self-esteem (Harlen and Deakin Crick, 2003; Zolabi, 2012), as well as between self-esteem and academic achievement (Harter, 1983; Johnson and Kanoy, 1980), as an important character in identifying a positive academic results as researchers have found that there is a positive correlation between motivation and self-esteem (Harlen and Deakin Crick, 2003; Zolabi, 2012) and also self-esteem and academic achievement (Harter, 1983; Johnson and Kanoy, 1980) and also between motivation and academic achievement.

Additionally, a study by Aryana (2010) that examined the relationship between motivation, self-esteem, and academic success among ESL students found that there was a significant relationship between these factors. These findings are consistent with research by Fathi Astianiet al. (2007), who also conducted a study with Aryana (2010) that is similar to the current research study. Therefore, it can be concluded that through a review of findings and discussions of prior studies, it is discovered that there is a significant difference in academic performance, motivation, and self-esteem among ESL learners in the ESL classroom, proving the third research hypothesis of this current study.

Additionally, prior studies on the connection between positive self-affirmation, motivation, and

academic achievement have been undertaken and will be examined in order to demonstrate the significance of the fourth research hypothesis. First, a study by Sherman et al. (2013) will be reviewed in accordance with the fourth research hypothesis of this study. Based on the findings and discussion of this study, it was determined that the intervention of positive self-affirmation through motivation does, in fact, increase students' grades in the classroom (Cohen et al., 2006, 2009). Further research by Sherman and Cohen from 2006 revealed that positive self-affirmation lowers defensiveness and enhances students' academic performance. The motivation of students, and consequently their performance in the classroom, declines when they are threatened with identity. Therefore, in order to boost students' motivation and consequently their performance in the ESL classroom, instructors must instil in them the habit of using positive self-affirmation.

Additionally, a study by CH Liu in the year 2021 found that the intervention of self-affirmation would boost students' motivation to take on difficult tasks. According to the study, those who received positive feedback tended to show a stronger tendency to take on the difficult task than those who didn't. Therefore, it could be argued that students' poor academic performance does serve as a catalyst for achieving high grade performance in the ESL classroom so they can overcome the challenge through motivation and positive self-affirmation, which proves the fourth research hypothesis of this current study, which demonstrates the positive significance between positive self-affirmation, motivation, and academic performance among ESL learners in the study.

V. CONCLUSION

Based on the results of numerous studies on self-affirmation, self-esteem, and academic performance of ESL students that have been conducted in the past, it can be concluded that stereotype threat and the SES background of the students are the primary factors that affect their self-esteem and, as a result, affect their academic performance in the ESL classroom. Therefore, it is crucial for educators to foster positive self-affirmation among their students as well as students among their peers in order to cultivate a caring and harmonious society in this world, which would also improve especially ESL students' academic performance in the ESL classroom. This will help prevent the use of stereotypical threat among ESL students, specifically at tertiary institutions.

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Equipping Teachers to Adapt: A Look into Teachers' Professional Development Programs in Times of COVID-19 Pandemic

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Abstract

This study was conducted to determine public school teachers' experiences and perspectives on different professional development programs during the COVID-19 pandemic. It also aimed at determining teachers' motivation and barriers in attending TPDs. A multi-faceted survey questionnaire was given to 84 teacher-respondents representing 10 public schools in Tandubas District, Tawi-Tawi, the southernmost province of the Philippines. Prior to this, the questionnaire had undergone validation and reliability testing. Afterward, follow-up interviews were also made with ten selected teacher-respondents for an in-depth appreciation of the context of the data gathered. The result shows that teachers shifted to online courses and webinars during the pandemic. There is also a high frequency of utilization of informal professional development programs such as peer tutoring, coaching, and school-based Learning Action Cell (LAC) sessions. Other professional development programs such as formal degrees, reading of professional papers, professional networking, school and classroom observations, conducting education research, and attending conferences were least attended. In terms of topics, most teachers have attended training on students' assessment, module development, school readiness, and safety. The study also found a Significant difference in the professional development experiences of teachers of different educational backgrounds and schools. This means that teachers with higher education tend to avail themselves more and school culture is one factor that encourages teachers to attend professional development programs. The result also shows that most of the teachers joined various TPDs because of the desire to improve their teaching, encouragement from school heads and peers, and usefulness for a job promotion. As to the barriers, most of the teachers mentioned financial constraints, time constraints, and poor internet connectivity as the top three reasons for not attending professional development programs in the past 12 months.

Keywords— *New Normal Education, Teachers' Professional Development, Teachers' Experiences, Teachers' Training*

I. INTRODUCTION

The disruption brought about by the COVID-19 pandemic to education is unprecedented. This abrupt change has brought traditional classrooms into virtual or modular for already more than two years. The Philippine Department of Education (2020) has given schools options of choosing modalities such as online, modular, or blended. However, whatever the modality, teachers being at the forefront of education need to be kept abreast with these trends to effectively manage the change.

This pandemic exposed the weakness of our education system. It has led our schools to struggle for

resources and in providing much-needed training opportunities to teachers. These difficulties are compounded by many restrictions imposed such as no face-to-face meetings and travel bans. For decades, the country's dominant model of in-service training had been the face-to-face cascade model in which regional and divisional trainers are trained. They will then be responsible for training teachers in districts and schools (The Philippine Department of Education, 2016). This model is not anymore possible. The difficulties in preparing schools and teachers are due to the unevenness in access to training and resources. For instance, some

private schools were the most affected due to a reduced in enrollees and the high cost of maintaining the new modality. As for the Philippine public schools, the arduous preparation has led to many months of postponement of the schools' reopening.

Undoubtedly, this new reality in education calls for upskilling and re-tooling of teachers' competence necessary for them to successfully transverse this new world. Teachers need a new way of delivering content, managing classrooms, craft self-learning modules, and assessments. This can only be done by providing them with effective Teachers Professional Development (TPD) programs. Months of no mobility may also have not been favorable to teachers who have a mindset to always grow in the profession (Anchol & Arrieta, 2021). In addition, every professional in the Philippines is mandated by law to regularly undergo continuous professional development (RA 10912).

The researchers believe that the pandemic may have led to the difference in the professional development experiences of teachers due to the difference in training opportunities, resources, and availability of technology, among others. Hence, this study was conducted to determine actual teachers' experiences and their perspectives on professional development programs during the pandemic with the hope of providing insights for planning relevant and effective Teachers' Professional Development Programs (TPDs). This study aimed at exploring teacher experiences with the teachers' development programs during the pandemic. Specifically:

1. What were the public school teachers' experiences in the teachers' development programs in terms of frequency and topics attended?
2. Which of these Teachers' Professional Development (TPD) has the most and the least impact as perceived by teachers?
3. What are the perceived barriers to Teachers' Professional Development (TPD)?
4. What are the factors that motivate teachers in spending time on Teachers' Professional Development?
5. Is there a significant difference in the experiences of teachers in the Teachers' Professional Development by school, length of service, and highest educational attainment?

II. METHODOLOGY

Research Design. This study used a mixed-method research design. To collect needed data, it made use of

researcher-made survey questionnaires on teachers' experiences and perceptions in the professional development programs for the past 12 months.

Research Respondents. This study was conducted in the Division of Tawi-Tawi, the southernmost province of the Philippines. Schools included are located in rural areas. The participants were 84 teachers representing 10 public elementary and secondary schools. These schools have been using modular learning for the past two years. The selection of schools is purposive based on the number of teachers and accessibility to researchers. Ten respondents were selected for a follow-up interview to have an in-depth understanding of the data collected.

Research Instruments. The survey questionnaire used in this study consists of four parts - demographic profile, professional development experiences, teachers' perception of the impact of TPD programs, and open-ended questions on teachers' motivation and barriers to attending TPDs. The classification of Teachers Professional Development is adapted with modification from OECD's Teaching and Learning International Survey (TALIS) 2018 report (Jerrim & Sims, 2019). Before the final administration, the questionnaire had undergone face validation by three experts in the field of education and was revised based on the experts' suggestions. The questionnaire was also field-tested and was found to be reliable using Cronbach alpha with a value of 0.84.

Data Gathering Procedure. First and foremost, the researchers asked for the permission of the school heads and the consent of the teacher-respondents. The researcher then personally administers the survey questionnaire to the respondents. An online survey using google forms was utilized for distant respondents. Follow-up interviews were made with selected teacher-participants to triangulate the data collected. Afterward, the result was tallied for statistical analysis. Statistical tools used include percentage, mean, and Kruskal-Wallis Test. Thematic analysis was utilized for the analysis of the qualitative data.

III. RESULT AND DISCUSSION

Table 1 shows public school teachers' experiences in the different teachers' professional development. The result shows that attending online courses and webinars has the highest mean frequency ($M = 2.38$, $SD = 0.972$). This means according to the teachers' respondents, they have attended on average of 2-3 webinars and online courses these past 12 months. This was followed by peer coaching ($M = 1.66$, $SD = 0.851$) where the teachers consult other peers on issues relating to teaching. Follow up interview shows this was done in an informal setting. Third most

frequently attended form of TPDs was face to face seminars (M = 1.16, SD = 0.936) and school-based Learning Action Cell (LAC) sessions (M = 1.16, SD = 0.826). Other professional development programs such as formal degree programs (M = 0.33, SD = 0.473), reading of professional papers (M = 0.51, SD = 1.189), professional networking (M = 0.67, SD = 0.596), school and classroom observation (M = 0.12, SD = 0.329), and conducting education researchers and attending conferences (M = 0.80, SD = 0.324) were rated below 1.0. This means that only a few of the teacher-participants have engaged in these professional development programs over the past 12 months. In addition, the least participation of teachers in action research is because of the high level of technicalities needed. This finding is similar to that of Tindowen, Guzma & Macanang (2019) and Toquero (2021). Overall, the teacher-respondents have attended an average of 8.79 (SD = 0.72) different Teacher Professional Development Programs during the past 12 months. The result supports the findings of Henry and Namhla (2020) that teachers usually engaged in both informal staff-development programs and formal school-based in-service programs. Hence school administrations should utilize and support both programs to improve their teachers' competencies.

Table 1. Elementary Teachers' Experiences on the Different Teachers' Professional Development Programs (TPDs) During the Past 12 Months

Teachers Professional Development Programs	Mean	S.D.
Formal program (e.g. diploma/master's/doctoral program)	0.33	0.473
Seminar/workshop attended (district, division, regional, national and international)	1.16	0.936
School-based/LAC Sessions	1.16	0.826
Online courses/Webinar	2.38	0.972
Reading professional literatures (books, journals, research papers, blogs, etc.)	0.51	1.189
Peer coaching/ mentoring as part of a formal school arrangement	1.66	0.851
Participation in a network of teachers formed specifically for the professional development	0.67	0.596
Observation visit to other school/classroom	0.12	0.329
Conduct action researches and attend Education conferences	0.80	0.324
Total/Average	8.79	0.72

Table 2 shows elementary school teachers' attendance in professional development listed by topics. The result shows the top three topics attended by teachers were on student assessment under the new normal (n = 24, 23%) followed by trainings on module development (n = 21, 20%) and school readiness and safety (n = 17, 16%). Other trainings participated by the public school teachers include reading strategies (n = 16, 15%), teaching strategies (n = 12, 12%), information and communication technology (n = 6, 6%) and others (n = 8, 8%).

Table 2. Professional Development Programs Attended by Public Elementary Teachers by Topics

Teachers Professional Development Programs Topics	frequency	Percentage
Assessment	24	23%
Reading Strategies	16	15%
Module Development	21	20%
School Readiness and Safety	17	16%
Teaching strategies (other than reading)	12	12%
Information and Communication Technology	6	6%
others	8	8%

The teacher-respondents were also asked to rate the effectiveness of nine professional development programs. This is based on the applicability of these programs to their teaching these past 12 months. The finding shows that only four out of nine programs were rated as Somewhat effective. These are formal programs such as taking graduate courses (M = 4.94, SD=1.801), face-to-face seminar-workshop (M = 4.95, SD = 1.917), school-based LAC sessions (M = 5.22, SD = 1.587) and peer coaching and mentoring (M = 4.66, SD = 1.642). A high frequency of attendance in school-based LAC sessions is in line with the Department of Education (DepEd) guidelines. However, it is still far below the recommended frequency of 1-2 times a week (DepEd Order No. 35 s. 2016).

Table 3. Elementary Teachers' Perceptions on the Impact of different Teachers' Professional Development Programs

Teachers Professional Development Programs	Mean	S.D.	Interpretation
Formal program (e.g. diploma/master's/doctoral program)	4.94	1.801	Somewhat Effective
Seminar/workshop attended (district, division, regional, national and international)	4.95	1.917	Somewhat Effective
School-based/LAC Sessions	5.22	1.587	Somewhat Effective
Online courses/Webinar	4.13	2.113	Neither effective nor ineffective
Reading professional literatures (books, journals, research papers, blogs, etc.)	4.44	1.765	Neither effective nor ineffective
Peer coaching/ mentoring as part of a formal school arrangement	4.66	1.642	Somewhat Effective
Participation in a network of teachers formed specifically for the professional development	4.07	1.910	Neither Effective Nor Ineffective
Observation visit to other school/classroom	4.16	2.076	Neither effective nor ineffective
Conduct action researches and attend Education conferences	3.74	2.142	Neither effective nor ineffective

Legend: Highly Ineffective (1.00-1.86), Ineffective (1.87-2.72), Somewhat Ineffective (2.73-3.58), Neither Effective nor Ineffective (3.59-4.44), Somewhat Effective (4.45- 5.30), Effective (5.31- 6.16), Highly Effective (6.17- 7.00)

The rest of the programs were rated Neither effective nor Ineffective. These include program such as online courses and webinars (M = 4.13, SD = 2.113), reading of professional materials related to teaching (M = 4.44, SD = 1.765), participation in a professional network (M = 4.07, SD = 1.910), observation visits to other school or classroom (M = 4.16, SD = 2.076) and conducting of action research and conferences (M = 3.74, SD = 2.142). It can be seen from the table that engaging in action research is rated as the least effective in contrast to the findings of Aguilar-De Borja (2018) who found positive teachers' perceptions in the impact of action research in teaching. A follow-up interview shows that this was because of the technicalities needed and the perceived lack of incentives.

Teachers' professional development experiences were also compared among schools and demographic profiles such as educational attainment and length of service. The finding shows that there is a Significant difference in the professional development experiences of teachers of different education backgrounds ($p = 0.000$). Teachers who have higher educational attainment tend to engage more in the different teachers' professional development programs. When compared by the length of teaching experiences, it was found to be Not Significant ($p = 0.333$). This indicates that irrespective of the length of service, the teacher-respondents have similar engagement in professional development programs in contrast to the findings of Nugraha and Maulida (2021) who found that younger teachers tend to have a greater chance of availing professional development programs. On the other hand, data shows a Significant difference in the professional development experiences of teachers when compared by schools. The result shows that teachers in some schools are more engaged in TPDs compared to others. The result implies that support from school leaders and peers encouraged teachers to attend various professional development programs.

Table 4. Elementary Teachers' Experience in the Teacher Professional Development Program Compared by Length of Service, Education Attainment, and School

Variables		Mean rank	p-value	Interpretation	Decision to H_0
Avepdex	bachelor	33.53	0.000	Significant	Reject
	MA Units	56.37			
	Masters	54.92			
Avepdex	2-12	13.00	0.355	Not significant	Accept
	13-22	7.67			
	23-32	7.00			
	33-42	10.72			
	43-52	4.50			
Avepdex	School 1	26.23	0.000	Significant	Reject
	School 2	19.94			
	School 3	27.96			
	School 4	67.08			
	School 5	32.00			
	School 6	54.44			
	School 7	39.28			
	School 8	56.30			

We asked teachers about what motivates them to join professional development programs over the past 12 months. The result shows that most of the teachers joined various TPDs because of the desire to improve their teaching ($n = 29$, 28%). This is consistent with the findings of Apova and Arbaugh (2017). Followed by encouragement from school heads and peers ($n = 24$, 23%) and the usefulness of TPDs for job promotion ($n=20$, 19%). Some teacher-respondents also mentioned the accessibility of TPD programs as factors that encourage them to attend such as the use of online platforms for webinars and modular learning delivery of some local colleges and universities. While some teachers joined the professional development programs as part of their fulfillment as professional teachers ($n = 12$, 12%).

Table 5. Public Elementary Teachers' Motivations in Attending Different Teachers' Professional Development Programs

Teachers Professional Development Programs Topics	frequency	Percentage
Desire to Improve Teaching	29	28%
accessibility	19	18%
Encouragement from school heads and peers	24	23%
promotion	20	19%
Personal fulfillment	12	12%

In terms of barriers to joining teachers' professional development programs, ten themes emerged from the teachers' responses. Most of the teacher-respondents mentioned financial constraints ($n=20$, 18%) as the top reason. This same barrier also emerged in the study of Zhang, Shi, and Lin (2019). This was followed by time constraints ($n = 15$, 13%) and poor internet access ($n = 15$, 13%). Other challenges encountered by teachers in their attendance to different TPD programs are lack of motivation ($n = 9$, 8%), lack of opportunities ($n = 9$, 8%), lack of support from school heads ($n = 8$, 7%), lack of needed resources such as gadgets and devices ($n = 8$, 7%), distance ($n = 7$, 6%), and high amount of workload ($n = 7$, 6%). Similar themes have emerged in the study of Chin et. al. (2022) and Nugraha and Maulida (2021).

Table 6. Public Elementary Teachers' Barriers to Attending Different Teachers' Professional Development Programs

Teachers Professional Development Programs Topics	frequency	Percentage
Lack of motivation	9	8%
Time constraints	15	13%
Financial constraints	20	18%
Lack of support from school heads	8	7%
Poor internet access	15	13%
Lack of resources	8	7%
distance	7	6%
Restrictions brought by pandemic	14	13%
High amount of workload	7	6%
Lack of Opportunities	9	8%

IV. CONCLUSION

The pandemic has transformed education at all levels and places. The researchers believe that the COVID-19 pandemic may have led to the difference in professional development experiences of teachers due to differences in training opportunities, resources, and availability of technology. Hence, this study was conducted to determine actual teachers' experiences and their perspectives on professional development programs during the pandemic. The researchers also look into motivations and barriers with the hope of providing insights for planning relevant and effective Teachers' Professional Development Programs (TPDs). Eighty-four public school teachers were surveyed using a multi-faceted questionnaire. Out of these, ten teachers were selected for a follow-up interview.

The result shows that teachers shift to online courses and webinars ($M = 2.38$, $SD = 0.972$) during the pandemic. There is also high frequency of utilization of informal professional development programs such as peer

tutoring and coaching ($M = 1.66$, $SD = 0.851$) and school-based learning action cell (LAC) sessions. Third most frequently attended form of TPDs were face to face seminars (mean=1.16) and school-based Learning Action Cell (LAC) sessions ($M = 1.16$, $SD = 0.826$). Other professional development programs such as formal degree programs ($M = 0.33$, $SD = 0.473$), reading of professional papers ($M = 0.51$, $SD = 1.189$), professional networking ($M = 0.67$, $SD = 0.596$), school and classroom observation ($M = 0.12$, $SD = 0.329$), and conducting education researchers and attending conferences ($M = 0.80$, $SD = 0.80$, 0.324) were rated below 1.0. The finding implies that school leaders should utilized both formal and informal development programs to improve teachers' teaching competencies.

As to the perceived effectiveness of different TPD programs, only four out of nine programs were rated as Somewhat Effective. These are formal program such as taking graduate courses (mean = 4.94, $SD = 1.801$), face-to-face seminar-workshops (mean = 4.95, $SD = 1.917$), school-based LAC sessions (mean = 5.22, $SD = 1.587$) and peer coaching and mentoring ($M = 4.66$, $SD = 1.642$). The rest of the TPD programs were rated Neither Effective nor Ineffective. In terms of motivation, most of the teachers joined various TPDs because of the desire to improve their teaching ($n = 29$, 28%), encouragement from school heads and peers ($n = 24$, 23%) and the usefulness of TPDs for job promotion ($n = 20$, 19%). Some teachers also mentioned the accessibility of TPD programs as one of the factors that encouraged them to attend. These include the use of online platforms for webinars and modular learning delivery offered by some local colleges and universities. However, top barriers to joining teachers' professional development programs include financial constraints ($n = 20$, 18%), time constraints ($n = 15$, 13%) and poor internet access ($n = 15$, 13%). Furthermore, this study found a significant difference in the teachers' experiences in professional development programs by schools ($p = 0.0000$) and education attainment ($p = 0.000$). These show that teachers who have higher educational attainment tend to engage more in the different teachers' professional development programs. Similarly, significant difference by school implies that school culture and support are important factors in teachers' attendance to TPDs.

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Research Leadership as a Predictor of Research Competence

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Abstract

The study is designed to explore the role of research leadership as a predictor of research competence of teachers from different colleges in Technological Institute of the Philippines – Quezon City. Complete enumeration sampling was employed in the study and a total of 158 teachers participated in the study. The collection of data was made using a twenty-five-item researcher-made instrument which has an overall Cronbach's α coefficient of 0.90. The data obtained were treated using descriptive statistics and Linear Regression analysis. The results revealed that research leadership significantly predicts the research competence of the respondents.

Keywords— Research Competence, Research Leadership

I. INTRODUCTION

The role of research in educational institutions is significant for its continued improvement and sustainability. In universities, research is so crucial that it determines the quality of education and services it offers. Because the education system continues to face challenges, the conduct of research is considered to be the most useful strategy to address the issues and come up with evidence-based decisions and solutions to identified problems. However, specifically, in Higher Education Institutions (HEIs), not many have obligatory research goals for their faculty members and there are still a number of institutions that do not have adequate infrastructure to help the teachers in producing quality research. The lack of an inspiring academic environment, lack of support funds, and inadequate infrastructure continue to be some of the most apparent factors that contribute to the dismal image of research in educational institutions.

One of the most possible ways to make the conduct of research more appealing to faculty members is by strengthening research leadership. Research leadership means a lot for higher education institutions to encourage their teachers to participate in the conduct of research. It specifically refers to the support of the educational institutions to their faculty-researchers, whether tangibles or intangibles, from the research agenda to financial

support, that are essential for the faculty-researchers to take an active role and participate in the conduct of research. Through excellent research leadership, educators become more actively involved in doing research so that they would be updated with the latest knowledge, information, and facts that are more fitted to the current context of classrooms rather than referring to and using textbooks or modules that were printed years ago. On one hand, research leadership prepares educators to be engaged in the conduct of research to learn up-to-date information. On the other hand, research leadership indirectly prepares and produces students who also become research-oriented because they learn from their teachers who are familiar with the importance and various aspects of doing research.

Research leadership should always be strengthened in order for the higher education institutions to progress toward quality education through research competent teachers and students. Specifically, research competence in the study refers to the capability of the educator to produce, utilize, and disseminate their research. It serves as the gauge mark for educators to sustain their quality in teaching and learning. In addition, it refers to the educator's complete knowledge in writing a research paper from the first to the last chapter based on their awareness of the research trends locally and globally.

The study seeks to find out if research leadership in a higher education institution predict the research competence of its faculty members. Because HEIs engage and invest in research that directly or indirectly contributes to their progress and continuous improvement, the role of its administrators as research leaders is crucial to bring its faculty members in the practice of doing quality and successful research works.

II. LITERATURE REVIEW

Importance of Research in Higher Education Institutions

The value of research in higher education institutions is so crucial that it becomes the reference point of the quality of education and services it offers. There is a high expectation that researches from higher education institutions are the source of new information that not only leads to important advances in education and technology but also contributes to better understanding of many issues and conditions in the society. These research works contribute to culture, technology, and society as it brings new, global, intellectual, and scientific trends. Most importantly, higher education institutions zealously push for a stronger research orientation in its faculty members as it endeavors for evidence-based policy making (Prado, 2019). The more a university conduct and complete research works, it leads to greater recognition and reputation of the institution.

Further, the conduct of research has established that the main objective of higher education institutions is not to produce learners who will soon move into a specific type of profession or career. What they do in universities is to prepare learners to live in a complex and unpredictable world. Because of a fast-paced existence of technology and innovations, education stakeholders believe that a research-intensive academic institution is an excellent center of learning because it emphasizes that quality learning needs critical inquiry, discovery, and research. Research in the various fields and industries, and most importantly in the academe, fostered a culture of inquiry and innovation. When the making of strategy, program, or policy is based on facts and data through the conduct of research, whatever output that will be developed will be useful and realistic when implemented within the institution (Amala & Ukaegbu, 2020).

Most importantly, higher education institutions, where higher education is delivered and emphasized, are expected to develop not only the students' depth of knowledge in foundational and advanced subjects, but also to acquire and develop skills for knowledge acquisition and understanding to prepare them for successful careers.

Students greatly benefit from studying in an institution that is rich with research, discovery, and innovation. Moreover, as the members of the institution are given opportunities to be involved as part of research teams, they would be able to bring back to the classroom what they have learned from their research works which are practical and (Rosowsky, 2022). There is call for higher education institutions to invest their resources not only in the usual activities or programs implemented by the school, but also to strengthen the conduct of research to for continuous improvement of all involved in the institution.

Challenges and Role of Administrators in Producing Research Competent Teachers

The call to build a stronger research culture is mostly stressed in universities. Thus, school administrators play a vital role to motivate and produce research competent teachers. A number of studies have proven that administrators give least emphasis in nurturing and reinforcing research activities. Most of the teachers and even school administrators do not have enough time to conduct studies because of the academic workload. Others report that they lack theoretical guidance or knowledge of possible research methodology that they will use, while some feel pressured in the process of doing research. The number of teaching loads, administrative duties along with academic duties that need to be performed, lack of support funds from the school, and lack of research knowledge and skills are some of the major challenges that school administrators have to address to encourage its faculty members to participate in more research works (Prado, 2019).

In the study of Kanduri (2018), the result also pointed out that the lack of funding of the education institutions was a major deterrent for teachers to come up with quality research. It was pointed out that aside from the accreditation programs in the institution, the motivation of the teachers is the largest causative factor to come up with quality research. Aside from funding and motivation, the available infrastructure to support the conduct of research was also identified as a factor for universities to produce impactful research projects.

Hameed and Al-Ani (2021) revealed that the challenges associated with research capacity in an institution includes lack of time, lack of collaborative research culture, lack of research agenda, and lack of research-focused training. Research funding was highlighted as the most significant factor aspect of support that the teachers need while lack of time was the primary challenge reported. The teachers in higher education institutions prefer a more organized and systematic professional development activities that are specifically designed for research capacity building

(Hammad & Al-Ani, 2021). While the initiative of other teachers to assist was appreciated, the role of administrators was highlighted to strengthen the research competence of the teachers.

The current situation and needs of teachers in research works call for higher education institutions to seriously take up the research leadership to encourage and motivate its teachers to participate in research activities as well as to produce and disseminate quality research (Kanduri & Suripeddi, 2018). Administrators in higher education institutions need to continue with their willingness to invest in research. More importantly, they need to remember that the educational institutions should focus on learning instead of teaching alone, to help the students find solutions to social concerns and real-life problems (Amala & Ukaegbu, 2020). In this way, the institution will greatly benefit from having research competent teachers, research-oriented learners, and research-based programs and policies that are practically applicable to its stakeholders.

III. RESEARCH METHODOLOGY

Research Design

The study used a quantitative design as it delved into the phenomena through the collection and analysis of quantitative data. Specifically, the ex post facto research design was utilized because the investigation started after the fact has occurred without interference from the researcher. In addition, it was not ethically acceptable for the researcher to apply the protocols of a true experimental research since there was no comparison groups and the research focused on the effects (Salkind, 2010).

The design was used in the study as a substitute for true experimental research as the situation to manipulate or control the independent variable was not practical and ethically acceptable. However, the design was used to test the hypothesis about cause-and-effect relationships between the variables.

Population, Sampling and Respondents

Complete enumeration sampling as a kind of purposive sampling was used as the sampling technique in the study to acquire as many data as possible and get deeper insights about the phenomenon being studied. It is a method of obtaining responses from and studying all the members of the population when the population is defined and small (Lavrakas, 2008). This technique is often used to generate reviews of experiences of particular groups within the defined population.

The researcher used complete enumeration sampling since the researcher gathered data from all the faculty members in different colleges in the Technological Institute of the

Philippines – Quezon City. The respondents of the study are the faculty members from eight (8) colleges in Technological Institute of the Philippines – Quezon City. From a total of 195 teachers, there were 158 teachers that participated in the study.

Research Instrument

The research instrument used in the study was made by the researcher with the help of existing studies about research competence and leadership. The questionnaire has two parts that measure the level of competency of the respondents on the components of doing a research and to determine the research leadership of the institution as perceived by the respondents. The researcher designed the instrument to fit the existing practices and context of the population and institution being studied and it was submitted to experts for validation.

The instrument contains a total of twenty-five (25) items and two domains, namely: research competence and research leadership. Fifteen (15) items are used to determine the respondents' competence in conducting a research. On the other hand, ten (10) items measure the research leadership to assess how the respondents perceive the research leadership of the institution. The items in the first section of the instrument are rated using a four-point Likert scale ranging from "not competent" (one point), "barely competent" (two points), "moderately competent" (three points), and "highly competent" (four points) for the first section. The items in the second section are rated using a four-point Likert scale ranging from "not at all" (one point), "very little" (two points), "somewhat" (three points), and "to a great extent" (four points). The overall Cronbach's α coefficient for the tool was 0.90, while the research competence and research leadership domains had a coefficient of 0.88 and 0.85. The inter-item correlation ranged from 0.661 to 0.897, hence, no item was removed.

Data Collection and Analysis

Upon acquiring permission to gather data and securing necessary documents, the instrument was administered to the teacher-respondents. There was a total of 195 teachers but some were unable to finish the questionnaire due to unexpected circumstances. The total number of responses gathered by the researcher is from 158 teachers who completed answering the tool. After collecting the data, the researcher encoded and verified the data, and applied statistical treatment using SPSS. The researcher used SPSS version 20 to analyze the data gathered. Descriptive statistics were used to summarize the responses of the respondents in the questionnaire.

IV. RESULTS AND DISCUSSION

Research Competence of the Respondents

Research competence refers to the ability of the teachers to conduct a research work with the use of appropriate

design, methods and analysis, and including their writing ability. Table 3 presents the summary of research competence of the respondents. It shows that the overall assessment was moderately competent with a mean of 3.07 and a standard deviation of 0.53.

Table 1: Research Competence of the Respondents

Statements	Weighted Mean	Standard Deviation	Description
Writing introduction and establishing background of the study with clear identification of research gaps.	3.02	0.67	Moderately Competent
Expounding theoretical or conceptual framework to be used.	2.99	0.63	Moderately Competent
Identifying specific research problems, objective(s) and importance of the study.	3.12	0.62	Moderately Competent
Selecting, reviewing, and synthesizing related literature and studies.	2.89	0.66	Moderately Competent
Finding relevant references and citing sources of literature reviews and studies.	3.20	0.58	Moderately Competent
Selecting appropriate research design and sampling procedure.	3.20	0.92	Moderately Competent
Constructing and validating research instrument(s).	2.38	0.69	Barely Competent
Collecting data following ethical procedures.	3.26	0.59	Highly Competent
Establishing rapport with the respondents.	3.33	0.66	Highly Competent
Proper application of different statistical treatment needed for the research.	2.97	0.70	Moderately Competent
Presenting data using tables and appropriate graphs.	3.24	0.68	Moderately Competent
Interpreting and analyzing data.	3.13	0.65	Moderately Competent
Synthesizing the results and forming conclusions.	2.49	0.64	Barely Competent
Formulating recommendations based on research findings.	3.09	0.67	Moderately Competent
Writing with no grammatical errors and thoughts coherently organized.	3.20	0.68	Moderately Competent
Overall	3.07	0.53	Moderately Competent

The faculty-researchers have determined themselves to be highly competent in the data collection part of doing a research, specifically, following ethical procedures and building rapport with the respondents. The teachers revealed that they are most confident when they use a validated research instrument since they believe that it has been evaluated by the experts. When communicating with the respondents, being an educator is an advantage because

they are able to gauge the respondents and connect with them. They know how to choose the right words and approach in order to make the respondents of their research comfortable and eventually gain their trust.

Table 3 also reveals that the primary weakness of the faculty-researchers is developing valid research instrument, which was then followed by synthesizing the results and forming conclusions. The respondents

described themselves as barely competent in both items. To develop a valid and reliable instrument which is among the most important factor to produce a good research, a meticulous assessment of the items is required. This will lead the researcher to be precise in data collection and get relevant results to produce a standard and acceptable research (Ahmed & Ishtiaq, 2021). The respondents pointed out that they had difficulty synthesizing the results and forming conclusions since it requires them to discuss the implications of the results of their study in a broader perspective.

Generally, the respondents believe that they are moderately competent in many aspects of doing a research, from the writing of introduction and use of theoretical or conceptual framework, to data analysis and formulating recommendations. The respondents highlighted that they were able to minimize grammatical errors in their research work through the use of free softwares that correct their sentence structure when necessary.

Research Leadership

Table 2 presents the summary of research leadership in the institution as perceived by the respondents. Overall, it can be gleaned that the research leadership in the institution

was somewhat perceived by the respondents with a mean of 3.17 and a standard deviation of 0.52.

Table 2 shows that the respondents were able to utilize the institution's research linkages and networks as well as its subscription to local and international journals for referencing and publications to a great extent. Through the institution's subscriptions, the respondents were able to access a lot of content-related materials that they can use as reference for their research.

However, the respondents reported that there is a very little opportunity for them to participate in research-related trainings initiated by the institution. Thus, they had to look for opportunities outside the institution to learn the current practices and up-to-date trends in the conduct of research. As stated by Hammad and Al-Ani (2021), there were very few professional development opportunities in higher education institutions that specifically targets developing the research skills of its teachers. The teachers prefer a systematic activity that would emphasize and focus on their specific needs in the writing of research.

Table 2: Perceived Research Leadership

Statements	Weighted Mean	Standard Deviation	Description
Subscription to local and international journals and publications for referencing and publication.	3.28	0.65	To a great extent
Provision of statistical services and tools (e.g. SPSS, MaxQDA etc.).	2.44	0.76	Very little
Provision of support for intellectual property rights.	3.01	0.69	Somewhat
Conduct of trainings relevant to doing and learning up-to-date trends in research.	2.27	0.80	Very little
Provision of language and stylistic editing, and proofreading services.	2.33	0.78	Very little
Allocation of funds for college or institutional conduct of research and publications.	2.99	0.69	Somewhat
Utilization of research in the development of institutional programs and policies.	2.48	0.65	Very little
Dissemination through publication media such as journals, magazines, newsletters, circulars and bulletins that follows locally and internationally accepted standards.	3.04	0.71	Somewhat
Provision of rewards, incentives or recognition for completed, presented or published research.	2.64	0.66	Somewhat
Offering variety of research linkages and networks.	3.35	0.64	To a great extent
Overall	3.17	0.52	Somewhat

In addition, the respondents pointed out there is also a very little provision of support services from the institution for statistical analysis and use of software, and language and stylistic editing. Thus, they had to seek help from other colleges with teachers who are able to offer assistance on statistical analysis of data, as well as with language and grammar concerns. Though the institution provided seminars on the use of data analysis softwares, it was superficial for them as they were not able to identify its actual use in their research work.

Research Leadership as a Predictor of Research Competence

Table 3 shows the summary of linear regression analysis of the variables which are research competence as the

Table 3: Summary of Linear Regression Analysis

Variables	Mean	Std Dev	r ²	sig. value	Interpretation	Decision
Research Competence	3.07	0.53	0.164	0.000	Significant	Reject
Research Leadership	3.17	0.52				Ho

$\alpha = 0.05$

Research leadership is crucial for successful research in educational institutions. They play an important role in fostering a motivating and collaborative environment. Strong research leadership not only helps its teachers in the matter of research funding. They guide their teachers to navigate the weaknesses, challenges, and complexities involved in the conduct of research to reduce burdens so researchers can give more focus on their research and be more research competent (Smith, 2019). Strong research leadership includes communicating clearly to understand the challenges and demands of the teacher-researchers, encourage collaboration among teachers, lessen or manage administrative duties that free up time and attention for the teachers to focus on their research, and understand the importance of their role in the success of researchers and the success of the institution.

V. CONCLUSION

Research leadership plays an important role for the success of research works in an institution. It is essential for school administrators to understand their role as research leaders and to recognize the needs and challenges of the teachers in the conduct of research. Attendance to conferences and requiring teachers to produce research is not the best way to produce research competent teachers. As the importance of research in higher education institutions cannot be ignored, the role of school administrators as research

dependent variable, and research leadership as the independent variable.

The findings of the study showed a coefficient of determination (r²) that is 16.40% and a p-value of 0.000 which leads to the rejection of the null hypothesis of the study. This means that 16.40% of the variation on research competence can be explained by research leadership. The results imply that research leadership significantly predicts the research competence of the respondents.

leaders should not be disregarded as it is crucially important to produce quality research that will benefit not only the institution, but also the society.

Based on the research evidence suggesting the need for research-focused capability building programs, it is highly recommended that the school administrators provide regular research-related training or activities to help its faculty members develop and increase their research competence. Upon identifying the areas of concern of the faculty members in doing research, the administrators should initiate institutional activities to encourage the participation of its faculty members in research-related activities. Administrators should also take into consideration funding more research-related needs and activities of its teachers to increase motivation to do research works.

The administrators and faculty members should start circulation of research works and should encourage and support the different colleges in conducting research forums or seminars to encourage utilization of results as deemed applicable in different colleges, and to keep everyone updated with the latest trends and developments in education. Teachers should make an effort to collaborate with their colleagues across the different colleges within and even outside the institution with the aim of sharing knowledge and widening their areas of expertise.

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Choose Test Assessment Effectiveness of Left - Hand Cup Technique for Male Hanoi Shuttlecock Athletes

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Abstract

Using routine methods, 8 tests were selected to evaluate the attack efficiency with the left-hand cup technique for male Hanoi shuttlecock athlete with sufficient reliability after 2 tests, and at the same time determined that there was a relationship between the two. strongly correlated with the performance of Hanoi shuttlecock athlete $r > 0.789$ (probability threshold $P < 0.05$).

Keywords— test, evaluation, effectiveness, shuttlecock kick, left cup technique, shuttlecock athlete, Hanoi.

ARTICLE SOURCE

The article is excerpted from the research thesis of the same author "Research on exercises to evaluate the attack efficiency with the left-hand cup technique for male Hanoi shuttlecock athlete".

I. QUESTION

In professional shuttlecock training, people often focus on developing basic techniques, especially the group of attacking techniques, typically the attacking kick technique. To perform this task, coaches often use competitive exercises, mobility exercises combined with specialized technical movements, in addition, it is necessary to use appropriate methods and a system of techniques. Correctly selected exercises will bring high training efficiency. In order to assess the level and capacity of athletes, assessment tests must be used. With the above urgency, we conducted "Select test to evaluate the

effectiveness of attack with left-hand cup technique for male Hanoi shuttlecock athlete".

II. RESEARCH METHODS

The research process uses the following research methods: Method of analysis and synthesis of documents; Method of pedagogical observation; Interview method; Statistical Mathematical Methods.

III. RESEARCH RESULTS AND DISCUSSION

3.1. Synthesis and selection of tests to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athlete

On the basis of reference and synthesis of documents and practice of shuttlecock training, the thesis synthesizes tests to evaluate the effectiveness of attacking with left-hand cup technique for Hanoi male shuttlecock athletes, as follows:

Table 1. Summary of tests to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes

No	Code convention	Test
1.	T1	10 consecutive left shuttlecocks into the 1m box along the left sideline. (fruit in the box)
2.	T2	10 consecutive left shuttlecock cup into the 1m box along the right sideline. (fruit in the box)
3.	T3	10 consecutive left shuttlecocks into the 1m box running along the middle of the field. (fruit in the box)
4.	T4	From the position of the antenna column, move the right foot to the center of the net to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box)

5.	T5	From the middle position of the net, move towards the right foot to near the vertical line to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box)
6.	T6	From the position of the antenna column, move the right foot to near the border along the opposite side to perform 10 consecutive left-ball cups into the 1m box running along the middle of the field. (fruit in the box)
7.	T7	Move forward with the right foot 1 step to perform 10 consecutive left bridge cups into the 1m box running along the middle of the field. (fruit in the box).
8.	T8	Move forward 1 step to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box).

Intrinsic reliability testing and selection of tests to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes

From the built-in interview form (Appendix 1), the thesis conducts a pilot survey through interviews with

experts, scientists, and coaches (n = 27) on a 5-level Liker scale. and determine the internal reliability (Internal Consistent Reliability Analysis). The results of testing the intrinsic reliability of 8 tests to evaluate the effectiveness of attacking with the left-hand cup technique for male Hanoi shuttlecock athletes are presented in Table 2.

Table 2. Results of testing the intrinsic reliability of the tests to evaluate the effectiveness of attacks with the left-hand cup technique for male Hanoi shuttlecock athletes

Cronbach's Alpha value				
Cronbach's Alpha			N of Items	
0,878			8	
Item-Total Statistics				
Observed variables	Scale average if variable type	Scale variance if variable type	Coefficient of correlation of total variables	Cronbach's Alpha coefficient if variable type
T1	436.36	441.97	.378	0.862
T2	457.15	465.65	.335	0.832
T3	398.46	401.21	.356	0.824
T4	412.64	432.45	.372	0.853
T5	415.36	425.44	.351	0.814
T6	422.42	436.54	.365	0.843
T7	419.16	474.02	.358	0.824
T8	419.35	441.32	.377	0.838

Table 2 results show that Cronbach's Alpha of the scale is 0.878, greater than 0.6; the correlation coefficients of the total variables of the observed variables in the scale are all > 0.3 and there is no case of removing the observed variables that can make Cronbach's Alpha of this scale > 0.878, specifically the 8 variables are: T1, T2, T3, T4, T5, T6, T7, T8. From the above selection, there are 8 observed variables (tests) that are accepted and will be used in the next research steps of the thesis.

Evaluation of the correlation through 2 tests of tests to evaluate the effectiveness of attacks with the left cup technique for male Hanoi shuttlecock athletes

The thesis tests the correlation of each test through 2 tests to determine the stability during 2 weeks through the pair correlation coefficient. The results are presented in Table 3:

Table 3. Correlation through 2 tests of tests to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes (n = 10)

No	Encode	Test	Test results (1st time)		Test results (2nd time)		CORREL
			\bar{x}	σ	\bar{x}	σ	
1.	T1	10 consecutive left shuttlecocks into the 1m box along the left sideline. (fruit in the box)	7.1	0.876	6.9	0.738	0.877
2.	T2	10 consecutive left shuttlecock cup into the 1m box along the right sideline. (fruit in the box)	7.2	0.632	7.1	0.568	0.867
3.	T3	10 consecutive left shuttlecocks into the 1m box running along the middle of the field. (fruit in the box)	6.8	0.789	7	0.667	0.845
4.	T4	From the position of the antenna column, move the right foot to the center of the net to perform 10 consecutive left-hand cups into the 1m square running along the middle of the field. (fruit in the box)	6.6	0.699	6.8	0.789	0.846
5.	T5	From the middle position of the net, move towards the right foot to near the vertical line to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box)	7.1	0.738	6.9	0.568	0.822
6.	T6	From the position of the antenna column, move the right foot to near the edge along the opposite side to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box)	7.3	0.675	7.4	0.516	0.893
7.	T7	Move forward with the right foot 1 step to perform 10 consecutive left bridge cups into the 1m box running along the middle of the field. (fruit in the box).	7.1	0.876	7.3	0.675	0.884
8.	T8	Move forward 1 step to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box).	6.9	0.876	7.1	0.738	0.877

Table 3 shows that the test to evaluate the attack efficiency with the left-hand cup technique for the male Hanoi shuttlecock athletes through 2 tests has $r > 0.800$ (probability threshold $P < 0.05$). This shows that the retested tests have stability and reliability when used in assessing the effectiveness of attacking with the left-hand cup technique for male Ha Noi shuttlecock athletes.

The results of the interview on the appropriateness of the tests to evaluate the effectiveness of

the left-hand cup technique for male Hanoi shuttlecock athletes:

The thesis conducted interviews with 26 experts and scientists with a 2-level scale of "Suitable" and "Not suitable" and the convention of selecting tests through 2 interviews 2 weeks apart, reaching over 80%. from the number of interview samples; The results of Wilcoxon's test 2 times of the overall interview show stability, little variation with the probability threshold $P < 0.05$. The results are presented in Table 4:

Table 4. Results of 2 interviews (frequency distribution - \$T1\$ Frequencies) of the tests to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes.

No	Encode	Results of the first interview (n = 26)		Matching percentage	Results of the second interview (n = 26)		Matching percentage
		1	0		1	0	
1	T1	23	3	88.5	24	2	92.3
2	T2	26	0	100.0	26	0	100.0
3	T3	21	5	80.8	22	4	84.6
4	T4	25	1	96.2	25	1	96.2
5	T5	22	4	84.6	22	4	84.6
6	T6	23	3	88.5	24	2	92.3
7	T7	26	0	100.0	26	0	100.0
8	T8	21	5	80.8	21	5	80.8

Note: Convention on rating level: 1 - appropriate; 0 - not suitable.

Table 4 shows that, there are 8/8 tests through 2 interviews that experts, scientists and coaches think are reasonable with the results of selecting each indicator from 80.8% > 80.0%) the level of regulation. determined and judged not to be highly relevant in the practice of assessing

the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes.

Next, the thesis conducts Wilcoxon test to ensure the consensus between the two interviews. The test results are presented in Table 5:

Table 5. Wilcoxon test results between 2 interviews to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes

Test Statistics ^b	2nd Test Interview - 1st Test Interview
Z	-1,732 ^b
Asymp. Sig. (2-tailed)	,083

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks

Assumption H0: The mean values of the two populations are the same.

From the above results, we see that the observed significance level of the test between the two test interviews is sig. = 0.083 > 0.05 (threshold of statistical significance at P = 0.05). Therefore, we accept the hypothesis H0. Conclusion: According to Wilcoxon test, there is a coincidence and stability between the two interviews.

Evaluation of the correlation between competition performance and tests to evaluate the effectiveness of attack by left-hand cup technique for male Hanoi shuttlecock athletes

Testing the correlation between competition performance and attacking efficiency tests using the left-hand cup technique for male Hanoi shuttlecock athletes has an important role to play in determining the relationship between the tests and the success. performance of male Hanoi shuttlecock athletes. The results of the 10 Hanoi shuttlecocks are ranked from 1 to 10, and the test results of the 10 athletes are also ranked from 1 to 10. Spearman's hierarchical correlation coefficient is used. to calculate the correlation between competition performance and each test to evaluate the effectiveness of attack with left-hand cup technique for male Hanoi shuttlecock athletes.

Table 6. Correlation between competition performance and tests to assess the effectiveness of attack by left-hand cup technique for male Hanoi shuttlecock athletes (n = 10)

No	Encode	Test	Spearman Correlation	Sig. (2-tailed)
1	T1	10 consecutive left shuttlecocks into the 1m box along the left sideline. (fruit in the box)	.857	.021
2	T2	10 consecutive left shuttlecock cup into the 1m box along the right sideline. (fruit in the box)	.812	.024
3	T3	10 consecutive left shuttlecocks into the 1m box running along the middle of the field. (fruit in the box)	.818	.016
4	T4	From the position of the antenna column, move the right foot to the center of the net to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box)	.803	.018
5	T5	From the middle position of the net, move towards the right foot to near the vertical line to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box)	.852	.016
6	T6	From the position of the antenna column, move the right foot to near the border along the opposite side to perform 10 consecutive left-ball cups into the 1m box running along the middle of the field. (fruit in the box)	.821	.022
7	T7	Move forward with the right foot 1 step to perform 10 consecutive left bridge cups into the 1m box running along the middle of the field. (fruit in the box).	.821	.024
8	T8	Move forward 1 step to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box).	.789	.032

Table 6 shows that the tests to evaluate the effectiveness of attacking with the left-hand cup technique for male Hanoi shuttlecock athletes have a strong correlation with the performance of Hanoi shuttlecock athletes. $r > 0.789$ (probability threshold $P < 0.05$).

Developing a standard classification and rating scale for attacking efficiency with the left cup technique for male Hanoi shuttlecock athletes.

Normally, building a standard classification and rating scale are conducted on the value \bar{x} and δ according

to the 2δ rule for tests whose units are time and number of times. However, in 8 tests to evaluate the effectiveness of attacking with the left-hand cup technique of the male Hanoi shuttlecock athlete of the thesis, 10 results were required in 1 evaluation test, so the thesis did not proceed to build a rating scale according to the value and that constructs according to 5 classification levels corresponding to 10 results performed in 1 test test. The evaluation scale is still conducted on a 10-point scale, according to the regulations, each result (according to the requirements) is counted as 1 point. The results are presented in Tables 7 and 8:

Table 7. Classification of criteria to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes

Classify	Good	Rather	Medium	Feebleness	Least
Number of results achieved in 1 test (10 results)	9-10	7-8	5-6	3-4	1-2

Table 8. Scoring scale to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes

Test	The point									
	10	9	8	7	6	5	4	3	2	1
Number of results achieved in 1 test (10 results)	10	9	8	7	6	5	4	3	2	1

The results of Tables 7 and 8 are very convenient for evaluating the effectiveness of the attack with the left-hand cup technique for the Hanoi men's shuttlecock. In order to classify the attacking level with left-hand cup technique for male Hanoi shuttlecock athletes it is necessary to perform the following steps: Test the effectiveness of the attack with the left-hand cup technique by the prescribed tests (pay attention to ensure the correct test standards); Compare the athlete's test results with the standard section

corresponding to the level of attack with the left-hand cup technique.

To evaluate the overall effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes. The maximum score for each test is 10 points. So the Good is 9-10 points; Fair from 7 to close to 9 points; Average is from 5 to close to 7 points, weak from 3 to close to 5 points and poor gets less than 3 points. The summary score is presented in Table 9:

Table 9. Summary scoreboard to evaluate the effectiveness of attacking with left-hand cup technique for male Hanoi shuttlecock athletes

Classify	Good	Rather	Medium	Feebleness	Least
Maximum total score = 80 points	72-80	56-71	40-55	24-39	<24

3.2. Assessing the actual situation of attacking with the left-hand cup technique for male Hanoi shuttlecock athletes

Assessing the actual situation of attacking with the left-hand cup technique for male Hanoi shuttlecock athletes, the thesis conducts examination and evaluation according to the prescribed scorecard classification. The results are presented in Table 10.

Table 10. Evaluation of the actual situation of attacking with the left-hand cup technique for male Hanoi shuttlecock athletes

Test	Good		Rather		Medium		Feebleness		Least	
	m _i	%	m _i	%	m _i	%	m _i	%	m _i	%
10 consecutive left shuttlecocks into the 1m box along the left sideline. (fruit in the box)	0	0.0	2	20.0	6	60.0	2	20.0	0	0.0
10 consecutive left shuttlecock cup into the 1m box along the right sideline. (fruit in the box)	0	0.0	1	10.0	7	70.0	2	20.0	0	0.0
10 consecutive left shuttlecocks into the 1m box running along the middle of the field. (fruit in the box)	0	0.0	2	20.0	6	60.0	2	20.0	0	0.0
From the position of the antenna column, move the right foot to the center of the net to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box)	0	0.0	3	30.0	6	60.0	1	10.0	0	0.0
From the middle position of the net, move towards the right foot to near the vertical line to perform 10 consecutive left-hand cups into the	0	0.0	1	10.0	7	70.0	2	20.0	0	0.0

1m box running along the middle of the field. (fruit in the box)										
From the position of the antenna column, move the right foot to near the border along the opposite side to perform 10 consecutive left-ball cups into the 1m box running along the middle of the field. (fruit in the box)	0	0.0	2	20.0	6	60.0	2	20.0	0	0.0
Move forward with the right foot 1 step to perform 10 consecutive left bridge cups into the 1m box running along the middle of the field. (fruit in the box).	0	0.0	1	10.0	6	60.0	3	30.0	0	0.0
Move forward 1 step to perform 10 consecutive left-hand cups into the 1m box running along the middle of the field. (fruit in the box).	0	0.0	1	10.0	7	70.0	2	20.0	0	0.0

Table 10 shows that the actual situation of attacking with the left-hand cup technique for male Hanoi shuttlecock athletes is concentrated mainly on the average level (with 60-70% of average athletes), while some athletes with weak test results (with 10-30% of low-level athletes). Therefore, it is necessary to have exercises to develop and improve the attacking efficiency of the male Hanoi shuttlecock.

In order to have an objective assessment of the actual situation of attacking with the left-hand cup technique for male Ha Noi shuttlecock athletes, the thesis uses the criteria to assess the actual situation of attacking with the left-hand cup technique for shuttlecock athletes of Hanoi, Bac Giang, Hai Phong, Thanh Hoa and Phu Tho units. The results are presented in Table 11:

Table 11. Actual situation of attacking efficiency with left-hand cup technique for male Hanoi shuttlecock athletes with some other units

Unit name	Classify										Compare			
	Good		Rather		Medium		Feebleness		Least		χ^2 bảng 9.488			
	m _i	%	m _i	%	m _i	%	m _i	%	m _i	%	(1-2)	(1-3)	(1-4)	(1-5)
Ha Noi (n=10) (1)	0	0.0	2	20.0	6	60.0	2	20.0	0	0.0				
Bac Giang (n=8) (2)	1	12.5	2	25.0	5	62.5	0	0.00	0	0.0	3.09			
Hai Phong (n=11) (3)	1	9.09	3	27.27	6	54.55	1	9.09	0	0.0		1.53		
Thanh Hoa (n=7) (4)	0	0.00	2	28.58	5	71.43	0	0.0	0	0.0			1.76	
Phu Tho (n=7) (5)	0	0.00	1	14.29	6	85.71	0	0.00	0	0.0				2.33
Compare											P>0.05			

Table 11 shows that compared with Bac Giang, Hai Phong, Thanh Hoa, Phu Tho, the test results of male Hanoi shuttlecock athletes are low in both good, good and average levels. However, when comparing the difference between the evaluation results between the units and Hanoi, there is no

statistically significant difference, shows $\chi^2_{\text{calculated}} < \chi^2_{\text{tables}}$ at the probability threshold P>0.05.

IV. CONCLUSION

Through the interview steps, 8 tests were selected to evaluate the effectiveness of attacking with the left-hand cup

technique for male Hanoi shuttlecock athletes with sufficient reliability after 2 tests, and at the same time determined to have a correlation. closely related to the performance of Hanoi shuttlecock athletes $r > 0.789$ (probability threshold $P < 0.05$). In which, a summary scoreboard was built for each athlete after testing. On that basis, assessing the actual situation of attacking with left-hand cup technique for male Hanoi shuttlecock athletes is still limited, mainly focusing on the average level.

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Current Situation of Teaching Methods and Organization of Main Times of Physical Education Teachers of Foreign Trade University

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Abstract

The study assessed the actual situation of teaching methods and organization of the main course of physical education of lecturers of Foreign Trade University. The research results will serve as a basis for applying measures to improve the learning efficiency of physical education for students at Foreign Trade University, contributing to improving the quality of physical education work in the school.

Keywords— *Teaching methods, Physical education subjects, Methods of organizing lessons.*

ARTICLE SOURCE

The article is excerpted from the scientific research topic: "Research and application of measures to improve the learning efficiency of physical education for students of Hanoi Foreign Trade University". Thesis of Doctorate in Education - Institute of Sports Science.

I. ASKING THE PROBLEM.

Physical education is a compulsory subject in the training program, one of the basic factors to ensure the effective work of Physical Education is the facilities, staff, teachers, and training program. The training must be suitable and meet the needs, receptive ability, motor capacity, interests, aspirations, and health level of learners. In the process of teaching the subject of Physical Education to students today, it has met the training needs and the quality of training, which is reflected in the students' learning results achieved through the training courses. end-of-course exam. However, in the process of teaching and organizing physical education classes, there are still many difficulties in terms of facilities and teaching facilities. On the other hand, students' awareness, motivation, and attitude to study are still not good, especially the flexible combination of teaching methods of lecturers, which are heavy on experience and single-use methods. if there is a combination, the teaching methods are not optimized, not scientific, so students are not aware of the importance of health, have not created a sense of

regular exercise and sports, psychology is afraid of studying the subject of Physical Education, considering the subject of Physical Education is just a secondary subject.

Faced with that situation, it is necessary to have measures to innovate teaching methods and methods of organizing physical education lessons to improve learning efficiency for students. The content of the article conducts a general assessment of the current situation of teaching methods and organization of the main course of the physical education course of physical education teachers, as a basis for the application of measures to improve efficiency. Studying Physical Education for students of Foreign Trade University.

II. RESEARCH RESULTS AND DISCUSSION

2.1. Actual situation of teachers' teaching methods of physical education subject.

To assess the current situation of using teaching and practicing methods in the main class of the physical education course for students of Foreign Trade University, the study conducted interviews with 08 officials and lecturers at the Center for Physical Education and Training. Physical Education and Sports of Foreign Trade University on the current situation of using teaching and practicing methods in the main class of the physical education course. The results are shown in Table 1.

The percentage of trainers using different teaching and training methods, especially the percentage between the interval training method and the circular training method is not uniform, in other words, The circular practice method has not been used much in the teaching process to improve the learning efficiency of physical education for students, while other teaching methods are still very important.

Thus, only a brief review of the curricula, materials, and teaching plans has shown the heterogeneity and lack of focus in the use of methods.

- The group of traditional methods of teaching and practicing in teaching physical education subjects have been used regularly by lecturers (although there is a heterogeneity in the level of use in all methods), but teaching and training methods for students in physical education classes have been used regularly by 75.00% of lecturers (especially the integrated training method and the physical education method). In circular practice, the number of lecturers who do not use and rarely use it is quite high - from 37.50% to 50.00%.

Table 1. Survey results of current use of teaching methods - exercise of teachers in physical education courses for students of foreign universities (n = 8)

Group of teaching methods	Specific teaching and training methods	Interview result					
		Frequent		Useless		Do not use	
		n	%	n	%	n	%
Group of training methods with strict norms	The method of continuous steady repetition	7	87.50	1	12.50	-	-
	Steady Intermittent Training Methods	6	75.00	2	25.00	-	-
	Training methods are constantly changing	6	75.00	2	25.00	-	-
	Intermittent Variation Training Method	7	87.50	1	12.50	-	-
	Integrated training method	5	62.50	2	25.00	1	12.50
	Circle training method	4	50.00	3	37.50	1	12.50
Group of training methods with partial norms	Game method	7	87.50	1	12.50	-	-
	Competition method	6	75.00	2	25.00	-	-
Group of methods using words and visual media	Method of using words	8	100.0	-	-	-	-
	Methods of using visual media	8	100.0	-	-	-	-
Group of active teaching methods in physical education	Group teaching method	-	-	1	12.50	7	87.50
	Training method	-	-	1	12.50	7	87.50
	Game method	-	-	1	12.50	7	87.50

- When considering the group of active teaching methods in physical education, the number of lecturers who do not use it accounts for a relatively high percentage (87.50%), only 1/8 of them said that it is rarely used in teaching. physical education subjects for students (accounting for 12.50%). This is one of the groups of active teaching methods, to help students grasp the content of the lecture, acquire movement techniques, as well as exercise better.

2.2. The actual situation of the teacher's method of organizing the main course of the physical education course.

Intending to find out the evaluation opinions about the regular hours of the physical education course of students at Foreign Trade University, the study conducted a survey to assess the opinions about the regular hours of the physical education course through images. indirect interview form. The survey and interview subjects of the thesis are 2420 students currently studying at Foreign Trade University. The content of the interviews with students included: Students' opinions about the regular class hours; Factors affecting the results of physical education lessons. The results obtained as shown in Table 2 show that:

Table 2. Survey results of student's opinion of foreign trade university college schedule times

No	Interview content	First-year (n = 807)		Second year (n = 802)		Third year (n = 811)		Total (n = 2420)	
		n	%	n	%	n	%	n	%
1.	Motivation for exercise:								
	- Desire.	346	42.87	378	47.13	331	40.81	1055	43.60
	- Realize the effects of physical training.	242	29.99	221	27.56	314	38.72	777	32.11
	- Obligatory.	84	10.41	55	6.86	46	5.67	185	7.64
	- Unconditional.	135	16.73	148	18.45	120	14.80	403	16.65
2.	Evaluation of internal lessons:								
	- Provide knowledge about the sport.	642	79.55	654	81.55	648	79.90	1944	80.33
	- Technical equipment for sports.	605	74.97	617	76.93	611	75.34	1833	75.74
	- Improve health.	336	41.64	348	43.39	342	42.17	1026	42.40
	- Exciting class time.	434	53.78	446	55.61	440	54.25	1320	54.55
	- Class time is dry.	34	4.21	46	5.74	40	4.93	120	4.96
	- Not enough yard for tools.	785	97.27	797	99.38	791	97.53	2373	98.06
3.	Factors affecting the regular physical education class time:								
	- Due to yard conditions.	355	43.99	326	40.65	401	49.45	1082	44.71
	- Due to teacher qualifications.	66	8.18	76	9.48	54	6.66	196	8.10
	- Lack of exercise equipment.	352	43.62	311	38.78	314	38.72	977	40.37
	- Not having enough training equipment	34	4.21	89	11.10	42	5.18	165	6.82

- The motivation of students to exercise is mainly due to their interest in sports (1055 comments, accounting for 43.60%), while the number of opinions believe that physical exercise has a good effect on physical training. force (777 votes, accounting for 32.11%).

- When looking at the evaluation opinions about the regular class time, it was found that the perception of the position and the role of the internal class time of the majority of the students was: Providing knowledge, about physical training and sports only accounted for 80.33%, sports technical equipment accounted for 75.74%, health improvement accounted for 42.40%. In contrast, up to 65.58% of the students surveyed assessed that the internal class time was dry, rigid, and unattractive to stimulate students to practice, especially 2373 comments that said that the class time do not have enough conditions for equipment yards to meet training and learning (accounting for 98.06%).

- Regarding the factors affecting the regular physical education hours, most of the opinions focused on the factors due to the unsafe conditions of the yard (1082

votes, accounting for 44.71%) lack exercise equipment (977 selected opinions, accounting for 40.37%). Through direct discussion with the students, it was found that due to the unsatisfactory conditions of the yard and lack of exercise equipment, during the lessons, the number of students participating in the practice was not much. In other words, the density of movement during physical education lessons is not high. This is one of the causes that directly affect the quality and effectiveness of physical education lessons in schools today.

2.3. Actual situation of activity density in physical education class of students at Foreign Trade University.

The study was conducted to assess the actual status of the activity density of students at Foreign Trade University during the main hours of the physical education course. The density of exercise in physical education lessons is the ratio of time spent doing exercises to the total time of exercises, this is an important factor determining the effectiveness of physical education learning for children. student. The practice of physical

education has shown that, during physical education lessons, instructors and coaches can adjust and control their teaching process by professional measures. such as changing the amount of exercise, volume, intensity, method of organizing lessons, etc.) to achieve the highest efficiency. For that purpose, the study conducted

pedagogical observations of students' regular training sessions in several subjects: 1) Compulsory course: Aerobic exercise; 2) Elective courses: sports dance, table tennis, and badminton. Thereby recording the movement density index of the physical education class to assess the actual activity density of students.

Table 3. Results of surveying activity during in teaching times for physical education students of foreign trade university

No	Subject	Movement density by subject											
		Aerobic gymnastics			Sports dance			Badminton			Ping pong		
		Startup (15 phút) ($\bar{x} \pm \sigma$)	Basic part (65 phút) ($\bar{x} \pm \sigma$)	Dynamic density (%)	Startup (15 phút) ($\bar{x} \pm \sigma$)	Basic part (65 phút) ($\bar{x} \pm \sigma$)	Dynamic density (%)	Startup (15 phút) ($\bar{x} \pm \sigma$)	Basic part (65 phút) ($\bar{x} \pm \sigma$)	Dynamic density (%)	Startup (15 phút) ($\bar{x} \pm \sigma$)	Basic part (65 phút) ($\bar{x} \pm \sigma$)	Dynamic density (%)
1.	University course 59	5.16±0.77 34.40	23.16±3.47 35.63	35.02	5.33±0.80 35.53	23.45±3.52 36.08	35.81	5.03±0.75 33.53	22.05±3.31 33.92	33.73	4.13±0.62 27.53	20.38±3.06 31.35	29.44
2.	University course 58	5.32±0.80 35.47	24.11±3.62 37.09	36.28	5.46±0.82 36.40	24.89±3.73 38.29	37.35	5.11±0.77 34.07	23.19±3.48 35.68	34.87	5.05±0.76 33.67	21.13±3.17 32.51	33.09
3.	University course 57	5.03±0.75 33.53	23.07±3.46 35.49	34.51	5.83±0.87 38.87	24.17±3.63 37.18	38.03	5.23±0.78 34.87	23.21±3.48 35.71	35.29	4.98±0.75 33.20	22.01±3.30 33.86	33.53
4.	University course 56	5.77±0.87 38.47	25.16±3.77 38.71	38.59	5.87±0.88 39.13	25.56±3.83 39.32	39.23	5.16±0.77 34.40	24.02±3.60 36.95	35.68	5.01±0.75 33.40	23.32±3.50 35.88	34.64
	Σ			144.39			150.41			139.56			130.70
	\bar{X}			36.10			37.60			34.89			32.68

The study conducted observations in 4 university courses in training sessions with the number of observation sessions being 10 training sessions/course. The physical education class time of students according to the teacher's compiled lesson plan takes place from 90 to 105 minutes, distributed as follows: 5-minute preparatory part, 15-minute warm-up part, and basic part. 65 minutes and the ending 20-25 minutes. Based on the above division, observations were conducted simultaneously for the regular physical education class. The measuring instrument is a high-precision stopwatch, with pre-division observation forms for recording results. The time values are converted to minutes, respectively the warm-up part is 15 minutes and the base part is 65 minutes. From there, it is possible to calculate the activity density of the main physical education classes of students.

The results obtained as shown in Table 3.3 show that: The density of movement in physical education lessons for students (Aerobic subjects, sports dancing, table tennis, and badminton) is very low. (under 40%),

specifically: In aerobic exercise, the density of movement was obtained from 34.51% to 38.59%; in sport and dance, the density of movement was obtained from 35.81% to 39.23%; in badminton, the density of movement was obtained from 33.73% to 35.68%; In table tennis, the density of movement was also obtained from 29.44% to 34.64%. On average, the density of movement in the above subjects students reached 32.68% to 37.60%. The lowest is in table tennis and badminton, while aerobics and dance sports have a higher level of activity. This can be explained that the density of movement in badminton and table tennis lessons depends largely on the conditions of the yard and training equipment, this result is completely consistent with the above statement.

Thus, the implementation of the content of the physical education program of the lecturers at the Center of Physical Education and Sports of Foreign Trade University has not been thorough. have not met the tasks and requirements of physical education work in schools. Just stopped at the level of equipping students with skills

to perform movement techniques in some sports, not providing enough knowledge and scientific basis for physical education for students to know using physical skills. Using physical exercises as a means of training and developing physical qualities, and strengthening health, as well as having no policy to encourage lecturers to organize self-training activities for students. members and guides to organize those activities well.

III. CONCLUSION

Although the physical education work for students of Foreign Trade University is ensured by the regulations of the Ministry of Education and Training, there are still some basic shortcomings such as the implementation of the educational subject program. physical exercise is not thorough; do not attach importance to extra-curricular activities and sports; unsatisfactory physical conditions; there has not been appropriate encouragement for staff, lecturers, and students in physical education work; teaching methods and organization of regular physical education classes are not appropriate. That has led to the low average activity density in the regular physical education class of students (reaching from 32.68% to 37.60%); influencing students' academic performance in physical education.

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Traditional Handicraft Village in Thanh Hoa Today

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Abstract

Thanh Hoa is a land with a rich history and culture, with many long-standing traditional handicraft villages, which have been lost over time, now gradually been restored and promoted their values in modern life. In the spirit of Decree No. 52 dated April 12, 2018, of the Government on the development of rural industries, Thanh Hoa province has issued many mechanisms and policies to encourage the development of traditional handicrafts. The article focuses on clarifying the system of traditional craft villages in Xu Thanh (The Land of Thanh), the size, characteristics and guidelines, and policies of Thanh Hoa province to maintain and develop handicraft villages to serve the economy - social sustainability.

Keywords— *craft villages, crafts, traditions, policies, management.*

I. MAKE A PROBLEM

In recent years, along with the implementation of renovation work in various fields, the Party and State have adopted policies to support and create conditions for localities to restore and develop craft villages. Provincial Party Committee, People's Committee of Thanh Hoa province as well as districts, towns, and cities have issued many mechanisms and policies to revive craft villages. Many investment projects for spearhead occupations with high export and economic value such as stone processing, bronze casting, silk weaving, bamboo and rattan... preferential capital, land rent exemption and reduction to expanding factories and develop products suitable for craft villages, creating excitement and peace of mind for them to produce. Not only focusing on investing in craft villages that are recovering and developing, but a series of traditional handicraft village projects have been built such as in Quang Xuong, Nga Son, Thanh Hoa, and Dong Son cities. , Tho Xuan, Thieu Hoa... also expanded production scale in the direction of companies and enterprises. Expanding material areas such as Nga Son, Quang Xuong sedge, growing mulberry, and raising silkworms in Thieu Hoa, Tho Xuan, Dong Son, Hoang Hoa... Many localities have opened many vocational training classes directly taught by artisans, which are widely opened in all districts, towns, communes, and wards. The initiative and creativity have brought results, many handicraft products such as fine art stone; bronze wares; interference, Hong Do silk; woven bamboo and rattan in Giang village; sedge mats and sedge art products from Nga Son, Quang Xuong; Thai - Muong brocade... have become high-value consumer and

export products, favored by users. With the above question, we focus our research to clarify the picture of craft villages in Thanh Hoa today, on that basis, provide more scientific arguments for local agencies and departments. policy making to preserve and develop craft villages in Thanh Hoa in a sustainable manner.

II. OVERVIEW OF CRAFT VILLAGES IN THANH HOA

Thanh Hoa is known as one of the five provinces with the largest number of craft villages in the country. According to preliminary survey results, the whole province of Thanh Hoa currently has 21 districts/towns/cities with active craft villages, with several 175 craft villages. From the point of view of determining the size of craft villages given, 21 districts/towns/cities in the province all have large-scale craft villages, linking many villages to work together such as sedge mat weaving village in Nga Son district, and sedge mat weaving village in Nga Son district. salt production in Hau Loc district, seafood processing village in Nghi Son town, a craft village for growing and trading ornamental creatures in Nhu Thanh district... and small-scale craft villages within a village according to administrative boundaries such as Tra Dong bronze casting village and Dac Chau cake village, Thieu Hoa district, tea lam craft village, Vinh Loc district.

According to the latest statistics of the Department of Industry and Trade of Thanh Hoa province in the report on the development of industry and handicraft villages as of August 2022, the province has 118 industrial

and handicraft villages still in operation (87 craft villages, traditional craft villages and 31 new craft villages), with 75 craft villages, traditional craft villages have been decided to recognize trade villages by the Chairman of the Provincial People's Committee. The above data has a difference in the number of craft villages with the actual survey results. To find a consensus and have appropriate and scientific explanations, the decrease in the number of trades/craft villages due to inefficient operation or only a few households in the village still working in the village should not be considered. competent state management agencies to include them in statistics because they do not

meet the criteria for craft villages specified in Decree No. 52/2018/ND-CP dated April 12, 2018, the Government. In the content of the research, we make statistics of small and part-time craft villages, mainly the elderly and school-age children, with the need for self-sufficiency for the family.

Regarding the classification of occupations according to Decree No. 52/2018/ND-CP issued on April 12, 2018, Thanh Hoa province has 7 types of occupations. Most of the occupations/craft villages are concentrated in plain and coastal districts, and mountainous districts, with a small number of craft villages.

Table 1: Summary of the number of craft villages in Thanh Hoa

No	Craft name	Amount	Time	
			Over 50 years	Less than 50 years
1.	Making banana peels	01	x	
2.	Making harrow gears	01	x	
3.	Making vermicelli	02	x	
4.	Green tea	01	x	
5.	Making brooms	03	x	
6.	Making sedge mats	37	x	
7.	Knitting yarn	08	x	
8.	Rice paper	02	x	
9.	Quarrying and production of building materials	10	x	
10.	Brass Foundry	01	x	
11.	Making thorn cake	01	x	
12.	Ceramics	01	x	
13.	Confetti	03		x
14.	Making incense	03	x	
15.	Making peanut candy	01		x
16.	Make eyelashes	01		x
17.	Making lanterns	01	x	
18.	Mesh	02	x	
19.	Souvenirs from marine materials	01		x
20.	Processing fish sauce	03	x	
21.	Rattan	19	x	
22.	Making wine yeast	03	x	
23.	Making molasses	01	x	
24.	Making rice flour vermicelli, seaweed vermicelli	03	x	
25.	Carpentry	07	x	
26.	Making salt	05	x	

No	Craft name	Amount	Time	
			Over 50 years	Less than 50 years
27.	Making spring rolls (nem Chua, grilled spring rolls)	04	x	
28.	Making aluminum	01	x	
29.	Making conical hats	07	x	
30.	Making bamboo rolls	01	x	
31.	Growing and exploiting cinnamon	01		x
32.	Forging	03	x	
33.	Cooking wine	07	x	
34.	Cattle (weaving nets)	01	x	
35.	Craft village for growing and trading ornamental creatures	13		x
36.	Jewelry making profession	02	x	
37.	Brocade weaving	02	x	
38.	Seafood processing industry	09		x
39.	Weaving silk interference	01	x	
40.	Make soy sauce	01	x	
41.	Embroidery	01		x
	Total:	175		

(Source: Author of the survey, the year 2022)

Statistics show that, out of a total of 41 occupations (belonging to 175 craft villages), there are 33 occupations (belonging to 145 villages) born over 50 years (accounting for 80.5%); 8 occupations (belonging to 30 villages) were born in less than 50 years (accounting for 19.5%).

III. CHARACTERISTICS OF CRAFT VILLAGES IN THANH HOA

* *Richness, diversity*

Xu Thanh (The Land of Thanh) is still known as one of the civilization cradles of the ancient Vietnamese people, the land that created the brilliant Dong Son civilization in the Hung King's era. Xu Thanh (The Land of Thanh) culture is also influenced by the interference and acculturation of the two North-South regions, the basic conditions have brought certain advantages in terms of increasing the number of craft villages throughout Xu Thanh (The Land of Thanh) regions.

The richness and diversity of craft villages in Thanh Hoa are identified through the number of trades, craft villages and types of products in each profession (household appliances, handicraft products, mechanical products, worshipping objects, etc.) and materials to make products (stone, wood, ceramic, paper, fabric, metal...). Specifically, from the survey results, the province currently has 41 occupations/175 craft villages, of which

the sedge mat making village ranks first with 37/175 craft villages (accounting for 21.1%); bamboo and rattan 19/175 (accounting for 10.8%); planting and trading ornamental plants: 13/175 (accounting for 7.4%); stone mining and construction material production 10/175 (accounting for 5.7%), followed by the following occupations: seafood processing (9 villages); knitting (08 villages); making carpentry, making iron hats, making wine (each profession has 7 craft villages); making salt (07 villages); making spring rolls (nem chua and grilled spring rolls) (04 villages); occupations have 03 villages: making brooms, paper flowers, making incense, processing fish sauce, making wine yeast, making rice flour vermicelli, vermicelli, forging occupations with 02 craft villages: making vermicelli, rice paper, knitting nets, jewelry production, earth weaving; occupations with 01 craft village: making banana peels, harrow gears, tea lam, casting bronze, making gai cakes, ceramics, peanut candies, making eyelashes, making lanterns, souvenirs from marine materials, making molasses, making aluminum, making bamboo rolls, planting and exploiting

cinnamon , bamboo shoots , nursery silk weaving , making soy sauce , embroidery paintings

*** Exquisite crafting technique**

From past to present, the quintessential and sophisticated crafting techniques of craft villages have been constantly preserved and fostered. Handicraft products are crafted by skilled artisans and craftsmen from many materials to perfection to satisfy customers both at home and abroad. The product of the craft village is the crystallization of material and spiritual labor, which shows the skillful hands and creativity of the craftsman, reflecting the customs, practices, and beliefs of the artisans. unique nuances of each craft village. Many products have become trademarks, creating cultural identities not only for craft villages but also become invaluable assets of the nation, most notably the bronze casting of Tea village (Tra Dong). Bronze casting workers with skillful hands and intelligence have made many sophisticated and high-tech bronze products, especially the production of musical instruments: bronze drums, gongs, gongs... not only durable. but also standard in sound, this technique, according to many researchers, can only be created by skilled artisans.

Or, just look at the sophistication on the mounting lines, the center line, the line along with the carved patterns on the beams, doors, and items such as cabinets, hatches, shelves, altars... can recognize the products of the carpenter of Dat Tai village. The products of carpenter Dat Tai are described as sophisticated from the countryside to the capital (building houses to live in, building pagodas, making kings' palaces, lords' palaces): Thanh Hoa carpenter's good reputation / Making doors for houses of worship smart instead / Catch the bet again to choose the hand / Smooth plan, hard to change all sides / ... Four doors he touches four dragons / Above the dragon hatches, below the dragon, climbs... has shown, the reputation of the profession by carpenter Dat Tai has resounded outside the small village in Xu Thanh (The Land of Thanh).

With their aesthetic taste, sophistication, and industriousness, An Hoach stone carvers not only produce many products for life, but also create a system of stone breeds, and statues. worship, epitaph, stone... even at any time receive love. It is the sophistication in each touch, that many stone products of An Coach craft village have been present in the palaces of the kings and lords of the feudal court of Vietnam, or simply but delicately in the touches on the texts. Beer is still dense in Xu Thanh (The Land of Thanh).

No need to mention the sophisticated word, when it comes to Nga Son and sedge mat products, everyone remembers Nga Son mats, Bat Trang bricks / Nam Dinh silk fabrics, and Ha Dong silk products. Mats and fine art

products are not only favored by domestic consumers but also exported to China, Russia, and Western Europe, making the names of craft villages Nga Thuy, Nga Hai, Nga Tan..., referring to Phu Khe weaving, the sophistication is wrapped in two verses: Phu Khe although the language of silk is common / Used to play tricks in the Indochinese market and the notes of the scholar Le Quy Don (1774) when passing by. Here: "The place is full of silkworms, the house is full of silk". Coming to the villages in mountainous areas, there are many skillful embroiderers. From raw materials are cotton, jute, hemp, and dyes taken from products of the mountains and forests, through the hands of artisans, they have become perfect products, with all colors and beautiful patterns.

*** Dynamic, adaptive**

Thanh Hoa is famous for hundreds of craft villages in all three deltas, mountainous and coastal areas. There are craft villages that appeared a few hundred years ago and continue to develop until now, bringing economic efficiency and prosperous life to the people. This result is achieved through the constant search to learn, change and adapt to the market, through the creation of many designs, product categories, decorative themes, materials as well as techniques. processing techniques to serve the needs of domestic and foreign consumers of craft village communities.

Looking back at the development history of craft villages, creativity can be seen in the way craft villages "marriage" with each other. The "marriage" not only shows the love of life, love of the profession, and living together with sincerity and sincerity, but also a way for each craft village to find a place with abundant and abundant raw materials, suitable for the village's craft. to help and support each other in their work. For example, the weaving village made friends with the mulberry village, raising silkworms to pull cocoons, and the knitting village made friends with the village growing bamboo, bamboo, rattan, etc. Then, there were craft villages that found their direction very early on instead of waiting for policies, typically in the case of sedge mat weaving villages in the Nga Son district. Over 150 years with many ups and downs, to survive and perform well until today, the people of Nga Son have been very sensitive to the needs of the market. In addition to the traditional product of sedge mats, the craft village also uses sedge material to manufacture many modern handicrafts for export such as floor mats, knitting mats, lanes, and flower baskets. fruits, slippers, decorations... As a result, over the years, Nga Son sedge products have been present in the markets of Japan, Korea, China...

The strong recovery of the bronze casting village of Tra Dong (Thieu Hoa district) thanks to the enthusiasm of many artisans who still love the job and the attention and search for their direction of the authorities at all levels in recent years has helped Tra Dong to find its direction. East restored and maintained 25 large foundries, and 4 manufacturing and trading copper casting companies. In 2019, bronze casting accounted for 44% of the commune's total budget revenue, creating jobs for hundreds of workers. In particular, the village has 4 artisans recognized by the President as Excellent Artisans, namely: Artists Le Van Bay, Nguyen Ba Chau, Le Van Duong, and Dang Ich Hoan. These artisans have contributed to restoring, "reviving" and developing the traditional bronze casting village.

It can be said that thanks to the sensitivity and quick adaptation, many craft villages in Thanh Hoa have been revived, maintained, and developed strongly, making a significant contribution to preserving, protecting, and promoting the values of craft villages. , so that Thanh Hoa always deserves the title of "one of the cradles of civilization of the ancient Vietnamese" in the past, present, and future.

IV. WORKERS JOIN CRAFT VILLAGES IN THANH HOA

According to statistics, out of a total of 41 occupations/175 craft villages, there are 19 occupations with only one craft village; 04 occupations with more than 10 villages, including making sedge mats 37/175; bamboo and rattan making profession 19/175; cultivation and trading of ornamental animals: 13/175; quarrying and producing building materials 10/175.

Out of a total of 175 craft villages; Currently, 03 craft villages are no longer in operation, including sam Son weaving craft village (Sam Son city); banana sheath making village (Yen Dinh district); Stone jewelry manufacturing village (Dong Son district)

The number of households participating in handicrafts in the village has also decreased in some craft villages, although the People's Committees of districts, towns, and cities in the province have developed schemes, plans, mechanisms, and policies. encourage the implementation of the planning and development of craft villages. However, there are still many reasons leading to the decline, including both subjective and objective causes.

Firstly, at present, in many districts in the province, domestic and foreign enterprises have come to invest in the localities and expand the production scale, so labor in craft villages has shifted a significant part to workers in the locality. industrial zones and clusters. Although this is a positive shift from areas with low labor productivity to industrial production areas with high labor productivity and income, it has caused a rapid decline in the workforce in craft villages. , especially the labor group with an average age of 20-45 years, the main labor force in craft villages.

Secondly, many products of craft villages today cannot compete with industrial products in many factors: slow innovation in design, lack of creativity in products, and many manufactured products that have not yet come from demand. according to the needs of customers, making molds according to the samples available on the market or according to the orders from customers, but few creative and innovative products keep the traditional elements and suit the tastes and needs of customers. of the market.

Table 2: Statistics on the number of households working and maintaining occupations

No	District/town/city	Status of households maintaining jobs		
		No more households working	Less than 20 households are doing the job	More than 20 households are doing the job
1	Thanh Hoa city	-	04	14
2	Sam Son city	01	-	05
3	Hoang Hoa	-	01	22
4	Nga Son	-	04	30
5	Hau Loc	-	03	11
6	Trieu Son	-	05	05
7	Vinh Loc	-	02	02
8	Yen Dinh	01	02	02
9	Nong Cong	-	-	07

10	Nghi Son town	-	-	07
11	Tho Xuan	-	03	06
12	Nhu Thanh	-	01	08
13	Thieu Hoa	-	01	03
14	Quang Xuong	-	-	08
15	Ha Trung	-	06	02
16	Cam Thuy	-	04	02
17	Dong Son	02	-	-
18	Quan Son	-	-	01
19	Ba Thuoc	-	-	01
20	Thach Thanh	-	01	-
21	Thuong Xuan	-	-	01

(Source: Author of the survey, the year 2022)

Table 2 data, although not fully representing the craft villages in Thanh Hoa province, can also be partly assessed on the scale of Thanh Hoa craft village activities as follows:

- Craft villages in Thanh Hoa have a small scale, and the number of craft villages is almost evenly distributed in 21 districts, especially Hau Loc district has no small-scale craft villages but is the district with the highest number of large-scale craft villages. in the province. Small-scale Thanh Hoa craft village has a rate of 63/80, equivalent to 78.7%; the large scale has a ratio of 17/80 or 21.3%.

- Hau Loc has the largest number of craft villages in the province, showing the concentration of types of occupations done in the communes. Currently, Hau Loc has only 4 craft villages: a traditional wine-making village, a traditional mechanical forging village, a bamboo and rattan craft village, and a traditional salt production village.

- Thanh Hoa city and districts: Hoang Hoa and Tho Xuan, although the number of craft villages is large, it is not concentrated and small in scale, partly showing the appearance of craft villages of the three localities above if put into operation in tourism. The craft village calendar must have a proposed plan, strategy, and solution to be able to effectively implement it.

- Nga Son district has always been known nationwide as the district with the largest number of craft villages in the province. However, large-scale craft villages mainly focus on traditional sedge mat weaving villages with 37 villages in communes: Nga Tan, Nga Thanh, Nga Thuy, Nga Tien, and Nga Lien. This can be

seen as an advantage of Nga Son when developing craft village tourism from the perspective of craft village scale.

- In mountainous districts such as Nhu Thanh, Cam Thuy, Quan Son, and Ba Thuoc... the number of craft villages and the size of craft villages are small. The picture of Thanh Hoa craft villages is concentrated mainly in the delta and coastal areas. To exploit craft villages in mountainous districts of Thanh Hoa, there will be many difficulties in terms of the scale of the centralized craft village organization, the traffic is not convenient, and the accompanying services must be heavily invested...

- Sam Son city and several districts such as Vinh Loc, Tho Xuan... are localities with large-scale craft villages with great potential, and at the same time are the localities that are attracting the greatest tourist attraction in the whole country. conscious. However, the development of craft village tourism is still left open. The chain of cultural, historical - spiritual - landscape - culinary - craft villages tourism has not been combined.

- Most of the production establishments have small production scale (mainly households), with little capital, outdated and simple technological equipment, which is difficult to expand and develop. There has not been a link value chain between craft villages: linking human resources, products, developing craft village tourism.

V. STATE MANAGEMENT ISSUES, MECHANISMS, AND POLICIES FOR CRAFT VILLAGES IN THANH HOA

In recent years, the People's Committee of Thanh Hoa province has had many mechanisms and policies to

develop craft villages, and handicraft industries, creating momentum for production and business activities in the area to develop strongly. introduced more new occupations, created jobs for rural workers... Reality shows that craft villages have been making positive contributions to rural economic restructuring, creating a premise for implementation. successful project of developing one product per commune and ward (hereinafter referred to as OCOP) and building new countryside.

In the context that Thanh Hoa province has a strong socio-economic growth rate, the industrialization and modernization process is increasingly expanding. The development process changes all fields in both positive and negative directions. Change is an inevitable and necessary rule so that craft villages can continue to maintain and develop in the current context. Faced with the strong effects and influence of the market economy, while some craft villages could not continue to exist, the vast majority of craft villages of Xu Thanh (The Land of Thanh) still maintained protect and develop the traditional trades of their ancestors. This is the result of the dynamism, sensitivity, and initiative in changing products to suit the new context of the craft village communities themselves; and on the other hand, due to the attention of the Party and State, especially the government of Thanh Hoa province, to the development of agriculture - rural areas in general and handicrafts in particular.

In addition, the Department of Industry and Trade advised the Provincial Party Committee to soon issue Resolution No. 03-NQ/TU dated November 4, 2002, on the development of industries and handicrafts; To put Resolution 03-NQ/TU into practice, the Provincial People's Committee issued Decision No. 467/QD-UB dated February 12, 2003, providing temporary provisions on several policies to encourage the development of industry - cottage industries. industry in the province. However, when there was Decree 134/2004/ND-CP of the Government on encouraging the development of handicrafts, the policy according to Decision 467/UB of the province was no longer appropriate, in that situation, the Committee Provincial People's Committee issued Decision No. 2409/2006/QD-UBND on mechanisms and policies to encourage the development of handicrafts and industries to replace Decision No. 467/UB, and then Decision No. 2541/QD-UBND dated August 19, 2008, on amending some contents of Decision No. 2409/QD-UBND.

Decision No. 2409/2006/QD-UBND of the Provincial People's Committee on mechanisms and policies to encourage the development of handicrafts and industries. After 08 years of implementation under the

Decision, it has supported training and maintaining the profession for 56,298 employees and supported the attraction of 366 workers. However, the policy has been discontinued since 2014.

Under the Government's Decree No. 66/2006/ND-CP dated July 7, 2006, on the development of rural industries and Circular No. 116/2006/TT-BNN dated December 18, 2006, guiding the implementation of several contents of the Government's Decree No. 66/2006/ND-CP dated 7/7/2006 on the development of rural industries, the People's Committee of Thanh Hoa province has concretized by the master plans, details of craft village development such as Decision No. 902/QD-UBND dated March 24, 2011, approving the master plan on agricultural and rural development in Thanh Hoa province to 2020.

To implement the Government's Decree 45/2012/ND-CP on Industrial Promotion, in 2014, the Provincial People's Committee issued Decision No. 3567/QD-UBND on the Regulation on management and use of industrial promotion funds. local; at the same time, to encourage the development of industry, handicrafts, and trade, the Provincial People's Council has issued Resolution No. 29/2016/NQ-HDND. After 5 years of implementing Decision No. 3567/2014/ QD-UBND of the Provincial People's Committee, the craft villages have received very effective support in terms of advanced machinery and equipment for production; promoting products on information channels; participating in the Fair; visiting, learn from experience. As a result, 2,550 workers have been trained and 60 projects have been put into production with advanced machinery and equipment.

On November 10, 2015, the Chairman of Thanh Hoa Provincial People's Committee issued Decision No. 4620/QD-UBND approving the project "Protecting and developing traditional craft villages in ethnic minority areas" Thanh Hoa province in the period 2016-2020".

After more than 16 years of implementing the resolutions of the provincial government on the development of industries and handicrafts; Industrial promotion programs of central and local governments and activities of Thanh Hoa craft villages have achieved positive results: Industrial promotion programs have supported the training of 13,600 workers, 15 projects of bringing machinery and equipment. advanced equipment into production and 15 demonstration models; After 03 years of good implementation of policies to encourage the development of industry - handicrafts and commerce in the spirit of Resolution No. 29/2016/NQ-HDND, has supported 03 production investment projects in the district. 7.1 billion dongs in mountainous areas and 0.9 billion

dongs for the unit that has contributed to building 03 craft villages.

In general, the mechanism and policies of Thanh Hoa province for the planning and development of craft villages in the whole province are shown through legal documents which are quite good. Credit policies, support for vocational training, vocational transmission, and the opening of new vocational classes are very practical. However, the effectiveness of some policies is not high and the implementation is not fast. In addition, the capacity of the local staff from understanding the values of craft villages to organize, implement, and manage activities, and propose strategies to protect and promote the values of craft villages has not yet been established effectively. Many local leaders and managers have not attached importance to the development of craft villages, still, most of the households manage to survive on their own.

According to the Government's Decree No. 68/2017/ND-CP dated May 25, 2017, on the management and development of industrial clusters, the People's Council of Thanh Hoa province issued Resolution No. 29/2017/NQ-HDND dated 8/08. December 2016 on policies to encourage the development of industry, handicrafts, and trade in Thanh Hoa province and other investment incentives and support according to current regulations of law. Accordingly, projects and schemes for developing industrial clusters of craft villages are also interested such as the Establishment of the Tien Loc craft village industrial cluster in Tien Loc commune, Hau Loc district, Thanh Hoa with an area of 6.0 ha, with a total investment of 52.8 billion VND, implemented under the decision No. 325/QD-UBND of the People's Committee of Thanh Hoa province. The industrial cluster includes Traditional blacksmithing; production and processing of animal feed; to attract other industrial and handicraft production establishments. Established an industrial cluster of craft villages in Quang Chau - Quang Tho ward, Sam Son city with an area of about 25 hectares, investment capital up to VND 250 billion. Activities here include processing fish sauce, processing dried seafood (not producing fishmeal); refrigeration for seafaring; production and processing of handicraft products to serve tourists; carpentry (processing from slate to household wood products); small mechanics for handicraft production; warehouse of materials and equipment for the water industry... Besides, there are many small and medium-sized projects and projects that are continuing to be implemented.

It can be seen that the policies of the State and the province in the development of craft villages are very clear, but to effectively implement the mechanisms and

policies, it is necessary to have a team of leaders and managers with a strong heart. , has the scope for craft villages - a special type of heritage, an important potential in local socio-economic development. In fact, in many localities, the capacity of management staff related to craft village development is still weak, manifesting in the following phenomena: Delay in concretizing documents of local superiors or implemented but not effective; The perception of some local managers about craft villages is not correct, somewhat overlooked; Investment policies to protect and promote the value of craft villages are not effective; Some cooperatives and professional associations have been established, but there are still certain inadequacies in operation. In addition, in the state management of craft villages, there are still problems arising and existing, such as craft village planning, capital, technological innovation, industrial promotion, product diversity, and development. market, branding, inspection activities, inspection...

The organization and implementation of these tools are still inadequate by functional sectors (Department of Agriculture and Rural Development with Department of Industry and Trade and Department of Culture, Sports and Tourism). Like the vast majority of craft villages across the country, most of Thanh Hoa's craft village products have low quality, low competitiveness, and monotonous product designs; the production and business activities of several craft villages seriously affect the environment and urban ecology; awareness of law enforcement on craft villages is not high...

Finally, investment resources to develop handicrafts are still modest and inconsistent, mainly just initially invested in supporting vocational training and technological innovation, while there are still many stages that need to be improved. focus on production capital, craft village infrastructure... is also considered as one of the shortcomings and limitations in state management and mechanisms and policies that significantly affect the actual situation of production activities. production and business of craft villages in Thanh Hoa province.

VI. CONCLUSION

From the initial research results, it is shown that there are currently many craft villages in Thanh Hoa that are operating effectively, with good development trends such as agricultural, forestry, fishery, and food processing craft villages, and production craft villages. handicrafts... Craft villages have played a very important role in promoting socio-economic development in rural areas by creating many jobs for local people. workers, increase incomes and improve people's lives, and promote exports

in the integration process of the locality in particular and the country in general.

Craft villages in Thanh Hoa produce products all year round with different frequencies and quantities, only a few craft villages depend on seasonality. The level of product consumption tends to remain stable. Some craft villages are still developing well due to trends, consumer tastes are moving towards unique values with historical significance. However, there are also many occupations with a decreasing trend in product consumption because craft village products cannot compete and cannot find markets for consumption and product consumption.

To survive and develop sustainably, Thanh Hoa craft villages are looking for ways to adapt to the development and market needs. expand production, business, and invest in equipment. But attracting capital is very difficult, the lack of capital is one of the reasons why many craft villages have not developed properly in the current market economy.

Environmental issues have always been a hot spot when it comes to the activities of craft villages in Vietnam, but with specific policies and measures, the issue of environmental protection in Thanh Hoa is addressed by leaders and departments. Special interest. The environmental story has been solved quite well in Thanh Hoa craft villages. It can be assessed that this is one of the remarkable successes of Thanh Hoa province that not all localities can do.

The mechanism and policies of Thanh Hoa province for the planning and development of craft villages in the whole province are shown through legal documents which are quite good. However, to effectively implement mechanisms and policies, it is necessary to have a team of leaders and managers who have a heart and a vision for craft villages - a special type of heritage, and a potentially important role in local socio-economic development.

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The Evaluation of Mathematics Online Learning in Eight Grade Students of SMP Negeri 1 Sipahutar in Academic Year 2021/2022

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Abstract

Learning mathematics in Covid-19 (Corona Virus Disease) learning is very ineffective and cannot meet face to face directly between teachers and students, and other students Therefore, in learning during the COVID-19 pandemic, students are asked to study from home using online methods, namely through social media. This study aims to determine the ease and constraints as well as learning outcomes and the effectiveness of student learning in online learning mathematics for eight grade students of SMP Negeri 1 Sipahutar. Type of research is descriptive qualitative which takes place in SMP Negeri 1 Sipahutar. The data sources used are primary and secondary data sources. The techniques used in data collection are interview methods, observation methods, test methods, and documentation methods. The data analysis technique used is data reduction and data presentation. Based on the learning outcomes and the effectiveness of student learning seen from student learning outcomes tests showed that the percentage of classical learning completeness was 37.5%. Based on these results, mastery learning reaches the criteria of being unfavorable thus it can be concluded that online learning during the COVID-19 pandemic using the WhatsApp application in mathematics learning is not effective.

Keywords— Evaluation, Mathematics, online Learning.

I. INTRODUCTION

Education is an activity that is conscious and intentional and is full of responsibility carried out by adults to children so that interactions arise between the two so that the child reaches the desired maturity and takes place continuously. Education has an important role in advancing the Indonesian nation in the current era of globalization. Education is a process of changing attitudes and behavior of a person or group of people effort to mature humans through teaching and training efforts. Education today is determined by quality human resources. The purpose of education is to educate the life of the nation and to have good character. According to the Surabaya City Dispendik, Supomo (2020) "Current learning due to covid 19 (Corona Virus Disease) is not as effective as learning in class and cannot meet face-to-face between teachers, students and friends." Therefore, due to the COVID-19 pandemic, students are asked to study at home using online social media. So in learning mathematics many students complain are left behind in the subject matter, and cannot do the questions that have been given by the teacher. Because students have difficulty in working on the questions that have been given

by the teacher with social media. In this study the researcher chose the number pattern material on the grounds when the researcher conducted interviews with several students and the students said they were still difficult and confused in determining the number pattern. Therefore researchers need to take the material so that students understand about number patterns as well as the benefits that students get in number pattern material namely increasing students' reasoning power the better students' thinking is more critical and also learning is very important. in the daily life of students environment as well as in the community and their families. Researchers are interested in conducting research related to "Evaluating Mathematics Online Learning. The reason or background behind the researcher choosing this title and choosing the school is that in previous research, there has never been a study that has examined online learning at SMP Negeri 1 Sipahutar. So the researchers intend to research online learning at the school during the covid-19 pandemic.

II. REVIEW OF LITERATURE

Online Learning

Learning is a process of interaction between students and learning resources in a learning environment that includes teachers and students exchanging information. According to the Ministry of National Education, "In Law No. 20 of 2003 concerning National Education Education Article 1 Paragraph 20, learning is a process of interaction between students and educators and learning resources in a learning environment". Learning media are tools, methods, and techniques used in order to make communication and interaction between teachers and students more effective in the education and teaching process in schools. WhatsApp is an application designed to facilitate communication in the midst of current technological developments. WhatsApp is part of social media that makes it easy and allows all users to share information Jumiatmoko (2016), said WhatsApp is an internet-based application that allows each user to share various kinds of content according to the supporting features. WhatsApp is equipped with various features with advantages that can be used to communicate with the help of internet services. The WhatsApp media functions that can be utilized include being able to send messages, chat groups, share photos, videos, and documents.

WhatsApp advantages and disadvantages

Some of the advantages of WhatsApp Media are:

- a. Easy to use
- b. Practical and fast
- c. Save internet data
- d. Can be accessed only with mobile phones and has various features.

The weaknesses of WhatsApp, namely:

- a. The existence of different locations will have different effects on signal strength.
- b. The number of chats that enter the WhatsApp Group result in the cellphone's memory being full, so that the internet connection becomes slow.
- c. Chat that accumulates will be difficult to access because you have to scroll up to be able to follow the course of the discussion.

Ease and Constraints of Online Learning

Ease of use is the degree to which a person believes that the use of a system is not difficult to understand and does not require great effort from the user to be able to use it. The concept of convenience provides an understanding that if a technology is easy to use, then users tend to use the technology. Obstacles according to the Big Indonesian Dictionary defines the notion of obstacles as obstacles, obstacles with conditions that limit, hinder or prevent the achievement of goals. ease and constraints in online learning is an activity that can help easily and have

problems or obstacles to achieve the goals achieved through the process of interaction between students and teachers in a learning environment using electronic technology.

Evaluation of Online Learning for Middle School in Mathematics Subjects

The teacher acts as the spearhead or director of education in charge of preparing an attractive learning environment and facilities that support the development of the potential and morals of students. Learning mathematics as one of the junior high school subjects that has an important role in meeting the needs of students' lives. Junior High School is the initial level to instill concepts for students, so that the concepts received by students are the opening of their thinking power in facing the next level. In accordance with the nature of the subject matter of mathematics is abstract, then learning mathematics must be in accordance with the level of self-development of students. Learning in the midst of the Covid-19 pandemic is a challenge for teachers, students, and also parents. Learning is not done face-to-face makes students required to learn independently. Independent learning that seems forced makes students feel bored quickly and gradually virtual learning becomes reluctant to do students. Exercise is needed to foster the process of student learning independence, namely through positive discipline. According to Hidayat (1986) "effectiveness is a measure that states how far the target (quantity, quality and time) has been achieved where the greater the percentage of targets achieved the higher the effectiveness." Meanwhile Handoko (1997:7) explains that effectiveness is the ability to choose the right goals or the right equipment to achieve the goals set. Effectiveness level of ability to achieve goals appropriately (Devung, 1988:25).

III. RESEARCH METHODOLOGY

The type of research is qualitative research namely data collection in a natural setting, using natural methods and carried out by people or researchers who are naturally interested. The place of this research is in SMP Negeri 1 Sipahutar. The research is carried out after the online based mathematics learning is completed. The reason behind the researchers choosing the SMP Negeri 1 Sipahutar school is based on interviews with schools such as the principal or teachers in the junior high school that apparently there has never been a research that has examined online learning at the school and researchers are easier to research at the school because strategic place close to the city crowd and easy to reach So the researchers intend to research online learning during the covid-19 pandemic.

IV. RESULT AND DISCUSSION

A. The Validity of Test

Table 4.1 The calculation of the validation questions

No	R _{count}	r _{table}	Explanation
1	0,526	0,349	Valid
2	0,53	0,349	Valid
3	0,746	0,349	Valid
4	0,74	0,349	Valid
5	0,614	0,349	Valid

A. The Reability of test

Test reliability is calculated using the formula

Formula
$r_{11} = (k/k-1)(1-\sigma^2b/\sigma^2t)$

Before calculating the reliability of the test, the variance of each question and the total variance were calculated. By using the alpha formula the variance is obtained as follows:

Variance Formula
$\sigma^2 = \frac{\sum x^2 - (\sum x)^2/n}{n}$

Table 4.2 The Calculation of variance

Test	Variance
Formula	$\sigma^2 = \frac{\sum x^2 - (\sum x)^2/n}{n}$
1	0,694
2	0,968
3	1,415
4	0,983
5	1,297
$\sum \sigma^2b =$	5,357
$\sum \sigma^2t =$	10,758
R ₁₁	0,628

B. The Level of Difficulties

Table 4.3 The Calculation of difficulty level

No	B	Js	Difficulty level	Explation
1	108	32	3,375	Easy
2	72	32	2,250	Easy

3	78	32	2,438	Easy
4	55	32	1,719	Easy
5	59	32	1,844	Easy

C. The Different of test

Table 4.4 The Calculation of test

No	Ba	Bb	DP	Explanation
1	60	48	0,750	Very Good
2	41	31	0,625	Good
3	53	25	1,750	Very Good
4	39	16	1,438	Very Good
5	38	21	1,063	Very Good

D. The Easy, Constraints and Solutions in Implementation of Online Mathematics Learning in Eight Grade Students of SMP Negeri 1 Sipahutar

Learning activities are not limited by distance, time and place means that wherever they can take part in learning. In evaluating learning assignments the learning outcomes of students can be immediately known, in this case students send answers and then the teacher immediately corrects the answers so that the learning outcomes can be known directly. Meanwhile based on the results of interviews with students the average ease of online learning of mathematics is not having to come to school, In learning process can be accompanied by parents can access the internet network to find answers to questions given by the teacher and have a lot of time with family, Can play mobile phones, play more time, and don't need to get up early Constraints and Solutions for Online Learning Mathematics in eight grade students of SMP Negeri 1 Sipahutar. Based on the results of interviews with mathematics subject teachers the obstacles to online learning mathematics are: In evaluating learning activities teachers must be more focused and thorough because each student sends their answers individually. While in one day of learning there are three lessons students sometimes do not have internet data packages to support learning activities, students find it difficult to understand the material delivered by the teacher through online media, and the teacher cannot explain the material optimally. Meanwhile based on the results of interviews with students the average obstacles in online learning mathematics are students do not have their own cellphones as a facility for online learning activities. Students or parents do not have money to buy internet data packages, difficult to understand the material delivered by teachers via online media, cannot accompanied by parents, and the sometimes unstable internet network can interfere with learning activities.

Solutions to overcome the obstacles faced by teachers and students in online learning mathematics are:

- a. Teachers in evaluating learning activities must be more focused and thorough and every day must recapitulate student values so that mistakes do not occur.
- b. For students who do not have their own cellphones and internet data packages students can join their friends whose houses are closest.
- c. For students who cannot understand the material or questions given they can ask their parents. If you really can't the teacher can help answer student questions by sending answers or instructions for solving the problem.
- d. If parents cannot teach their children to understand the material or solve problems students can ask the people around them or with their friends.

V. DISCUSSION

1. Learning outcomes

The results of observations students ability to work on questions or tests during online-based mathematics learning through the WhatsApp application obtained the lowest student score of 40 and the highest score of 85 students.

Table 4.5 The Student Learning Score

Scores	Students	Categories
85-100	8	Very Good
70-84	4	Good
60-69	9	Fairly Good
50-59	8	Not good
<50	3	Poor Good
	32	

Based on the table above, information is obtained that the number of students in the very good category is 8 students, the score is 70-84 the number of students in the good category is 4 students, the score is 60-69 in the fairly good category as many as 9 students, the value is 50-59 the number of students in the poor category. good as many as 8, the value <50 the number of students in the bad category as many as 3 students,

2. Student Learning Effectiveness

Table 4.6 Learning Outcome Test

Mean Score	65,31
Maximum Score	85
Minimum Score	40
Classical Competence	37, 5%

Based on the table above, the average score of students is 65.31, the highest score is 85, the lowest score is 40. From the results of the learning outcomes test, it is known that the percentage of classical completeness is 37.5%. Based on the results mastery learning reaches the criteria of not being good, so it can be concluded that online learning during the covid-19 pandemic using the WatsApps application in learning mathematics is not effective.

VI. CONCLUSION

Based on the results of the data it can be concluded that online learning is learning without face to face directly between teachers and students, but is carried out online or by accessing the internet network by using social media to exchange information and interact using the WhatsApp group application. Ease of online learning, among others, for teachers, student learning outcomes can be known directly learning activities are not limited to distance, time and place, in the learning process can be accompanied by parents, students can access the internet network, students can take advantage of existing media in the surrounding environment, have lots of time with family, can play mobile phones, no need to get up early, and more playing time. While the obstacles experienced by teachers and students include teachers In evaluating learning activities teachers must be more focused and thorough, students do not have their own cellphones, students or parents do not have internet data packages, it is difficult to understand the material delivered by teachers through online media, lack of understanding of people so that they cannot teach their children, the internet network is sometimes unstable. Based on the learning outcomes and the effectiveness of student learning seen from student learning outcomes tests showed that the percentage of classical learning completeness for was 37.5%. Based on the results mastery learning reaches the criteria of being unfavorable, it can be concluded that online learning during the COVID-19 pandemic using the WatsApps application in mathematics learning is not effective.

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Promoting Natural Hazards Triggering Technological Disasters (NATECH) in Malaysia

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Abstract

Malaysia is a fast-growing country in Southeast Asia that is experiencing rapid technological development. This increases the risk of technological disasters and occupational hazards that can be triggered by natural hazards. This paper stresses the linkage of natural hazards with technological disasters, or NATECH, that remains a rather new term within the Malaysian context. Given the lack of current information on NATECH risk nationwide, this article intends to provide Malaysia-specific cases. This paper report on some significant local NATECH cases that have not been given any public access and not published in scholarly journal. I also highlight that communication and valuable information-sharing are crucial to an effective and efficient disaster management framework. There is still gaps and missing barriers in the nation's readiness and resilience towards NATECH disasters. In Malaysia, the information regarding NATECH risks has hardly been shared outside of the industrial fence, resulting in low level of awareness on the lessons and knowledge for better future proofing.

Keywords— Disaster Risk Reduction, Community Preparedness, Industrial Accident, NATECH, Infrastructure Resilience.

I. INTRODUCTION

'Natural hazards triggering technological disasters' or NATECH is a new term in the Malaysian repositories that has yet to become the center piece of many discussions revolving the technological accidents caused by extreme natural disaster. This also means that mitigation efforts are not orchestrated across sectors. The term 'NATECH' was first coined by Showalter and Myers [1] when they reviewed the causes of chemical accidents triggered by natural hazard events, a wide concern among researchers due to a climb in the number of accidents [2]. In this paper, the context of NATECH stretches beyond the chemical accidents caused by human error into natural hazards that are out of human's control (see [3]). The measures against NATECH in Malaysia are multiple, but most reside within the perimeter of an industrial facility. A broader application can only come true with knowledge sharing and learning from past experience to safeguard future operations. As emphasized by [4] historical events also contribute more reliable prediction of likelihood and frequency of NATECH events. The intention of this paper is to bring forth NATECH events that have not been widely made known to enhance the current knowledge

bank so that refinement and partnership can happen in our protection for our people and assets.

II. UNDERSTANDING THE NATECH GROWING RISKS

The impact from NATECH incidents, most profoundly caused by global warming, extreme climate change and vicinity to the Pacific ring of fire is huge. In the latest update by the ASEAN Coordinating Centre for Humanitarian Assistant on Disaster Management [5] in July 2019, Malaysia, Indonesia, and the Philippines lie directly on the path of the ring of fire. According to [6], communities around the Pacific Rim typically face hazards like earthquakes, tsunamis, storms, cyclones/typhoons, floods and bushfires. However, disaster impact is different across the nations based on the risk exposure and vulnerability towards disaster.

From 1998 to 2018, Malaysia has experienced 51 natural disasters. The latest floods and debris flows in 2021 and 2022 are caused by abnormal heavy rainfall events in the central peninsular and northern peninsular. While many stakeholders have been paying attention to these disasters,

specific attention should be given to its potential to trigger technological disasters that are defined as “low frequency and high severity”. These include the failure of facilities such as fuel storage plants, power plants, chemical plants due to natural disasters. In other words, if a technological disaster occurs, the death toll can become very high because of a series of technological failures occurred thereafter that affected the local community.

The scientific community has been discussing about NATECH scenarios for quite some time, [7 & 8] but discussion in the general public within the ASEAN region is still new [9]. The most well-known contextualization of a global effort in using science and technology to reduce disaster risk is perhaps the setup of the United Nations Office for Disaster Risk Reduction Asia-Pacific Scientific and Technical Advisory Group (UNDRR-AP-STAG). Through this group, the principles of NATECH risk management for the Asia-Pacific region are defined [10]. Currently, most documented NATECH disasters are those in the United States [11], Turkey [12] and the Great Eastern Japan Earthquake and Tsunami (GEJET) [13]. Malaysia has less documented records of NATECH incidents in comparison, but this has to change to enhance the nation’s response during a disaster [14]. A mindset shift has to occur among the people and the authorities to change for the better so that even the annual flood tragedies are no longer treated as a norm.

III. NATECH CASE IN MALAYSIA AND OTHER NATIONS

A relatively significant NATECH disaster in Malaysia is the fire at the PETRONAS buck storage tank in Johor Port caused by lightning strike. Based on an internal industrial investigation report in 2006, the event had caused widespread panic and a massive uncontrolled evacuation during midnight. Detailed information is hardly seen beyond the industrial fence [15], making it difficult for stakeholders to learn from the lesson for better safety enforcement at other premises. In February 2013, a similar NATECH incident occurred at the Terengganu Crude Oil Terminal (TCOT) in Kertih, Terengganu, where the T444 tank caught on fire because of lightning strike. Information of this event was again, contained inside the industry and not released to the general public.

The most recent event took place in Port Dickson in 2020. A refinery caught fire after being stroke by lightning according to a report from the Fire and Rescue Department. Lighting is a typical natural occurrence in Malaysia that is commonly mitigated by installing lighting arrestors at significant hazardous installation or hazardous material (HAZMAT) facilities. Some additional fire mitigation devices are also installed in chemical storage or

facilities to allow immediate intervention in the event of a lightning strike and ignition spark.

Although NATECH incident may triggered by any kind of natural hazards [16], lightning strike has caused the highest number of life-losses in Egypt in 1994 [17]. Indonesia also has a high record of NATECH caused by lightning in 1995 [18]. However, Malaysia has not disclosed its extensive list of lightning-related NATECH occurrences in a scholarly journal. The time is perfect for the government to conduct an extensive research on risk exposure and assessment for NATECH.

IV. RECOMMENDATION

Many parties have agreed that a lack of disaster preparedness within the community is catastrophic to the disaster response phase [19, 20 & 21]. Communities are the first to be hit by disaster and thus, their involvement and readiness are important in disaster management [22 & 23], The right knowledge and competency training have to be brought to them to build a resilient nation. The community must be informed about the risks in the area, including ecological risks, technological risks, and NATECH risks, especially for the community that is located next to an industrial sector. Information is essential, regardless of how sensitive it may be (certain industries may not disclose the quantity of hazardous materials they own owing to tight business policy, or to prevent panic, etc.). The planning and construction of the required infrastructure, including coastal embankments, as well as the required non-structural measures will be of the biggest benefit to the development of resilience. Design regulations and standards; chemical process safeguards; combined natural hazard and chemical process safeguards; land-use planning and disaster mitigation; and response planning can all help to reduce the danger of NATECH accidents to industrial or communities.

In this paper, I propose a partnership program that involve multiple critical stakeholders, which include the representative of the public or community leader, a representative of the public sector, the local government, the surrounding industrial players, and the subject-matter-experts from learning institutions to form the Consortium for Disaster Risk Reduction. An effective and efficient disaster risk management needs frictionless coordination among stakeholders that cannot be driven alone by a single entity. The public-private-academia partnership (PPAP) is the approach to an effective mutual strategy. Sharing all the technical, crucial and readiness information and resources from all stakeholders can upscale the entire district’s strength to respond to any disasters. The member of this team requires thinking, pondering, digesting,

information, analysis and wisdom. These three primary PPAP committees shall drive a comprehensive program.

The 1996-enacted Occupational Safety and Health (Control of Industrial Major Accident Hazard) (CIMAH) Regulations in Malaysia requires substantial improvement on the clauses that call for industry players to inform the surrounding community of the 'process hazards that can be accidentally released'. Clearer and more concise legal explanations need to be given to clauses such as the "Information to Public (ITP) programme shall be implemented on an annual basis to the majority neighbouring population." The 1996 CIMAH Regulation also did not specify the risk that NATECH may expose to Malaysian heavy industry, not to mention little has been mentioned on the legislation on the risk of chemical accident caused by NATECH incident [13].

V. CONCLUSION

Malaysia has a long journey ahead towards understanding and achieving the readiness to manage the emerging risk linked to NATECH. This paper intends to bring awareness towards NATECH disasters. Stakeholders need to be open on communicating the hazards, including the amount of HAZMAT storage to the local community within vicinity. This forms the first level of knowledge sharing and introduction to any design for risk mitigation. The establishment of PPAP takes this further, combining the knowledge of multiple parties to identify the local needs with the right expertise. This collaboration model may become handy in drafting and implementing disaster risk reduction policy to spearhead the nation's better response to NATECH-related disaster.

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