

EFFECTIVENESS OF THREE MODES OF TEACHING IN BASIC ENHANCEMENT COURSE BASED ON STUDENTS' PERFORMANCE

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Abstract

There are institutions that still use modules as part of delivering lessons to the learners. With these, the researcher aims to identify the effective modes to be employed by the teachers in any educational level related to the problems of the learners in their learning process in using modules. There are lots of problems with using the modules despite of its benefits especially in the delivering lessons to the learners. Educational experts cannot deny the fact that the modules cannot really be understood by the learners. They still need to be assisted by the teachers, parents or anyone who have enough knowledge with regards to the lessons stated at the modules. The research design for this investigation is the descriptive - comparative research design. The researcher would like to compare on the effectiveness of the three different modes identified which are the home-schooling teaching mode, blended teaching mode and traditional teaching mode. The researcher used purposive sampling in selecting the respondents. Furthermore, the researcher used mean, t-test, ANOVA and chi square as statistical tools to be used to analyse the data in different problems stated. After thorough analysis of the data, the researcher therefor concludes that a certain instructor can use any mode of teaching in the class; this does not affect the performance of the students. There is no difference in the level of performance of the BEC students in terms of their profile, and there is no such certain mode of teaching identified as effective to be used in the BEC class. Lastly, the researcher would like to recommend that an instructor must select any mode of teaching to be used in class depending on the learners' preference.

Keywords: Mode of Teaching, Blended Learning, Traditional Learning, Home- Schooling Learning, Teaching Strategies, Effective teaching strategies

1.1 INTRODUCTION

Learning of students is possible through many modes of teaching. Student- centered, teacher-facilitator modes are just some of the identified modes of teaching that are being used by the educators. Despite of the current situation that the world is facing, education must not be stopped, learning must be continuous. The rights of the children to education can still be fulfilled even if schools are closed. Exploring available learning modalities may not be easy at this point- but is possible (Muyot, 2020).

As the pandemic occur all over the world, everything had changed including the learning process of each student and the teaching modalities delivered by the teachers. It needs to adapt new capacity requirements and cease the traditional activities. There are lots of teaching and learning style have been introduced like digital and online delivery modes, mixed and versatile delivery modes, synchronous and asynchronous delivery modes, or a mixture of all of these alternative mode which replaced the traditional face to face mode. These changes have shocked the education system both on teachers and students; they need to deal with it just to continue the learning process. This sudden change raised concern among many teachers and students because a large segment of the population

has unstable internet connection and limited electronic devices (Pastor, 2020; Mirandilla-Santos, 2016).

In the Philippines, according to ADEC innovation, during the enrolment, the survey was conducted on the preferred mode of learning, more students prefer modular distance learning, next is the online class and lastly a blend face to face with other modalities. Most of the students chose the modular distance learning because of the problem with the internet connections especially in the rural areas like Sulu. Modular Distance Learning is learner's learning at their own pace, in their own way and using self-learning modules (SLMs). It can be printed/ digitized format/ electronic copy that is appropriate to the learners, and other learning resources like learners' materials, textbooks, activity sheets, study guides and other learning materials. Learners can access learning materials on computer, tablet PC, or smartphones, CDs, DVDs, USB storage and computer-based application can be used to deliver e-learning materials, including offline E-books (M.A. Llego 2020). Teachers and students used this mode to deliver the learning in its finest; it helps them both to make the learning environment easy despite of the challenges and issues in this era.

With the modes stated above, there are still consequences in delivering the learning to the learners despite of how detailed SLMs are. Teachers tried their best in creating SLMs to make it more understandable and fit to the learners' level of ability. However, some students in Sulu cannot really understand what are stated in their modules maybe because they don't have the access to tutorials; parents have lack of knowledge with regards to subject matters, internet access are poor; lack of electronic devices and etc. Thus, it is the reason behind why there are teachers specifically senior high school teachers of Mindanao State University - Sulu extends their help to the students to provide them the important learning they need. Some teachers used the home-schooling teaching mode to their students, some used the blended teaching mode and the other used the traditional teaching mode. With these different modes, the researchers would like to compare on the effectiveness of these modes to help the teachers in finding ways in delivering the learning to the learners in most effective way during the use of modules. The selection of the effective mode will be based through the performance of the basic enhancement course students.

To facilitate the process of knowledge transmission, teacher should apply appropriate teaching methods that best suit specific objectives and level outcomes. In traditional epoch, many teaching practitioners widely applied teacher-centered methods to impart knowledge to learners comparative to student-centered methods. Until today, questions about the effectiveness of teaching methods on students learning have consistently raised considerable interest in the thematic field of educational research (Hightower et al., 2011). Moreover, research on teaching and learning constantly endeavour to examine the extent to which different teaching strategies, methods or modes enhance growth in the students learning most especially during this pandemic.

1.2 Significance of the Study

This study may be beneficial to the following:

To administrator – this study will help them in guiding their faculty on what best mode or methods that they can apply in their respective classes or subjects. This would give them ideas to formalize at least one mode in their respective institutions, thus to avoid students' comparison among their teachers.

College instructors – in line with using the modules, this study will help the college instructor to assess themselves and the instruction modes that they are using if it is effective or not towards imparting the knowledge. This would also give them opportunity to choose on what particular modes that they can employ in their respective classes. This is for efficacy of teaching- learning process.

High School Teachers – This study will help them in managing the learning process with the learners through identifying the best modes to be utilized during this era. As an educator of secondary level, they can have the idea on the different techniques to be utilized in their teaching process that will make their profession easier and manageable. Since they are the ones that induce ideas to the learners, it is important for them to use techniques which will best fits with the learners.

Grade School Teachers – they will have a wider understanding on teaching and facilitating pupils as the pandemic change the concept of the educational system. Since they teach pupils, through this study they should gain knowledge to the different instructional approach to be employed in teaching with modules for the effectiveness of their lessons.

To educators in general – this study provides idea on what would be the most effective modes to be used in teaching with modules and make their teaching profession easy and enjoyable, rather than a burden because of the new state of educational system that the world is facing. Moreover, this would also enhance the credibility of teaching of a certain teacher.

1.3 Statement of the Problem

The aim of this study is to identify the effective modes to be employed by the teachers in any educational level related to the problems of the learners in their learning process in using modules. There are lots of problems with using the modules despite of its benefits especially in the delivering of the learning. Educational experts cannot deny the fact that the modules cannot really be understood by the learners. They still need to be assisted by the teachers, parents or anyone who have enough knowledge with regards to the modules.

The study specifically sought to answer the following:

1. What is the level of performance of the BEC students in the three modes of teaching?
2. Is there a significant difference in the level of BEC students' performance when they are group according to profile?

3. Is there a significant difference in the effectiveness of the Home- Schooling, Blended and Traditional modes of teaching based on the BEC students' performance?
4. How does each mode of teaching associate with the BEC students' profile?

1.4 Objectives of the Study

This study aims to solve the following research problems identified above. Thus, it aims to achieve the following objectives:

1. To determine the level of performance of BEC students in three modes of teaching.
2. To identify the significant difference on the level of performance when grouped according to profile.
3. To identify the significant difference on the effectiveness of the Home- Schooling, Blended and Traditional modes of teaching as based on the BEC students' performance.
4. To find out how does each mode of teaching associate with the BEC students' profile.

1.5 Scope and Delimitation of the Study

This study aims to compare the effectiveness of the home- schooling, blended and traditional modes of teaching based on the BEC students' performance. This study covers only three modes of teaching which was identified by the researcher. The respondents of this study is only limited to one section on basic enhancement course during summer in Mindanao State University – Sulu Senior High School Department. The researcher would just like to measure the different modalities and to look on its effectiveness for it to be recommended on certain institution. The researcher will use only one subject in this study.

2.1 REVIEW OF RELATED LITERATURE

In a survey of online faculty who had also taught face-to-face classes, it was found that one of the main differences in the instructional methods was that the online courses depend so much on texts (Teaching (2010)). It was pointed out, however, that online courses are also able to bring in much more information from virtual sources and these can be more seamlessly integrated than in a face-to-face course. Those faculty who were surveyed indicated that one of the main advantages of an online course was the fact students needed to write everything and this is seen as allowing for a deeper understanding of the material.

Sipes and Ricciardi, (2006) also examined the nature of online and face-to-face education and concluded that the main difference is that online instruction is student centered while traditional courses are instructor centered. Sugar, Martindale and Crawley investigated the difficulty of transitioning from one mode to the other (2007). Turball (2002) described his experience in translating his face-to-face course to the online environment. He points out that the process changes the instructor's role to that of a facilitator and creates a challenge to keep the learning active.

Several of the fundamental differences between learning online and in a traditional classroom setting were identified by McGovern (2004). These differences included the following: online learning requires students to have a certain level of computer skills and equipment that may not be necessary in the traditional environment; online instruction does not permit students the opportunity to learn by hearing since audio presentations are not normally available in online courses; and that online courses permit asynchronous learning rather than requiring students to be in a classroom at a given time and place.

One study surveyed an extensive list of students, from both domestic and foreign colleges and universities, who took classes in both mediums. The survey found that 48% of the students preferred the face-to-face medium and only 34% preferred online classes (Kishore, et al, 2009). Another study found that there was no difference in the teaching functions of an instructor presenting the same material in the two different media (Alonso and Blazquez, 2009). Kirtman (2009), researching the difference between online and face-to-face instruction, found a significant difference in favor of the face-to-face students on the same midterm but no significant difference on the same final examination.

Singh and Stoloff (2007) surveyed a class and found that students believed they learned as much in an online course as they did in a face-to-face class. Cragg, Dunning and Ellis (2008) found in their study of a course taught in two different modalities, that there was no difference in the outcomes. Tutty and Kleine (2008) found that facilitating both online and face-to-face collaboration can lead to the development of effective learning strategies.

Larson and Sung (2009) researched a course that utilized the same instructor teaching sections in face-to-face, online and in a hybrid modes and found no significant difference in the learning outcomes as measured in a common midterm and final. A study of the impact of the modality of instruction on student evaluation of instructors found that there was generally no significant difference in evaluations in terms of the format of instruction except in the case of minority instructors. Minority of the instructors received lower evaluations in a face-to-face medium than in an online one (Carle, 2009).

Teaching method is the way of teachers deliver the subjects to students by using certain methods corresponding to the characteristics of students that were encountered. Each student has different characteristics from the very clever, moderate, and there is also less able to receive lessons quickly. Therefore, a teacher must be able to apply the learning method in accordance with the characteristics of students. Unless the students whose middle - low ability will be left behind in the understanding of the material that is presented. And it will cause the students mentioned are not interested and lazy to learn because they have felt unable to do. Teaching method helps to determine the success or failure of a learning and teaching activity and it is a unity in teaching system. The more precise method that is used by teachers in teaching is expected to be more effective the achievement of learning goal (Qudsyi, Herawaty, Saifullah, Khaliq, & Setiawan, 2011).

2.2 Theoretical Framework

Below are some theories that would support the study with regard to the importance of methods of teaching.

According to Ayeni (2011), teaching is a continuous process that involves bringing about desirable changes in learners through use of appropriate methods. Adunola (2011) indicated that in order to bring desirable changes in students, teaching methods used by educators should be best for the subject matter. Furthermore, Bharadwaj & Pal (2011) sustained that “teaching methods work effectively mainly if they suit learners’ needs since every learner interprets and responds to questions in a unique way.”

As such, alignment of teaching methods with students’ needs and preferred learning influence students’ academic attainments (Zeeb, 2004).

According to Tambo (2003), teaching methods are important components for the curriculum for they determine how effective the objectives would be attained. The teaching methods are chosen based on the objectives to be attained.

Effandi and Iksan (2007) stated, “the quality of education that teachers provide to students is dependent upon what the teacher does in the classroom. The use of traditional teaching methods such as lectures in Geography classrooms has been the underlying factor for students’ poor performance in the subject.”

2.3 Conceptual Framework

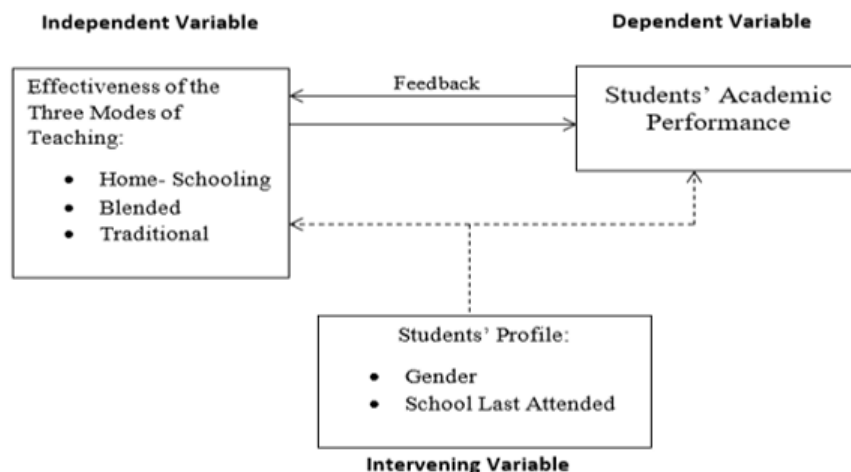


Diagram 1.1 Conceptual Paradigms

2.4 Hypothesis

H₀: There is no significant difference on the effectiveness of the Home- Schooling, Blended and Traditional modes of teaching as based on the BEC students’ performance.

H_a: There is a significant difference on the effectiveness of the Home- Schooling, Blended and Traditional modes of teaching as based on the BEC students’ performance.

H₀: There is no association on the mode of teachings with the BEC students’ profile.

H_a: There is an association on the mode of teachings with the BEC students’ profile.

2.5 Discussion of Conceptual Diagram

The diagram shows the relationship of the identified variables in this study. The effectiveness of the three modes of teaching: home- schooling, blended and traditional is the independent variable which seems to make the performance of the BEC students which is the dependent variable high and low. There is also an arrowhead line connected from the dependent variable to independent variable stating the feedback. The researchers believe that BEC students' performance will give feedback to the three modes which is the effectiveness. Correspondingly, the researchers also identify the students' profile: Gender and school last attended as intervening variable.

3.1 RESEARCH METHODOLOGY

This section describes the research design used in the study, research setting, research instrument, research respondents, methods of data gathering, and methods of data analysis.

3.2 Research Design

The research design for this investigation is the descriptive - comparative research design. The researcher would like to compare on the effectiveness of the three different modes identified which are the home-schooling teaching mode, blended teaching mode and traditional teaching mode.

Descriptive - comparative analysis means describing and explaining the similarities and differences of situations or consequences among large scale of social units such as regions, nations, societies and cultures (Smelser, 1973). Furthermore, a comparative perspective exposes weaknesses in research design and helps a researcher improve the quality of research. The focus of comparative research is on similarities and differences between units (Holt & Turner, 1970).

3.3 Research Locale

The study was employed in the Mindanao State University – Sulu Senior High School Department Capitol Site Patikul, Sulu. This campus is an autonomous campus of the Mindanao State University – System and it was established since 1974.

3.4 Research Respondents

The research respondents of this study were students in the researcher's section enrolled in basic enhancement course 2022 of Mindanao State University- Sulu Senior High School Department. The total number enrolled in researcher's section was divided into three groups to be utilized in three different modes.

3.5 Research Sampling

The researchers used the purposive sampling method. The researcher divided the section into three groups to be utilized in three modes of teachings. The division of students were selected randomly to balance the three groups in terms of their learning abilities.

3.6 Research Instrument

The researcher used a module which contains the lectures and the activities or evaluations needed. There is only one subject to be utilized which is science and technology. The activities were evaluated and used to assess the effectiveness of the identified three modes of teaching.

3.7 Methods of Data Gathering

The researcher follows the following procedures in gathering data. The researcher starts with the writing of letter to be noted by the Graduate School Dean asking permission to conduct the study in their respective department. Subsequently, the approved by the director of Senior High School Department, the researcher conducted the operation on the basic enhancement course. The researcher balanced the total number of the enrolled students in a section into three groups. The first group applied the home – schooling teaching, then the second used the blended teaching and the last group catered with the traditional teaching. Afterwards the researcher conducted the evaluation then checked, analyse and interpret the results.

3.8 Methods of Data Analysis

In managing and analysing the data to be collected, the researcher used the quantitative data analysis by using different statistical tools. In this study, the researcher identified four statistical tools to be used. First is the mean for the research problem on the level of performance of the students. Then the T-test for independent sample will be utilized to see the significant difference on the level of performance when grouped according to profile. To analyse the effectiveness of the Home- Schooling, Blended and Traditional modes of teaching as based on the BEC students' performance the researcher used the one- way analysis of variance (ANOVA). And to the last research question, the researcher used the Chi- Square to determine the association of the mode of teaching with BEC students' profile. The researcher ponders that the following statistical tool would be beneficial enough to analyse and synthesise the data collected to answer the different research problems.

4.1 Level of Performance in Different Mode of Teaching

Table 4.1 shows the level of performance of the BEC students in the three modes of teaching. In blended, it obtained 83.36 (Satisfactory) and a standard deviation of 8.168. Traditional obtained 87.21 (Very satisfactory) with standard deviation of 5.951, while Home-schooling got 85.071 (Very satisfactory) and standard deviation of 8.8184. Based on the tabulated data, the respondents have good performance in traditional mode of teaching. It means that it is good to have this mode of teaching when conducting the BEC program for students. With these, according to Kemp and Grieve (2014), face- to- face instruction provides dynamic learning attributes not found in web- based teaching.

Level of performance of the BEC students in the three modes of teaching

Mode of Teaching	Mean	Standard Deviation	Description
Blended	83.36	8.168	Satisfactory
Traditional	87.21	5.951	Very satisfactory
Home-schooling	85.071	8.8184	Very satisfactory

Legend: 90-100 (Outstanding); 85-89 (Very Satisfactory); 80-84 (Satisfactory); 75-79 (Fairly Satisfactory); 70-74 (Satisfactory); 65-69 (Fairly Satisfactory); 60-64 (Satisfactory); 55-59 (Fairly Satisfactory); 50-54 (Satisfactory); 45-49 (Fairly Satisfactory); 40-44 (Satisfactory); 35-39 (Fairly Satisfactory); 30-34 (Satisfactory); 25-29 (Fairly Satisfactory); 20-24 (Satisfactory); 15-19 (Fairly Satisfactory); 10-14 (Satisfactory); 5-9 (Fairly Satisfactory); 0-4 (Satisfactory); 5 below (Did Not Meet Expectation)

4.2.1 Difference in the level of Performance according to gender

The table 4.2.1 shows the significant difference in the level of BEC students’ performance according to gender. The findings showed that there is no significant difference on the students’ academic performance between male (M = 85.73, SD = 7.692) and female (M = 84.65, SD = 7.909) respondents; $t(40) = .447, p = .657$. The result suggested that the performances of the respondents have no difference.

Table 4.2.1. Significant difference in the level of BEC students’ performance according to gender

Gender	N	Mean	Std. Deviation	T	df	p-value	Decision	Remarks
Male	22	85.73	7.692	.447	40	.657	Accept H_0	Not significant
Female	20	84.65	7.909					

p-value of 0.05 and below are significant and above 0.05 are not significant

4.2.2 Difference in the level of Performance according to school last attended

The table 4.2.2 shows the significant difference in the level of BEC students’ performance according to School last attended. The findings showed that there is no significant difference on the students’ academic performance between Public (M = 85.35, SD = 7.627) and Private (M = 84.20, SD = 9.257) respondents; $t(40) = .310, p = .758$. The result suggested that the performance of the respondents based on their last school attended have no difference. It implies that no matter where the students graduated from does not define their performance on the Basic Enhancement Course.

Table 4.2.2. Significant difference in the level of BEC students’ performance according to school last attended

School last attended	N	Mean	Std. Deviation	T	df	p-value	Decision	Remark
Public	37	85.35	7.627	.310	40	.758	Accept H_0	Not significant
Private	5	84.20	9.257					

P-value of 0.05 and below are significant and above 0.05 are not significant

4.3 Difference on the effectiveness of blended, traditional and home- schooling based on performance

Table 4.3 shows the significant difference in the effectiveness of three mode of teaching based on the BEC students’ performance. The results revealed that the blended, traditional, and home-based in terms of the BEC students’ performance has no significant ($F(2) = .872, p = .426$). It implies that there is no accurate effective mode of teaching that

can be used in Basic Enhancement Course; it means to say that any of those modes of teaching are preferable to be used.

The study revealed that, effective teaching of practical agriculture enhances students' performance in the world of work; there was no significant difference between the mean responses of Agricultural science teachers on strategies for effective teaching of practical agriculture for self-employment in senior secondary schools in Bayelsa State, Nigeria. (K.K. Obiyai, P. Y. Olisa, 2022)

Table 4.3. Significant difference in the effectiveness of Blended, Traditional and Home-Schooling based on the students' performance

Mode of teaching	F	df	P	Decision	Remark
Blended					
Traditional	.872	2	.426	Accept H ₀	Not significant
Home-schooling					

P-value of 0.05 and below are significant and above 0.05 are not significant

4.4.1 Test on mode of teaching and gender

A chi-square test of independence was performed to examine the association between the gender of respondents and mode of teaching (blended, traditional, and home schooling). The association between these variables was not significant, $\chi^2 (2, N=42) = .191, p=.909$. The results suggest that males are more likely than females to prefer traditional.

Table 4.4.1. Chi-square test on mode of teaching and gender

Gender	Blended	Traditional	Home-schooling	χ^2	df	p-value	Decision	Remark
Male	7	8	7	.191	2	.909	Accept H ₀	Not significant
Female	7	6	7					

P-value of 0.05 and below are significant and above 0.05 are not significant

4.4.2 Test on mode of teaching and school last attended

A chi-square test of independence was performed to examine the association between the mode of teaching (blended, traditional, and home schooling) and school last attended of the respondents. The association between these variables was not significant, $\chi^2 (2, N=42) = 3.178, p=.204$. The results suggest that the respondents are mostly on the public school and they preferred home-schooling. In private, they preferred blended as the mode of teaching.

Table 4.4.2. Chi-square test on mode of teaching and school last attended of respondents

School last attended	Blended	Traditional	Home-schooling	χ^2	df	p-value	Decision	Remark
Public	11	12	14	3.178	2	.204	Accept H ₀	Not significant
Private	3	2	0					

P-value of 0.05 and below are significant and above 0.05 are not significant

5.1 DISCUSSION AND FINDINGS

The researcher aims to identify the effective methods to be used in the Basic Enhancement Course in Mindanao State University- Sulu Senior High School. After analyzing the data with the use of the statistical package for social science (SPSS), the data provide the following results stated in this portion.

In blended, the students got only satisfactory whereas in traditional obtained very satisfactory with the home-schooling mode of teaching. The respondents have good performance in traditional and home- schooling mode of teaching. It is best way to say that the traditional mode is the best method to be used rather than home-schooling if it would be based from the grades of the BEC students because of its difference.

Moreover, it is also stated that there is no significant difference on the performance in terms of gender and school last attended with the effectiveness of the three modes, the result simply state that there is no difference in terms of effectiveness of the three modes of teaching.

The association between modes of teaching and the gender was no significance, the results suggest that males are more likely than females to prefer traditional in terms of their frequency. It also examined the association between the mode of teaching (blended, traditional, and home schooling) and school last attended of the respondents. The results suggest that the respondents are mostly on the public school and they preferred home-schooling. In private, they preferred blended as the mode of teaching. This suggestion is in terms of the frequency of the respondents.

5.2 Recommendation for Future Research

Traditional teaching method has proved to be effective in classrooms based from the performance of the BEC students. It allows students to interact with each other and their teachers, allowing meaningful conversations and learning opportunities. This is especially beneficial for younger students like in senior high school who may not be able to use technology effectively yet and who don't have the access over internet. But there are also advantages with the blended mode of teaching like flexibility of time, more sources can be access during class hours and etc,. Same as the home- schooling like the parents can show their support and assistance to their children and a lot more. With that, the researcher recommends to the beneficiaries to choose on what is best mode of teaching to be used in BEC depending on the students' needs to learn the lessons in modules. If the learners need to have a thorough discussion on the lessons inside the module they can use the traditional mode of teaching or the blended mode of teaching. In other way around, they can use the home- schooling mode of teaching.

Research Agenda:

1. Empowering students in dealing with different mode of teaching strategies
2. Assessment on teaching strategies used by non-education graduate instructors
3. Integration of ICT in different mode of teaching its effect to the academic performance of the students

5.3 Conclusions

Based on the findings, the researcher concludes that there are no such effective modes of teaching that can be used to facilitate learning, most likely on BEC students. The instructor can use the blended, traditional and home- schooling mode of teaching depending on the learner or instructor preference. The researcher also concludes that there are no associations in the modes of teaching with the students' profile, male or female, from public and private has just the same state when the modes of teaching matters.

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