

**Provision of Remedial Studies and Fertilization of Ideas Through Attending  
Conferences, Seminars, Workshops for Instruction and Learning of the  
Sandwich Students in the University of Calabar, Cross River State-Nigeria**

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**Abstract**

The main purpose of this study was to investigate the provision of remedial studies and fertilization of ideas through attending conferences, seminars, workshops for instruction and learning of the sandwich students in the University of Calabar, Cross River State-Nigeria. To achieve the aim of this study, two research questions were formulated to guide this study. Literature related to the variables under study was reviewed according to the research question for the study. Ralph Tyler (Input) evaluation research design was adopted for this study. Secondary data and primary data were used in the study. A total sample of four hundred (400) respondents was randomly selected for the study. The selection was done through the stratified random sampling technique. The main instruments used for the collection of data were records, tables and the questionnaire. The questionnaire was subjected to face validation by the supervisor and experts in Measurement and Evaluation/Research and Statistics and Faculty of Education who vetted the items developed. The reliability estimate of the instrument was established through the test-retest reliability method. The data were collected personally by the researchers with the help of some research assistants. Based on the findings it was recommended among others that the university must ensure that it harmonizes the university long vacation with the Ministry of Education long holiday to enable more teachers to participate during their holiday.

**Key words: Provision of remedial studies and fertilization of ideas through attending conferences, seminars, workshops for instruction and learning**

## **INTRODUCTION**

The objectives of sandwich programme emphasize the training and production of teachers who are equipped with knowledge and skill for effective teaching. But according to Lock & Latham (2002), people perform better in an organization when they are committed to achieving certain goals. Where there are no commitments to the objective, a proper training and production of effective teachers will not be achieved, hence effective training and production of teachers can be achieved only with a share commitment to the criteria for effectiveness. Thus effective training and production of teachers can be achieved by ensuring a consistent and healthy commitment to the enrolment of students, provision of in-service training, making provision for remedial studies, awarding of degrees in instructional courses and fertilization of ideals through student participation at conferences and seminars.

Therefore, this study is to determine the trend of enrolment, the commitment to the provision of in-service training, availability of remedial admission, the trend of award of instructional courses, commitment to the fertilization of ideas, for the effective implementation of sandwich programme in Unical.

It is observed that the programme that was to be held in the vacation period of the University and state schools is now holding in juxtaposition to the regular students, which cannot support a healthy in-service training. This will make the state schools' students to suffer from insufficient attention from their teachers who will be absent from classes during their training, there is still a dearth of science teachers in the state public schools, it is also observed that there is insufficient time to

accommodate group work, seminars these can affect the overall implementation and outcome of the programme. The present work is therefore a focus on process evaluation of University of Calabar Sandwich Programme with a view of providing data for programme improvement.

### **Purpose of the study**

1. Find out whether Unical Sandwich programme provides remedial studies to increase the chances of entrants into the programme.
2. Determine how fertilization of ideas through attending conferences, seminars, workshops and study group improve instruction and learning of the Sandwich students

### **Research questions**

1. To what extent does Unical Sandwich programme provides remedial studies to increase the chances of entrants into the programme?
2. How does fertilization of ideas through attending conferences, seminars, workshops and study group improve instruction and learning of the Sandwich students?

## **LITERATURE REVIEW**

According to Merriam Webster dictionary, cross fertilization “is the interchange or interaction (as between different ideas, cultures, or categories) especially of a broadening or productive nature”. Cross fertilization of ideas is the mixing of ideas, gestures of different people to produce a better result. Cross fertilization of ideas in teaching can come in the form of informal discussion among teachers in same discipline about the best way to handle the teaching of a concept, or a topic, that seems difficult to pass across to the students. Some colleagues have better

ideas advantage on a particular topic over another colleague. “You get a greater idea by collaborating with greater diversity of creative people from various people mindset, motivation and orientation” (Philips, 2014).

Cross fertilization is a key for teachers’ creativity in term of teaching delivery. This is achieved when a group of people harness the methods people have used in teaching a concept. As agreed by Steve Job, “the key to creativity is to expose yourself to the things that humans have done and then to bring those things into what you are doing”.

The term cross-pollination was used by various authors. It involves carrying ideas from one teacher to add to the idea of another teacher to bring about a better idea. It is a collaboratory work especially from informal discussion in the classrooms of how to teach a particular concept or topic, to group discussion in conferences, seminars. A teacher must be ready to accept the ideas of another and reflect on possible way it can affect his ideas positively. “It is this way of being that supports ability, self- awareness, and opportunity to produce results in a short time that are superior to anything one person could alone” (Kartie B. Smith and Associate).

Cross fertilization of ideas will bring about innovation to teaching and learning. According to Tina Seeling (2014), she identified five ways to innovate by pollination, they are as follows

1. First and foremost, it can come in the form of “combining ideas” whereby a teacher and a researcher “re-organize and re-arrange the things” learnt “in order to come up with brand new ideas”.
2. Asserted we can “fertilize idea by talking to people”.

3. Innovation can come from building on existing ideas. During cross fertilization this is achieved by exposure to the “best things that humans have done”.
4. Lastly, it is used as metaphor and analogies to look at problems.
5. Innovation, new knowledge and idea come from cross fertilization of ideas through “complex interaction between many individuals, organizations and environmental factors”. The benefit of cross fertilization is summed up by Jack Welch in his 25 lessons of “Get Good Ideas “by sharing what you know you get what you don’t know.

Cross fertilization of ideas is seen as a tool by many of improving in what others are doing small or doing even badly in teaching. This is corroborated by Tom Kelly (2017), he wrote that Steve Job will tell his team to “go away brainstorm and give me back something else”, while Bill Gates, also one of the most successful innovator in the world would say on the other hand, “hey, let’s all look around and see what the other guys are doing badly or doing in a small way and lets here, at Microsoft do the same thing well or in a big way.

The informal discussions by teachers during West African Examination Council co-ordination, at the plenary session during workshop are good ways of cross fertilization of ideas for improved teaching. Cross fertilization of ideas in teaching can be a collection of ideas of teaching from many teachers that will help to make a whole lot of better ideas in one teacher who is receptive.

In summary, cross fertilization of idea is an important tool of innovation in teaching. It is the transfer of idea or taking of ideas in relation to a particular topic from another teacher who has a comparative advantage idea to better ones teaching.

These are ideas obtained from our concrete surroundings, the daily experimental concepts, conferences, workshops, seminars co-ordination, paper presentation, and informal interaction in classrooms by teachers, cultural integration. Any one that must benefit in cross fertilization must be ready to be opened to new ideas. The researcher will attempt to find out if the UNICAL sandwich programme has tapped on the enormous benefit of cross fertilization through at least any of the means listed.

As the world is advancing in science and technology, the demand for education is becoming high with corresponding high rate of graduation. The Statistics of Wiscosin Education aptly buttress this claim, the graduation trend is taken between 2011 and 2016 in bachelors degree, masters and doctorate. Between 2011 and 2016, the average graduation for each year was 10176. 5 representing average graduation in bachelor's degree to be 6707, with average master's degree graduation of 2126.5 , doctorate degree to be 789.2 and average professional degree of 658. A steady growth was observed in all degrees.

From 2011 to 2014, the graduation rate was below average for bachelor's degree but was progressively above average from 2015 -2016. While the graduation rate for each year was uniformly distributed around the average in master's degree programme. The rate of graduation is highest in 2016 because it recorded 10594 as against the overall average graduation rate of 10176.

Graduation rate is the percentage of a school's first time undergraduates who complete their programme within 150% of their published time for the programme. (Stetson archive) i.e. a first time, first year undergraduate of a four year degree programme who completes programme within 6 years of the time for the programme. It is to be noted that graduation of students is not garbage in garbage out scenario;

there are times percentage of students that graduated is lower or higher depending on the circumstances surrounding the students and the universities.

Graduation of students is the means of accessing the progress of the students and even institution. Rowe and Lievesley (2002) supported that the measurement of quality and teaching and learning within higher education sector should involve indicators which are significant in informing individual students and institutional performance. The ratio of graduation to enrollment is generally said to be reducing as result of several factors which include; frustration of students, when they are not motivated, work load as a result of carry over courses from failed courses in the previous semester.

The rate of graduation is increasing in most countries as the years go by. The ratio of graduation to enrollment is also relatively getting higher which is a sign that the world is achieving the charge in the declaration of 1948 of the right to education. Manpower in most disciplines is meeting its demand. For instance, the data collected by the Canada Education Center shows 796,440 students enrolled in undergraduate and graduate level in 2007/2008 programme in Canada of which 653,403 were undergraduates and 166,342 post graduates, and about 575,395 graduated as undergraduates and about 139,000 graduated as post graduate.

Graduation trends also vary from country to country when it comes to tertiary institution. Using the data provided by United nation education scientific cultural organization (UNESCO) between 2006 to 2010. It was observed that the average graduation rate of the following countries were as follows; Algeria, 144326, Bosnia Hezegovina is 16034.5 China 6829455, France is 628932.25 The country with the highest graduation rate is China and the lowest graduation rate is Bosnia Hezegovina.

Notice that the trend of graduation is on a steady increase within country. The trend of graduation is higher in advance countries like USSR, China and France. This is as a result of the demand for high skilled labor.

Enrollment statistics is always more than the number of students that graduate yearly. This may partly be as a result of the explosion in population with respect to the high birth rate. The University of Ghana legon enrolled 32,059 undergraduates and 4,820 post graduates students making a total of 36,879 whereas the total number of students that graduated is 7,722 i.e., graduation rate 2%.

Graduation can also be hindered by retention factors Stetson university study supported this idea, they said “graduation in terms of institution is the outcome of how many students graduate within a set from an institution”, it is either 4 years or 5 years for an engineering degree. The study maintained that graduation rate depends on the retention rate of students and retention is a “measure of the rate at which students persist in their educational programme and expressed as percentages. He says for 4 years institution this is the “percentage of first time bachelor degree seeking undergraduate from previous session who again enroll in the current session”.

## **RESEARCH METHODOLOGY**

The research design to be used for this study was evaluation design by Ralph Tyler, because it is the process of determining to what extent the educational objectives are actually been realized by the program. The study area is University of Calabar. The University of Calabar is situated in calabar, the capital city of Cross River State, Nigeria. The population comprise of all students of sandwich programmes in the University of Calabar between 2010-2014 for the admission trend, in-service training, remedial services and the 2018\2019 were used for the

questionnaire on the fertilization of ideas. Stratified random sampling was used to select the required sample for the questionnaire. Based on the sampling technique, 400 samples were taken from 13 departments of 709 students. Both primary and secondary sources of data was used for data collection. The primary source of data consist of questionnaire on student fertilization of ideas [QSFI] was developed by the researchers on University of Calabar sandwich students. The instruments were developed based on the variables: fertilization of ideas. The questionnaire on student fertilization of ideas consist of two sections; A and B, section A is designed to obtain information on the department, sex, While section B consist of 15 structured questions on the fertilization of ideas through seminars, conferences and workshops. 3 different tables to measure enrollment trend, in service training, remedial service of sandwich students for the years 2010-2015, The questionnaire will be a 4-point likert scale type, ranging from

The instrument was validated by experts in measurement and evaluation who ensured adequate face content validity. The reliability of instrument was established using Cronbach Alpha method. The reliability co-efficient ranges from .76 to .80bwhich was high enough. The researchers visited the sandwich programme departments with a letter of identification obtained from the Head of department of Educational Foundations, University of Calabar to the coordinator of sandwich Programme to obtain data (information on admission trend, in-service training, remedial studies ) for 5 years and current population of students in sandwich programme of UNICAL for the purpose of sampling.

### **Presentation of results**

This section deals with the analysis of the research questions directing the study. The data are presented in Tables using simple percentage.

**Research question one:** To what extent does Unical Sandwich programme provides remedial studies to increase the chances of entrants into the programme? To answer this research question, the items on table 3 in the appendix was analyzed. The result of the analysis is presented in Table 1.

TABLE 1

Results of students percentage of the mode of entry into sandwich programme

| Mode of Entry | 2010  | %     | 2011  | %     | 2012  | %     | 2013  | %     | 2014  | %     | 2015  | %     |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Direct entry  | 7370  | 59.05 | 9502  | 66.48 | 8550  | 57.82 | 9512  | 61.17 | 6940  | 58.89 | 8258  | 64.26 |
| MPP           | 5110  | 40.95 | 4792  | 39.52 | 6238  | 42.18 | 6038  | 38.83 | 4844  | 41.11 | 4592  | 35.74 |
| TOTAL         | 12480 | 100   | 14294 | 100   | 14788 | 100   | 15550 | 100   | 11784 | 100   | 12850 | 100   |

The result in Table 1 shows that while in 2010 those who are direct dominated the program with 7370 (59.05%), in 2011 direct entry also dominated the trend in admission 9502 (66.48%), in 2012 those who undertake the programme in direct entry 8550 (57.82%), in 2013 direct entry dominated the trends with 9512 (61.17%), in 2014 those who enrolled as direct entry are 6940 (58.89%), while in 2015 a total of 8258 (64.26%) who enrolled as direct entry dominated the admission trends. This implies that those who are direct entry dominated the admission trend between 2010 to 2015.

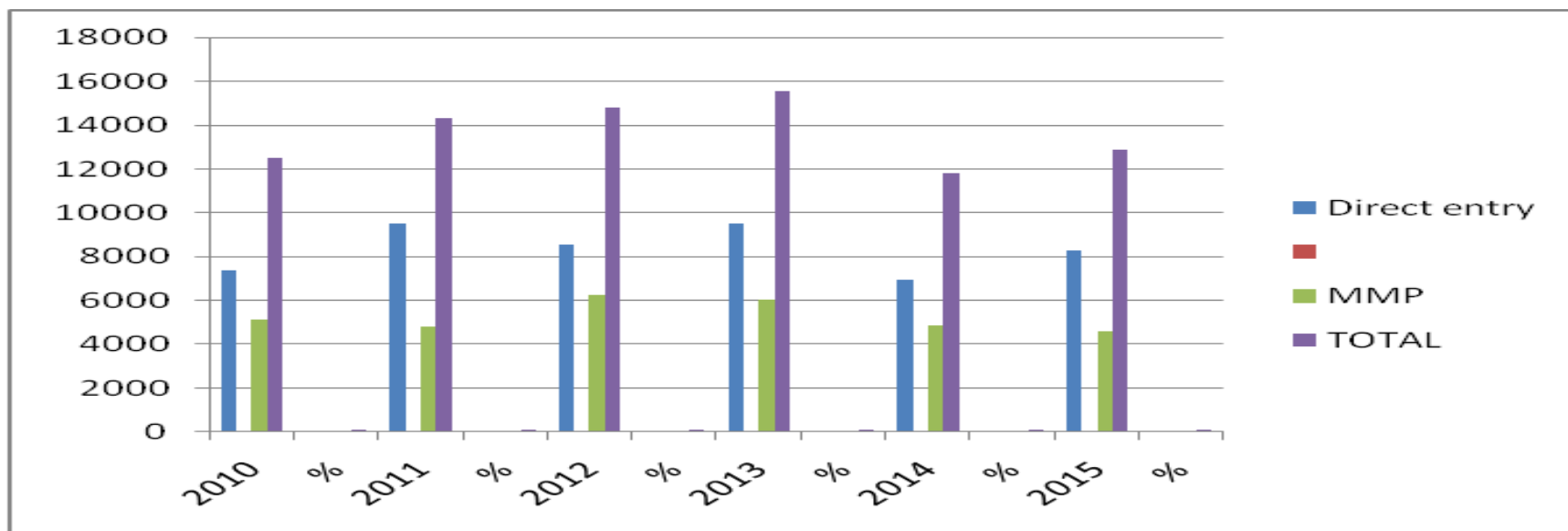


Figure 3: Percentages of sandwich students run the programme through in direct entry and MMP from 2010-20

**Research question two:** To what extent is the sandwich programme involved in the fertilization of ideas through conference, seminars, workshops and study groups to improve instructions and learning? To answer this research question, the items 19-24 of the questionnaire were analyzed. The result of the analysis is presented in Table 2.

TABLE 2

Response of the respondents on the extent is the sandwich programme involved in the fertilization of ideas through conference, seminars, workshops and study groups to improve instructions and learning

| S/N | ITEMS                                                                                            | RESPONSES |      |     |      | Total % |
|-----|--------------------------------------------------------------------------------------------------|-----------|------|-----|------|---------|
|     |                                                                                                  | A         |      | D   |      |         |
|     |                                                                                                  | f         | %    | f   | %    |         |
| 1   | Seminar presentation trains me to be confident before students                                   | 249       | 62.3 | 151 | 37.7 | 400 100 |
| 2   | Seminar presentation helps me to grasp some concept in details as a result of in-depth research. | 262       | 65.5 | 138 | 34.5 | 400 100 |
| 3   | Seminar presentation will help in gaining knowledge/idea of a particular topic from another      | 242       | 60.5 | 158 | 39.5 | 400 100 |
| 4   | Seminar presentation helps in                                                                    | 250       | 62.5 | 150 | 37.5 | 400 100 |

|    |                                                                                                                |     |      |     |      |     |     |
|----|----------------------------------------------------------------------------------------------------------------|-----|------|-----|------|-----|-----|
|    | covering a wide area of knowledge                                                                              |     |      |     |      |     |     |
| 5  | Knowledge gained from seminar presentation is long lasting.                                                    | 255 | 63.3 | 145 | 36.2 | 400 | 100 |
| 6  | Conferences help me to know the best method to teach your students                                             | 257 | 64.3 | 143 | 35.7 | 400 | 100 |
| 7  | Helps me to know the best way to source for materials and questions for students                               | 265 | 66.3 | 135 | 33.7 | 400 | 100 |
| 8  | Experience from conferences gives a better idea on how to teach the students                                   | 280 | 70.0 | 120 | 30.0 | 400 | 100 |
| 9  | Conference is a forum of learning different ideas about teaching and keeping records                           | 272 | 68.0 | 128 | 32.0 | 400 | 100 |
| 10 | You learn a superior idea from authorities that help in professional development                               | 267 | 68.8 | 133 | 33.2 | 400 | 100 |
| 11 | New ideas are often exchanged during group plenary session                                                     | 284 | 71.0 | 116 | 29.0 | 400 | 100 |
| 12 | The plenary session offers opportunity to ask questions that had hitherto bordered me, which is then discussed | 261 | 65.3 | 130 | 34.7 | 400 | 100 |
| 13 | It helps to practicalize new ideas for improvement in teaching                                                 | 300 | 75.0 | 100 | 25.0 | 400 | 100 |
| 14 | It helps to get new ideas from variety of resource persons                                                     | 290 | 72.5 | 110 | 27.5 | 400 | 100 |
| 15 | Workshop taught me how to improvise instructional materials                                                    | 278 | 69.5 | 122 | 30.5 | 400 | 100 |

From Table 2, it can be observed that 249 (62.3%) agreed that seminar presentation trains them to be confident before student, while 151 (37.7%) do not. Also, 262 (65.5%) agreed that seminar presentation helps them to grasp some concept in details as a result of in-depth research; while 138 (34.5%) do not. Also, 242 (60.5%) agreed that seminar presentation will help in gaining knowledge/idea of a

particular topic from another, while 158 (39.5%) do not. Also, 250 (62.5) agreed that Seminar presentation helps in covering a wide area of knowledge, while 150 (37.5%) do not. The result also shows that 255 (63.8%) of the total respondents agreed that Knowledge gained from seminar presentation is long lasting while 145 (36.2%) do not.

It can also be observed that 257 (64.3%) agreed that Conferences help to know the best method to teach students, while 143 (35.7%) do not. Again, 265 (66.3%) agreed that Helps to know the best way to source for materials and questions for students; while 135 (33.7%) do not. Also, 280 (70.0%) agreed that Experience from conferences gives a better idea on how to teach the students, while 120 (30.0%) do not. Also, 272 (68.0) agreed that Conference is a forum of learning different ideas about teaching and keeping records, while 128 (32.0%) do not. The result also shows that 267 (66.8%) of the total respondents agreed that You learn a superior idea from authorities that help in professional development, while 133 (33.2%) do not.

It can also be observed that 284 (71.0%) agreed that New ideas are often exchanged during group plenary session, while 116 (29.0%) do not. Again, 261 (65.3%) agreed that The plenary session offers opportunity to ask questions that had hitherto bordered teachers, which is then discussed; while 139 (34.70%) do not. Also, 300 (75.0%) agreed that It helps to practicalize new ideas for improvement in teaching, while 100 (25.0%) do not. Also, 290 (72.5%) agreed It helps to get new ideas from variety of resource persons, while 110 (27.5%) do not. The result also shows that 278 (69.5%) of the total respondents agreed that Workshop taught them how to improvise instructional materials, while 122 (30.5%) do not..

The results of the analysis indicate that the percentage of agreement for all the items are higher than the percentage of disagreement. This implies that the extent to

which the sandwich programme involved in the fertilization of ideas through conference, seminars, workshops and study groups to improve instructions and learning is significantly high.

### **Discussion of findings**

From the information obtained from research question 1, the analysis indicates the extent to which sandwich programme provided remedial studies for candidates who hitherto had no university requirements, which is low. The findings were contrary to the study of Tahir and Umar (1999) who observed that remedial schools have contributed in one way or the other to the development in the country. This is supported in a study in Ghana to know the contributions of remedial schools to the development in the country, the study involves 120 remedial schools, students, teachers, schools headmasters and educational directorates of metropolitan local government office. Questionnaires were administered on the sample population to solicit for responses. The survey reveals remedial schools do not only serves as means of preparing students adequately to pass their external examination but contribute immensely to employment generation, and provides a platform for skill upgrading. However he observed funding as a major problem confronting the remedial schools. He found out among many that remedial school helps students to strengthen their basic academic skills, like their ability to read, write, analyze, interpret and communicate students' opportunity for success at the labour market are significantly expanded. Remedial classes for college students who are at risk of failing are also found to improve in performance.

A remedial training was prescribed and given to the students who were at risk, significant improvement in performance was observed among the students who were

at risk to pass before the programme. However, argument cases has been made against the failure of the remedial programmes, students don't pay respect to teachers and often enter classes late. Remedial programmes can be used to help a student who is not doing well in class as an intervention programme. A formal evaluation and data from one, two and three are used to determine any eligibility for special education services (remedial). Wherever remedial programme is used as an intervention to bridge the gap created by deficiencies in academic qualification and proficiency to move further, whether in secondary schools, post-secondary to be able to enter another programme or in the university or higher institution to be able to follow up a programme, or may be to bridge the gap created by certain disadvantage be it economical, religion or cultural issues and problems have been identified.

The result of the second research questions revealed that the fertilization of ideas through conference, seminars, workshops and study groups have improved instructions and learning. The findings supported the study of Philips (2014) who observed that cross fertilization is the interchange or interaction (as between different ideas, cultures, or categories) especially of a broadening or productive nature". Cross fertilization of ideas is the mixing of ideas, gestures of different people to produce a better result. Cross fertilization of ideas in teaching can come in the form of informal discussion among teachers in same discipline about the best way to handle the teaching of a concept, or a topic, that seems difficult to pass across to the students. Some colleagues have better ideas advantage on a particular topic over another colleague. "You get a greater idea by collaborating with greater diversity of creative people from various people mindset, motivation and orientation. Cross fertilization is a key for teachers' creativity in term of teaching delivery. This is achieved when a group of people harness the methods people have used in teaching a concept. As

agreed by Steve Job, “the key to creativity is to expose yourself to the things that humans have done and then to bring those things into what you are doing”.

## **Conclusion**

- (1) The extent to which the sandwich programme provided remedial studies for candidates who hitherto had no university requirements is significantly low .Because at a point Mature People Programme was dropped.
- (2) The extent to to which sandwich programme involved in the fertilization of ideas through conference, seminars, workshops and study groups to improve instructions and learning is significantly high.

## **Recommendations**

- 1) The university must ensure that it harmonizes the university long vacation with the Ministry of Education long holiday to enable more teachers to participate during their holiday.
- 2) The Mature People Programme (MPP) , a type of remedial programme, must be consciously incorporated and encouraged by the programme coordinators.

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