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# Hybrid Instruction in Teacher Education Programs of State Universities and Colleges in Region III

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***Abstract*— Higher education is currently in the early stages of a major revolutionary change. Social, economic and technological factors are converging to shape the system of higher education to a new form, one providing a much more flexible form of delivery of instruction. In this time of transition towards digital revolution, hybrid instruction is used. It is any format of instruction which combines dynamically both technology and human instruction. The exemplary formats of hybrid instruction include computed mediated instruction, web-based courseware, distance learning as distribution channel and in-class use of technology as used in teaching professional education subjects enriched the learning opportunities of students and improvement of the instructional delivery as well. The study was conducted to assess hybrid instruction in nine (9) HEIs in Region 3 offering Teacher Education degree programs. The specific problems focused on the photo-tag of the faculty members; distribution of the faculty members to the Professional Education in subjects; extent of utilization of hybrid instruction; extent of attainment of lesson objectives using hybrid instruction as perceived by student respondents; administrative support extended; and problems encountered in the utilization of hybrid instruction.***

***Index Terms*— hybrid instruction, computer mediated instruction, web-based courseware, distance learning, in class – use technology.***

## I. INTRODUCTION

The twenty-first century ushered in a dramatic impact on the on-going technological revolution and communications and information technology. In the educational sector, it is changing our world and the context in which our students live and learn in a world that is extremely fast-paced, constantly changing, increasing culturally diverse, technologically driven and media saturated. Curriculum and instruction are the heart of an education endeavour, as they determine what is taught and how it should be taught. To meet the needs of the 21st century learner and achieve the student outcomes, schools should adopt the 21st century curriculum that blends thinking and innovation skills; information, media and ICT literacy; and life and career skills in context of core academic subjects and across interdisciplinary themes; and employ the methods of 21st century instruction that integrate innovative and research proven teaching strategies, modern learning technologies and real world resources and contexts (Perkins, 2008). New technological developments like e-learning are presently available in numerous academic institutions worldwide. Electronic learning or web-based learning provides varied updated information where it gives opportunity for both teachers and student to interact beyond the barriers of their schools and homes, a circumstances that is not possible in traditional classroom situations.

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In this time of transitions with digital revolution, hybrid instruction is used to minimize possible resistance from those who are not proficient in technology. A balance use of technology reduces the risks and helps find most suitable format. The use of multimedia laboratory, a series related activities using he technology facilitates more meaningful learning experience than pattern drills, likewise when students and teachers need more flexibility in learning experience, technology can be used in various group projects. Hybrid instruction according to Park (2000) is any format of instruction which combines dynamically both technology and human instruction. The range of the combination varies depending on the proportion of each component. There is a need to consider various factors running within the concept such as teacher participation, roles of instruction/students/other personnel as well as affective domains of both teacher and students. Considering the different together, there are four exemplary formats: 1) Computer Mediated Instruction where a multimedia program is the principal material that allow students autonomous learning on their individual paces, while the instructor does more facilitator's role rather than fully control the learning; 2) Web-based courseware where the media plays a role as a channel to communicate at the same time the container of the learning materials; 3) Distance learning as distribution channel wherein the use of delivery mode such as Video reference, Televised Distance Learning heavily supports the instructional delivery system and 4) In-class use of technology wherein technology is used as an additional material in a rather traditional setting.Some of the most important educational benefits using hybrid instruction is to help improve writing and computer skills. It also encourages self-directed learning, time management, problem solving and critical thinking analysis. Hybrid instruction maximizes the efficiency on the technology used by providing guides and necessary feedback concerning the technology. It also reduces the anxiety of students and teachers on the use of technology by providing friendlier learning environment for students. Furthermore, hybrid instruction help build relations and membership of learning community which full technology model students usually lack most. It can also adopt to different learning styles, makes wise use of time and provides wide range of resources that support various teaching modes. In view of theses heavily documented benefits and advantages using hybrid instruction, it remains a critical concern on the part of the educational setting and system in the Philippines that there remains a seemingly low adoption and integration of technology use to modernize instructional delivery system.


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It therefore becomes a necessary research priority to ascertain the extent by which classes have been organized and conducted with a more decisive concern for integrating technology in instruction, the extent by which hybrid instruction has supported students learning opportunities and correspondingly, the extent by which teachers embrace the full requirements and imperatives of using technology in the performance of their teaching assignments. This study is therefore conducted to provide answers to these educational concerns with the end-goal of generating relevant insights and information through which policy recommendations may be made to ensure and facilitate more dynamic, effective and relevant teaching and learning opportunities.

## II. OBJECTIVES

This study attempted to assess the utilization of HI in teacher education programs in Region III. Specifically intended to:

a) Determine the photo-tag of the faculty members in terms of academic rank, highest educational attainment, academic designation, number of years in service and professional subjects handled.
b) Identify the utilization of HI in the teaching of professional education subjects.
c) Identify the extent of attainment of objectives of HI by the faculty and students.
d) Recognize the administrative support extent for the utilization of HI.
e) Enumerate and categorize problems encountered in the utilization of HI.

## III. METHODOLOGY

A combination of comparative and correlation research design was used in this study. A total of 113 faculty members and 328 students of teacher education programs in Region 3 were included as respondents of this study. Questionnaires were used to gather data and were subjected to validation and reliability tests.Descriptive and inferential statistics were used to facilitate the analyses and interpretation of the data which comprised frequency counts, percentages , Chi square and Pearson Product Moment of Coefficient Correlation .

## IV. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

### FINDINGS:

### 1. Photo Tag of the Respondents

The bulk of the faculty (41 or 36.3%) respondents are holders of Associate Professor rank. Teachers have either completed or at the time of data collection were pursuing graduate studies. Most faculty members have no work designations other than teaching; and they had been in the service for 1-10 years.

**Table 1. Photo Tag of the Respondents**

| PHOTO TAG | FREQUENCY | PERCENTAGE |
|---|---|---|
| **Academic Rank** | | |
| Instructor | 23 | 20.4 |
| Assistant Professor | 40 | 35.4 |
| Associate Professor | 41 | 36.3 |
| Professor | 9 | 8 |
| **Total** | 113 | 100 |
| **Educational Attainment** | | |
| Bachelor's Degree | 10 | 8.8 |
| Masteral Units | 24 | 21.2 |
| MA Graduate | 24 | 21.2 |
| Ed D Units | 28 | 24.8 |
| Ed D Degree | 27 | 23.9 |
| **Total** | 113 | 100 |
| **Academic Designation** | | |
| Faculty (No designation) | 68 | 60.2 |
| Dean | 9 | 8 |
| Program Chair | 12 | 10.6 |
| Director | 7 | 62 |
| Subject Coordinator | 17 | 15 |
| **Total** | 113 | 100 |
| **Years in Service** | | |
| 1-10 | 49 | 43.4 |
| 11-20 | 27 | 23.9 |
| 21-above | 37 | 32.7 |
| **Total** | 113 | 100 |

### 2. Extent of Utilization of Hybrid Instruction

Of the 113 faculty respondents, there were only 102 who utilized hybrid instruction in their classes. Of this number, there were 43 or 42.2 percent who utilized hybrid in 1-2 assigned subjects and there were 20.6 who utilized in 5 and above subject handled.

**Table 2. Extent of Utilization of Hybrid Instruction**

| Number of Assigned Subjects where Hybrid Instruction was Utilized | Utilization of Hybrid Instruction | Frequency | Percentage |
|---|---|---|---|
| 1-2 | Low | 43 | 42.2 |
| 3-4 | Moderately high | 38 | 37.3 |
| 5 and above | High | 21 | 20.6 |
| Total | | 102 | 100 |

### 3. Subjects where Hybrid Instruction was Utilized

Hybrid instruction was used in all professional subjects handled by 102 teachers. Only 11 teachers claimed they did not use hybrid instruction since they had not acquired the skill of using hybrid technology to develop their lessons.

### 4. Extent of attainment of Objectives of Hybrid Instruction

Overall, the 3 objectives of hybrid instructions namely enrichment of the students learning opportunities, enhancement of the faculty members instructional delivery system and process and improvement were attained at a high level as shown in the mean that falls within the range of 3-41-4.20. The other 2 objectives such as attainment of learning competencies and enhancement utilization of technological development were perceived to be attained at a very high level by the faculty respondents.


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**Table 3. Extent of Attainment of Hybrid Instruction**

| Objectives | Extent of attainment | |
|---|---|---|
| | AWM | Descriptive Rating |
| **Enrichment of the students' learning opportunities** | | |
| 1. Creates opportunities for learning at own pace. | 3.94 | High |
| 2. Applies principles in the preparations of the collaborative reports/projects. | 4.04 | High |
| 3. Discovers ways for better access to learning. | 3.88 | High |
| 4. Devices own learning. | 3.81 | High |
| Over-all Weighted Mean | 3.92 | High |

As to the students perception on the attainment of the objective enrichment of the students learning opportunities, the students rated that it was attained at a high level as revealed in the mean of 3.92.

**5. Administrative Support for Hybrid instructions**

The support of the administration to the teachers who utilize hybrid instruction was determined in this study and findings are shown in Table 4.

**Table 4. Administrative Support for Hybrid Instruction**

| Administrative Support | F | % |
|---|---|---|
| A. Technical | | |
| 1. Training for instructional material preparation | 26 | 25.5 |
| 2. Training for computer literacy | 20 | 19.6 |
| 3. Use of audio visual facilities | 24 | 23.5 |
| B. Financial | | |
| 1. Budget released for preparation of hybrid instruction | 25 | 24.5 |
| 2. Purchase of computer unit | 21 | 20.6 |
| 3. Availability resources for production of media | 25 | 24.5 |
| C. Non-monetary incentives | | |
| 1. Distinctions and honorific titles | 22 | 21.6 |
| 2. Free training for hybrid instructions | 21 | 20.6 |
| 3. Provides scholarships and tuition fee discounts | 24 | 23.5 |
| D. Infrastructure development | | |
| 1. Availability of number of computer units | 25 | 24.5 |
| 2. Provision for internet access for faculty and students | 19 | 18.6 |
| 3. Availability of computer facilities and laboratory rooms | 14 | 13.7 |

All the technical, financial, non-monetary, and infrastructures development were provided by the administration for Hybrid Instruction in the Professional Education subjects. In particular, almost all those handling theories mentioned that they received technical support along the instruction materials preparations. Likewise, they also go technical support along computer literacy, use of audio visual facilities and use of internet.

**6. Difference in Utilization of Hybrid Instructions across Photo tag**

The differences in the extent of utilization of hybrid instructions across academic rank, educational attainment and years in service are not significant as shown in the chi square value and the significance which is greater than the 0.05 level while a significant differences in the extent of utilization of hybrid instruction across designation existed as revealed in the chi square value of 22.577 and the significance of 0.004.

**7. Relationship between the extent of utilizations and extent of attainment of Hybrid Instructions**

A significant relationship existed between the extent used hybrid instructions and the attainment of objectives along the enrichment of the student learning opportunities as shown in r value of -0.220 and the significance of 0.026. The extent of utilization of hybrid instructions as revealed in the r values and the significance which are all greater than the set 0.5 level.

**8. Problems encountered in the utilization of Hybrid instructions**

Of the listed and faculty related problems, the limited number of computer units for students were mentioned by 87 or 83.5 percent and 78 or 76.5 percent, respectively. On the other hand, the limited financial support was mentioned by 82 or 80.4 percent of the respondents.

## V. CONCLUSIONS

1. The faculty respondents teaching Professional Education subjects had lower academic ranks; pursuing or completed their graduate degrees; were plain faculty members; and were young in teaching experience.
2. All faculty members handled professional education subjects where they used the hybrid instruction.
3. The extent of utilization of hybrid instruction in Profession Education subject is quite low.
4. The faculty members used hybrid technology in almost all the Professional Education subjects handled.
5. All the objective of Hybrid instruction is attained at a high level.
6. The administrator provides sustainable and concerted efforts in the utilization of hybrid instructions.
7. The faculty members who have no academic designation used more hybrid instruction than those with academic designation.
8. The use of hybrid instruction is related to the enrichment of the learning opportunities of students.
9. Facilities and financial problems are encountered in the use of hybrid instructions.


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## VI. RECOMMENDATIONS

1. All facility members handling professional education subjects shall be encouraged to strengthen the use of hybrid instruction in their classes at most consideration of the appropriateness, applicability of the hybrid instruction format use and the corresponding competencies of faculty members to handle the requirement s of the hybrid instruction.
2. Faculty members who are assigned to each Professional Education Subject must be competent enough to teach different courses.
3. Faculty members should be prepared to assume redefined roles and must be willing to adapt technology in the professions as this is evolving to be standard and ideal instructional delivery system.
4. Training of the faculty must be technology and pedadogy-based to help them in the transition from pure classroom to instruction to the computer based instruction to the computer based instructions corresponding to the different type of format.
5. The high attainment of objectives of hybrid instruction along the enrichment of the learning opportunities, enhancement delivery system and process and improvement of classroom management need to be sustained. Thus, regular monitoring and evaluation of teachers' technology use and application must be made a regular activity of the HEIs improved.
6. Student perception on the attainment of the objective enrichment of the students learning opportunities must be sustained.
7. Technical, financial, non-monetary and infrastructure development provided by the administrative to support hybrid instructions be sustained.
8. SUC's should allocate adequate fund in developing hybrid instruction formats for the improvement of the school curriculum. Further, school administration should improve or upgrade classroom and Information Technology (IT) facilities in the university.
9. As an off shout of this study, an experimental study companies the effectiveness of pure online, hybrid instruction and traditional instruction should be conducted.
10. A similar study on hybrid instruction should be conducted not only within the professional education subjects, or on each of the cluster the said subject.

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