# Pedagogical Competence of Elementary Central School Teachers in Implementing the Blended Instruction Approach (Bia)

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*Abstract* — This study determined of the levels of pedagogical competence of the respondent-elementary central school teachers (ECST) in the implementation of BIA.
The respondents are typically young, female, married, educationally qualified, and had positive attitude towards implementing the BIA but they need to upscale their competence in computer-related tools for instructional purposes. Generally, the respondents are moderately competent in implementing the BIA, hence they need more in-service trainings focused on the different content areas of this approach.
The respondents' levels of pedagogical competence in implementing the BIA are different from each other when grouped according the categories of the independent variable which is number of relevant in-service trainings attended. The respondents' level of pedagogical competence in implementing the BIA is associated with the number of relevant in-service trainings. The "proposed in-service training for enhancing the pedagogical competence of the elementary school teachers in implementing the BIA" is relevant.
The following are strongly recommended: In-service trainings for improving the computer-related skills of the elementary school teachers should be programmed and implemented. In-service trainings enhancing the teachers' pedagogical competence in implementing the BIA should be developed and implemented.
Further studies on pedagogical competence in implementing the blended instruction approach (BIA) using other variables and conducted in a wider scope should be formulated and conducted under the auspices of accredited graduate institutions. Alternative studies on pedagogical competence in the use of other alternative approaches in education should be encouraged and promoted.
The proposed "In-Service Training for Enhancing the Pedagogical Competence of Elementary School Teachers in Implementing Blended Instruction Approach" should be approved by the education authorities and implemented.

***Keywords — Pedagogical Competence, Blended Instruction Approach, Elementary School Teachers, In-Service Training, Teaching Competence***

## I. Introduction

For the advancement of society, education is crucial. It offers the resources necessary for surviving in a constantly changing environment. It is crucial for the protection of national identity and culture. Al-Shuaibi (2014) asserts education helps people think, feel, and behave in a way that contributes to their success and improves their satisfaction and their community. Education

develops human personality, thoughts, and relations with others and prepares people for life's experiences and activities.

The CoViD-19 pandemic has affected all sectors of life all over the world. It created disruptions in the education systems. An estimated 1.6 billion learners in more than 190 worldwide were affected. Schools and other learning centers have been closed and impacting 94 percent of the world's student population and 99 percent in low and lower-middle-income countries. (Policy Brief: Education during COVID-19 and beyond, 2020)

The great challenge of conveying, inculcating character, and educating the next generation seems formidable. Thus, the Philippines education system took the challenge of continuing the teaching-learning process to all sectors, as part of the "education for all" program. Education must continue; life and culture must be sustained. COVID-19 pandemic forced the education sector to innovate alternative instructional strategies such as the blended instruction approach (BIA). It is a pedagogical strategy that integrates the distant education modular approach and the computer-based instructional strategy. It is an instructional strategy designed to sustain the teaching-learning process despite the restrictions under the "new normal."

Three (3) alternative learning delivery modalities (LDMs) that schools implemented were 1) distance learning (DL), 2) blended learning (BL), and 3) home-schooling (HS) Learning Delivery Modalities for Teachers, (2020).

Blended instruction was the most common choice of pedagogical strategy for achieving blended learning. Sheninger (2017) defined blended instruction as what the teacher does with technology while blended learning is where technology is used by the student to have control over the path, place, and pace of the learning activity.

Blended instruction is structured around the strengths of face-to-face instruction and e-learning and attempts at harmonizing the two approaches with the intent of maximizing the advantages of the two pure educational models (Thorne, 2003). It combines online and face-to-face activities which will result in more effective education (Means et al, 2009).

However, Cepik, et.al (2016) disclosed that the teacher-participants expressed a negative attitude towards blended instruction. This is because they do not have enough knowledge of blended learning. There is no training provided to the teachers, as well as, to the students. Werth and Kellerer (2013) assert that "the training must not cease in the time before implementation but should continue through the initial phases when struggles are likely to be greatest."

In this context, Jamon, et.al (2021) stated that teachers' training must be focused on the acquisition of the competency of writing and reproducing modules because this is not just a new skill to be acquired. It is also a skill that is stipulated in the Result-Based Performance Management System (RPMS) for the promotion of teachers in the DepEd.

It did not take a long time to show that the main factor in the success of the educational settings in the Philippines during the pandemic is having teachers possessing the skills in preparing and writing modules for learners. Adopting modular-distance learning is cater to learners who belong to low- and middle-income families, and those who have limited or no access to digital learning resources (Habler, Khalayleh, and McBurnie, 2020).

These results corroborated with the study of Yücel, and Koçak (2010) which revealed that respondents who possess basic competency in computer-related technology have, at least a mediate level of skills. Another study conducted by Malinina (2015) found that the respondent-foreign language teachers had only basic or intermediate levels of computer-related competence. Additionally, Güneús, et al. (2010) found that teachers reported themselves to be 'incompetent' in the subdivision of databases while the respondents deemed themselves 'very competent concerning the subdivision of basic computer operation skills. Furthermore, Sølvberga, Rismark, and Haaland (2009) literature survey found that teachers were 'insecure' in the use of technology.

Main while, according to an article by Absolum et al., (2009), the regularity of teacher's assessment in the classroom has a superior impact on student learning than any type of assessment conducted outside the classroom. Classroom assessments are particularly valuable to improve student learning. This is especially so when formative feedbacks are a means to help students to understand their learning tactics. The results of this study evid that teachers are moderately competent when it comes to the evaluation of the formative and summative learning outcomes. To improve this competency, teachers must also know the purpose of each type of assessment, and be able to discern what type of assessment applies to the student.

Aliyyah et al., (2020) observed that teachers and students are hampered by the pandemic in achieving all curriculum requirements. Some reasons for this observation are limited learning resources at home and the inability of parents to assist their children. As a result, Cahapay (2020) recommended that schools should change assessment scales from "quantitative to qualitative such as pass or fail system" when giving or assigning grades to learners in this new normal. For one thing, teachers faced different challenges. They are over-burdened with workloads such as printing and reproduction of modules, preparing weekly home learning plans, finishing school forms and reports, and doing those that are not related to their job description.

These difficulties in education are not unique in the Philippines. Niemi and Kousa (2020) observed that in more advanced countries where the best quality of education is provided, teachers also experience challenges with the assignments and examinations of learners. For example, teachers remain skeptical regarding the result of students' work. It is really difficult for them to determine whether their students really learned or they just copied their answers from others or the internet.

Assessments and grades remain debatable topics among education officials, teachers, and other stakeholders. The queries involve the relevance and implications of assessing and grading

students while securing their safety and health during the pandemic. DepEd has released guidelines for assessment and grading in light of the Basic Education Learning Continuity Plan. In the guidelines, teachers are encouraged to think critically in identifying the objectives and priorities in designing assessments and assigning grades based on students' learning outcomes. Feedback help determines whether or not the learners understood the lesson.

DepED printed and distributed self-learning modules for students who were not able to participate in online classes. The parents become "home teachers" overnight. They had to understand the lessons and activities in the printed modules. Thus, stronger communication ties between home and school were forged to effectively talk about learning goals, expectations, outcomes, and feedback.

The above-mentioned issues and challenges provided the context for this study. The researcher sought to determine the elementary central school teachers' pedagogical competence in implementing the BIA, specifically in 1) preparation and reproduction of modular learning materials; 2) using computer-related technology in Online Livestream instruction to pupils; 3) evaluation of the formative and summative learning outcome; and finally, 4) recording and assigning grades based on the achievements of the learners.

Moreover, the current study determined whether or not there are significant mean differences in the respondents' pedagogical competence in implementing the BIA across the profile variables. Further, the study determined whether or not there are significant relationships between the respondents' pedagogical competence in the implementation of BIA and the selected variables. Finally, the study formulated and proposed in-service training for the enhancement of the elementary school teachers' pedagogical competence in implementing the BIA.

## II. Methodology

### Research Method

This study used the descriptive-correlational research method. It is a descriptive-correlational study intended to describe a phenomenon through the collection of data and their presentation using frequency counts, percentages, and other simple statistics (Singh, 2006; Calderon, 2006).

The Pearson r coefficient of correlation described the relationship between the independent and the independent variables. This statistical treatment determined whether or not there are significant relationships between the levels of pedagogical competence of the respondents and the selected profile variables.

**Research Design**

This study used the *ex post facto* one-shot case study design. The research design is as follows:

X O, where X is the assumed exposure of the respondent-ECST, and

O is the observation (measurement) of the construct.

The observation or measurements made were taken in just one setting, hence it is a one-case study. It is *ex post facto* so the assumed exposure of the respondent-ECSTs was an event that happened before the measurements (Meimban and Meimban, 2021).

**Population and Locale of the Study**

This study used the multi-stage sampling design. The respondents involved in this study were selected randomly by employing a set of inclusion and exclusion criteria. The eligibility criteria ensure that data are drawn from respondents with comparable experiences and contexts. The criteria are as follows: 1) the teacher must be in service at the time of the study, 2) the teacher must be teaching an elementary subject, and 3) the teacher must have at least two years of teaching experience.

The study was conducted in DepEd Region 1, province of Pangasinan, which includes Pangasinan Schools Division I, Pangasinan Schools Division II, and the City Schools Divisions of Alaminos City, Dagupan City, San Carlos City, and Urdaneta City. One hundred eighty-five (185) elementary central school teachers (ECSTs) were randomly selected as respondents using the Multi-Stage Sampling technique.

**Sampling Design**

In general, the assumption is that in a school district the best elementary school teacher is assigned to the Central Schools. The Elementary Central Schools are considered the showcase of the entire school district.

The respondents selected from the final stage of the multi-stage sampling are representative of the whole population. Therefore, determining the level of pedagogical competence of the ECSTs in implementing the blended instruction approach (BIA) from the sample size could provide a picture of the pedagogical competence of the population of elementary central school teachers in the entire venue. Thus, the sample size represents the population of all elementary central school teachers (ECSTs) in the Province of Pangasinan.

The venue includes Pangasinan Schools Division I, Pangasinan Schools Division II, and the City Schools Divisions of Alaminos City, Dagupan City, San Carlos City, and Urdaneta City, all under the Department of Education (DepEd) in Region I. The preliminary information needed

is the list of all central schools in these divisions and the number of elementary central school teachers (ECST) in each. This study used the multi-stage sampling design to determine the respondents.

The First Stage included elementary central school teachers (ECSTs) in all Central schools in the province of Pangasinan. The two (2) provincial and four (4) city school divisions comprise this stage with 2,364 Central School teachers.

Stage 1. List of all Elementary Central School Teachers (ECSTs) in all Central schools in the Province of Pangasinan.

The Second Stage constituted the list of central elementary schools in each school division. The list was arranged from the biggest to the smallest school. The number of ECSTs from the three "Upper 50% of the central schools" and three from the "Lower 50% of the Central Schools" were selected randomly. The frequency of ECSTs at this stage is 1,114.

**Stage 2.** A list of three (3) central schools from the "Upper 50% of the central schools" and three (3) from the "Lower 50% of the central schools" is presented below:

**Frequency Distribution of ECST Across the Three Upper 50% and Three Lower 50% of Central Schools in the School Divisions of the Province of Pangasinan (Stage 2)**

**The Third Stage** constituted a list of three (3) Central Schools from the "Upper 50% of Central Schools" category, and three (3) "Lower 50% Central Schools" categories. There are 343 central elementary school teachers included at this stage.

**Stage 3.** The number of teachers in schools selected from the Upper 50% of Central Schools" and from the "Lower 50% of Central Schools" are listed below. This list was the basis for the computation of the sample size.

**Computation of the Sample Size Based on the Number of ECSTs in Randomly Selected "Upper 50%" and "Lower 50%" of the Central Elementary Schools from Each Schools Division (Stage 3)**

The sample size was computed using the Yamane (Slovin) formula:

$n_0 = N / [1 + (N e^{2})]$

Where $n_0$= minimum sample size

N= population

e=allowable margin of error

Hence:

$n_0 = 343 / 1 + (0.05)^2$
$= 343/ 1+ 343 (0.0025)$
$= 343/ (1 + 0.8575)$
$=343/ 1.8575$
$=184.66 \rightarrow$ **185 (Sample size)**

**Ethical Considerations**

All information provided by the respondents was held strictly confidential. The respondent's involvement in the data-gathering process was entirely voluntary. The study used all the data collected to achieve its objectives.

Further, the research used proper citations as a way of acknowledging and giving credit to the contributions of other researchers and writers. The researcher practiced strict intellectual honesty regarding all information collected for this study.

**Data Gathering Tool**

In the data-gathering process, the researcher used the questionnaire as the main tool. The questionnaire was presented in four (4) parts. Part I gathered information on the profiles of the respondents. The computer-related competence-, and attitude towards blended instruction of the respondents were also included.

Part II consisted of Likert-type items designed to measure the computer-related competence of the respondents. Part III also consisted of Likert-type items for measuring the respondents' attitudes toward the implementation of the BIA.

Lastly, Part IV measured the levels of pedagogical competence of the respondents in four areas, namely: 1) preparation and reproduction of modular learning materials; 2) using computer-related technology in online Livestream instruction to pupils; 3) evaluation of the formative and summative learning outcome; and 4) recording and assigning grades based on the achievements of the learners.

The measurements on the level of the respondents' pedagogical competence were interpreted using the following scale:

A= **Very Easy** (I do not need any help in doing it.)
B= **Easy** (I need very little help in doing it.)
C= **Moderately Easy** (I need little help in doing it.)
D= **Slightly Difficult** (I need much help in doing it.)
E= **Very Difficult** (I need much help and time to learn before I can do it.)

The researcher administered the questionnaire checklist through google forms. A pilot study was carried out involving 30 central elementary teachers.

**Data Gathering Procedure**

The researcher sought the permission of the School Division Superintendents to administer the questionnaire to the respondents to gather data for the study. She (the researcher) informed all concerned School Principals about the data-gathering process to ensure order and confidentiality of the information and data provided.

To ensure the content validity of the questionnaire the researcher requested the assistance of five experts in the field of teaching and supervision as evaluators of the instrument. The evaluators used the Content Validity Instrument by L. Meimban (1997, revised 2021) for the purpose. The evaluators consisted of three (3) School Principals from different central elementary schools, and two (2) Public School District Supervisors (PSDS) from the Balungao school district.

The researcher reproduced the questionnaire for gathering the data. She (the researcher) informed respondents about the nature and scope of the study. The questionnaire checklist was in Google forms and each respondent was requested to respond to all the items in this format.

Finally, all the data gathered were tallied, organized, analyzed, and interpreted.

**Treatment of Data**

Specific problem No. 1 which dealt with the profile of the respondents was answered using descriptive statistics namely, frequency counts and percentages. The level of computer-related competence and the respondents' attitude towards implementing the blended instructional approach (BIA) were measured using the weighted mean (WM), overall weighted mean (OWM), and the grand overall weighted mean (GOWM).

The study used WM of each indicator statement, OWM of each area, and the GOWM for the grand total to answer specific problem No. 2 which was about the level of pedagogical competence of the respondents in implementing the blended instruction approach (BIA).

The study used the one-way ANOVA to answer specific problem No. 3 on the comparison of the levels of pedagogical competence of the respondents in implementing a blended instruction approach in different areas. In the case of dichotomous independent variables such as in the variable "sex" however, the t-test for independent samples was used. All null hypotheses were tested using a 0.05 alpha level. The study used the *post hoc test* Tukey HSD to locate where the significant differences lie when the F-value is significant.

The study used the above-mentioned statistical treatment to test the hypotheses of no difference in all areas of pedagogical competence namely: a) Preparation and reproduction of modular learning materials; b) Using computer-related technology in Online Livestream

instruction to pupils; c) Evaluation of the formative and summative learning outcome, and d) Recording and assigning grades based on the achievements of the learners.

The researcher used the Pearson Product Moment Coefficient or Pearson r to answer specific problem No. 4 on relationships between the levels of pedagogical competence and the selected profile variables of the respondents. The discussion and interpretation focused on the findings regarding the variables obtaining R-values significant at a 0.05 alpha level.

Finally, to answer specific problem No. 5 on an enhancement training program, the basis was the indicator statements with the lowest WMs. The proposed training matrix included columns: 1) items with the lowest WM in each of the areas of pedagogical competence, 2) skill set to be enhanced, 3) objectives for attaining the specific skill set, 4) persons involved, 5) time frames, 6) allocated budget, and 7) criteria for evaluating success.

## III. Results and Discussion

Table 1 presents the frequency and percent distribution of the respondent-elementary central school teachers (ECSTs) across the profile variables. The highest and the lowest values in the variable categories were discussed.

**Table 1**
**Frequency Distribution of Respondent- Elementary Central School Teachers (ECST) across the Profile Variables**
**N=185**

| Variable | Variable Categories | Frequency | Percentage |
|---|---|---|---|
| 1. Age | 20-25 years old | 74 | 40.0 |
| | 26-30 years old | 12 | 6.5 |
| | 31-35 years old | 14 | 7.6 |
| | 36-40 years old | 23 | 12.4 |
| | More than 40 years old | 62 | 33.5 |
| 2. Sex | Male | 13 | 7.0 |
| | Female | 172 | 93.0 |
| 3. Civil Status | Single | 31 | 16.8 |
| | Married | 141 | 76.2 |
| | Widow/Widower/Separated | 13 | 7.0 |
| 4. Highest Educl Attainment | BS/AB | 21 | 11.4 |
| | BS/AB w/ Master's units | 106 | 57.3 |
| | MAEd/ MS | 46 | 24.9 |
| | Master's w/ Doctor's units | 8 | 4.3 |
| | Ed.D./Ph.D. | 4 | 2.2 |
| 5. Monthly Family Income | 10,000- 15,000Php | 10 | 5.4 |
| | 15,001- 20,000Php | 36 | 19.5 |
| | 20,001- 25,000Php | 106 | 57.3 |

| | | | |
|---|---|---|---|
| | 25,001-30,000Php | 31 | 16.8 |
| | More than 30,000Php | 2 | 1.1 |
| 6. No. of Relevant In-Service Trainings | 1 Training (8 hours) | 35 | 18.9 |
| | 2-3 Trainings (16-24 hours) | 29 | 15.7 |
| | 4-5 Trainings (32-40 hours) | 45 | 24.3 |
| | 6-7 Trainings (48-56 hours) | 29 | 15.7 |
| | 8 or Trainings (64 hours or more) | 47 | 25.4 |

**Age.** Seventy-four (74) of the respondents or 40 percent belong to the age bracket of 20 to 25 years old. Sixty-two (62) of them belong to the category of more than 40 years old. Only 12 of them or 6.5 percent belong to the 26-30 years old bracket. Most of the respondent-ECSTs are relatively young.

**Sex.** A majority (172) of the respondents or 93.0 percent of them are females. Only 13 of them or 7.0 percent are males. The elementary schools in DepEd Region I are typically female-dominated. At this level of the educational hierarchy, female teachers provide the smooth transition of the pupils' life from early childhood to young adulthood.

**Civil Status.** A majority (141) of the respondents or 76.2 percent are married. Thirty-one (31) of them or 16.8 percent are single. Married teachers seemed to display stability in their lives, and in their respective families as part of their day-to-day reality. This stability is displayed in their behaviors in the workplace.

**Highest Educational Attainment.** The majority (106) of the respondents or 7.3 percent have a BS/ BA plus some units in a Master's degree. Forty-six (46) of them or 24.9 percent are holders of a Master's degree. Twenty-one (21) of the respondents or 11.4 percent are holders of a BS degree in teacher education. There are four (4) of them or 2.2 percent who have earned a Doctor of Education (Ed.D.) or a Doctor of Philosophy (Ph.D.).

**Monthly Family Income.** A majority (106) of the respondents have a monthly family income of 20,001- 25,000Php, with 106 of them or 57.3 percent. Ten (10) of them or 5.4 percent belong to families with 10,000- 15,000Php monthly income. Only two (2) of them belong to families with a monthly family income of more than 30,000Php. According to the National Economic Development Authority (NEDA) classification, these teachers belong to the lower middle economic level of Philippine society.

**Several Relevant In-Service Training.** Most (47) of the respondents or 25.4 percent have attended eight (8) relevant in-service training that lasted for 64 hours or more. Forty-five (45) of

them or 24.3 percent have attended 4-5 relevant in-service training lasting for 32-40 hours. There are 35 or 18.9 percent have attended at least one (1) relevant in-service training. It can be deduced that the respondents are well-informed about the latest policies and programs of the DepEd because of their attendance in these relevant in-service training.

**Summary of Pedagogical Competence in the Implementation of Blended Instruction Approach (BIA)**

Table 2 shows the summary of the levels of pedagogical competence of the respondents expressed in OWM in every area in BIA in the elementary school.

**Table 2**
**Summary of Pedagogical Competence of Respondent-ECST in the Implementation of Blended Instruction Approach (BIA)**

| Areas | Overall Weighted Mean | Transmuted Rating |
|---|---|---|
| A. Preparation and Reproduction of Modular Materials | 3.219 | MC |
| B. Using Computer-Related Technology in Online Livestream Instructions to Pipils | 2.982 | MC |
| C. Evaluation of the Formative and Summative Learning Outcomes) | 3.251 | MC |
| D. Recording and Assigning Grades Based on the Achievement of the Learners) | 3.421 | MC |
| **Total** | **12.873** | |
| **Grand Overall Weighted Mean** | **3.218** | **MC** |

Legend:

| WM Score Range | Descriptive Rating | Transmuted Rating |
|---|---|---|
| 4.50-5.00 | Always (A) | Very Competent (VC) |
| 3.50-4.49 | Often (O) | Competent © |
| 2.50-3.49 | Sometimes (S) | Moderately Competent (MC) |
| 1.50-2.49 | Seldom (Sl) | Slightly Competent (SC) |
| 1.00-1.49 | Never (N) | Not Competent (NC) |

The GOWM=3.218 of the respondents' pedagogical competence is equivalent to moderately competent (MC).

The area of "recording and assigning grades based on the achievement of the learners" received the highest OWM=3.421. The lowest OWM=2.982 is in the area of "using computer-related technology in online Livestream instructions to pupils." The respondents got OWMs equivalent to moderately competent (MC) in all areas in implementing the BIA.

**Relationships between the Levels of Pedagogical Competence In the Implementation of Blended Instruction Approach and the Profile Variables**

Table 3 shows the correlations between the respondents' levels of pedagogical competence in implementing the BIA and their profile variable.

**Table 3**
**Correlations between the levels of Pedagogical Competence in the Implementation of BIA and Profile Variables**
**N=185**

| Area | Pearson Correlation | Age | Sex | Civil Status | Educl Attainment | Monthly Family Income | Relevant In-Serv Trainings |
|---|---|---|---|---|---|---|---|
| Computer-Related comp | r-value | -.023 | -.276** | -.201** | .087 | -.095 | -.489** |
| | Sig. (2-tailed) | .761 | .000 | .006 | .238 | .200 | .000 |
| Attitudes towards BIA | r-value | .090 | -.057 | -.036 | .109 | -.101 | -.033 |
| | Sig. (2-tailed) | .222 | .438 | .625 | .140 | .171 | .653 |
| Prep. & Repro of Modules | r-value | .036 | -.004 | .012 | -.003 | .007 | -.207** |
| | Sig. (2-tailed) | .631 | .952 | .869 | .970 | .929 | .005 |
| Using Computer Tech in OLS | r-value | -.095 | -.151* | -.193** | -.051 | -.107 | -.398** |
| | Sig. (2-tailed) | .196 | .040 | .009 | .490 | .146 | .000 |
| Eval of F&S Learning Outcomes | r-value | .007 | -.034 | .004 | -.043 | -.050 | -.254** |
| | Sig. (2-tailed) | .925 | .647 | .960 | .566 | .503 | .000 |
| Record & Assigning Grades | r-value | .077 | -.042 | .016 | -.040 | .005 | -.129 |
| | Sig. (2-tailed) | .300 | .571 | .824 | .586 | .947 | .081 |
| GRAND MEAN | r-value | .008 | -.128 | -.093 | .001 | -.070 | -.351** |
| | Sig. (2-tailed) | .914 | .082 | .209 | .986 | .346 | .000 |

*Significant at 0.05 alpha level

Table 3 presents the R-value of -0.276* sig. at 0.000 and R= -0.201* sig. at 0.06 both in the area of "computer-related competence" of the respondents indicate that the variables, "sex" and "civil status" are negatively correlated with the respondents' levels of pedagogical competence in implementing the BIA.

The negative R-value of -0.151* sig. at 0.040 and R= -0.193* sig. 0.009 in the area of "using computer technology in online Livestream instruction to pupils" likewise indicates that the female respondents' level of pedagogical competence is lower than those of their male counterparts. The findings in Table 11 attest that the male respondents indeed had a higher pedagogical competence than their female counterparts.

In this study, the variable category "male" was code 1 and "female" was code 2. The negative R-value means that as the respondents' level of pedagogical competence went down the numerical value code of the independent variable went up. This means that the females' pedagogical competence in implementing the BIA is lower than their male counterparts.

The independent variable, civil status was code 1 for "single" and code 2 for "married". Thus, the negative R-values indicate a decrease in the married respondents' levels of pedagogical competence in implementing the BIA.

Table 3 also shows the R-value of -0.489* sig. at 0.000 in the area of "computer-related competence" of the respondents; R= -0.207* sig. at 0.005 in the area of "preparation and reproduction of modules"; R= -0.398* sig. at 0.000 in the area of "using computer technology in online Livestream instruction to pupils"; R= -0.254* sig, at 0.000 in the area of "evaluation of formative and summative learning outcomes"; and R= -0.351* sig. at 0.000 in the "Grand Mean."

The negative R-values are all significant at a 0.05 alpha level of significance. Therefore, the null hypothesis stating "there are no significant relationships between the respondents' levels of pedagogical competence in implementing BIA and the profile variables, namely: sex, civil status, and the number of relevant in-service training" is rejected. This means that the differences in the respondents' levels of pedagogical competence in implementing BIA are associated with the independent variables.

However, the null hypothesis on the respondents' level of pedagogical competence across the independent variables, namely: age, highest educational attainment, and monthly family income," is accepted. This indicates that the respondents' levels of pedagogical competence in implementing the BIA are similar to each other, concerning the later variables.

Statistically, a negative correlation indicates a downward direction of the dependent variable as the value of the independent variable (higher numeric code) takes an upward direction.

## IV. Conclusion

The following conclusions are drawn based on the salient findings:

1. The respondents are typically young, female, married, educationally qualified, and had a positive attitude towards implementing the BIA but they need to upscale their competence in computer-related tools for instructional purposes.

2. Generally, the respondents are moderately competent in implementing the BIA, hence they need more in-service training focused on the different content areas of this approach.

3. The respondents' levels of pedagogical competence in implementing the BIA are different from each other when grouped according to the categories of the independent variable which is the number of relevant in-service training attended.

4. The respondents' level of pedagogical competence in implementing the BIA is associated with the number of relevant in-service training.

5. The "proposed in-service training for enhancing the pedagogical competence of the elementary school teachers in implementing the BIA" is relevant.

## V. Recommendations

The following are strongly recommended:

1. In-service training for improving the computer-related skills of elementary school teachers should be programmed and implemented.

2. In-service training enhancing the teachers' pedagogical competence in implementing the BIA should be developed and implemented.

3. Further studies on pedagogical competence in implementing the blended instruction approach (BIA) using other variables and conducted in a wider scope should be formulated and conducted under the auspices of accredited graduate institutions.

4. Alternative studies on pedagogical competence in the use of other alternative approaches in education should be encouraged and promoted.

5. The proposed "In-Service Training for Enhancing the Pedagogical Competence of Elementary School Teachers in Implementing Blended Instruction Approach" should be approved by the education authorities and implemented.

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