

Competencies of Teachers in Physical Education Programs of Higher Education Institutions in Region 10

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Abstract

This study assessed the level of competencies of teachers in Physical Education Programs of HEIs in Region 10. Ten HEIs in Region 10 comprised the institutional samples while 56 teachers respondents. A paper-and-pencil test and a questionnaire were used to gather data. Frequency, percent distribution, the mean, and two non-parametric tests, tested at .05 and .01 levels of significance, were used to analyze the data.

The findings showed that the PE teachers had poor teaching competencies in content knowledge but were found to have very good competencies in both professional and pedagogical skills. The over-all teaching competency level obtained was satisfactory signifying that the said teachers met the minimum local and global standards required. Of the teacher characteristics, only age was found not to be associated with competencies in content knowledge while 3 and 6 variables were found to be significantly associated with pedagogical and professional skills, respectively. As to differences in content knowledge competencies, 3 variables were found to be significant. Seven variables brought significant differences to scores in pedagogical teaching competency skills while only educational attainment was found to bring significant differences in professional competency skills.

Keywords: physical education, teaching competencies, content knowledge, pedagogical skills, professional skills

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The Physical Education Program in the country today has commonly been taken as a peripheral program or worse, as a mere appendage to programs which are generally considered relevant such as science and technology. Consequently, school administrators may have been lax in examining the competencies of teachers handling the PE programs. In addition, it has been observed that in most schools today, PE courses, basic or major, have the tendency to be regarded as "for requirement purposes only," thus adversely affecting decisions in the recruitment and selection of PE teachers.

The International Council for Health, Physical Education, Recreation, Sport and Dance (ICHPER.SD) and UNESCO jointly sponsored a United Nations (UN) Charter Declaration in 1976 on the need to establish global standards as bases for offering quality PE Programs in schools worldwide in order to promote the right to learn premises making it incumbent upon government agencies and HEIs to embrace physical education as a means to fulfill an individual human right by providing daily quality PE instructions for all students equal to that of other disciplines using quality content standards and to be provided by professionally competent and appropriately credentialed physical educators (Bucher and Krotee, 2002). Moreover, the ICHPER.SD and the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) along with other bodies, established the Global Standards for Professional Preparation of Physical Education Teachers in 2001 which emphasized that competencies of PE teachers must comply with the standards of content grouped in three domains – content or disciplinal knowledge, pedagogical skills, and professional skills.

Locally, the Commission on Higher Education (CHED) has been safeguarding the competencies of teachers such as those provided for in Memorandum Order No. 57, Series of 2007 promoting the Competency-Based Teacher Standards not specific though for PE, but for teacher education in general.

The fundamental role played by teacher competence in quality education is undeniable. It is, thus, apparent that efforts must be done to look into the status of teaching competencies of PE programs in the country, particularly in Region 10. Thus far, the competencies of teachers handling the Physical Education programs of HEIs in Region 10 have not been extensively assessed and analyzed based on global standards set by

ICHPER.SD and to some extent on the local standards set by CHED, therefore, the conduct of this study.

Aims of the study

This study mainly intended to assess the level of competencies of PE teachers handling PE Programs of HEIs in Region 10, and determine whether such competencies have met the minimum local and global standards prescribed by the various aforementioned bodies or agencies. Specifically, this study aimed to answer the following questions: 1. What are the characteristics of the PE teachers in terms of age, gender, civil status, educational attainment, trainings attended, academic rank, examinations passed, length of teaching experience, and area of specialization? 2. What are the level of competencies of the respondents in terms of content knowledge, pedagogical skills, and professional skills? 3. To what extent have the teaching competencies of the respondents met the minimum local and global standards required? 4. Is there significant association between teacher characteristics and the teaching competency scores in content knowledge, pedagogical skills and professional skills? 5. Are there significant differences in the teaching competency scores in all domains when the respondents are grouped according to their teacher characteristics? 6. What are the problems encountered by the PE teachers in relation to the PE programs?

Hypotheses

The following null hypotheses were tested at .05 level of significance:

- Ho1 There is no significant association between teacher characteristics and their teaching competency scores in content knowledge, pedagogical skills, and professional skills.
- Ho2 There are no significant differences in the teaching competency scores of the respondents in all domains when grouped according to teacher characteristics.

Conceptual Framework

The framework in Figure 1 showing the interrelationships of the variables studied and analyzed was used as a guide to insure the smooth conduct of this study.

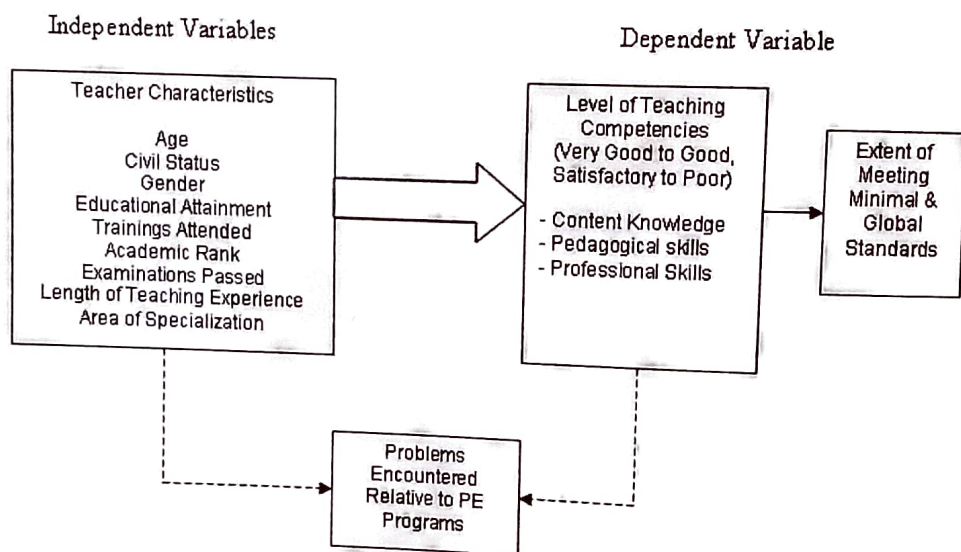


Figure 1. Conceptual Framework Showing the Interrelationships of Variables in the Study

Review of Literature

A specific provision of the International Charter for Physical Education established in November 1978 by ICHPER.SD and UNESCO provided the initial theoretical basis of this study. It states that “the teaching, coaching, and administration of PE and sports should be performed by qualified, well trained, and carefully selected competent personnel to insure adequate levels of specialization” (cited in Bucher and Krotee, 2002). In support of the said provision, the Teacher as Facilitator Framework of the Education Unit of Davidson College in the United States in 2002, argues that teachers must be facilitators of learning and must therefore, possess at least satisfactory teaching competencies and content/disciplinal knowledge, pedagogical skills, and professional skills. Pearson (1980) added that teacher competency is a situation where a

teacher meets the standards to teach satisfactorily rather than minimally and therefore, has the requisite skills to perform at this level.

The Entry Requirements for Physical Education Teachers of the Physical Education Department of New Mexico in the United States, supports the framework that physical education teachers must possess adequate teaching competencies in the three aforementioned domains (www.ed.psu.edu/ci/teacher). Moreover, the Global Standards for Professional Preparation of Physical Education Teachers established by ICHPER.SD in 2001 provided the final theoretical basis of this study. The Council emphasizes that a PE Program achieves compliance with the global standards when the competencies of PE teachers have met the minimum requirements for the standards of content in content knowledge, pedagogical skills, and professional skills.

The seven competency domains contained in the Teacher Performance Framework of the CHED Memorandum Order (CMO) No. 52, Series of 2007 also provided insights into the conceptualization of this study. Its seven competency domains established competency standards for teacher education in general, not specifically for physical education teachers (www.ched.gov.ph).

Methodology

Ten HEIs in Region 10, namely: MSU-IIT, Mountain View College, Central Mindanao University, Capitol University, De La Salle University, Pilgrim Christian College, Bukidnon State University, Liceo de Cagayan University, Lourdes College, and Medina College Foundation comprised the institutional sample drawn based on the offering of any baccalaureate degree in PE. Using complete enumeration, a total of 56 PE teachers of the said HEIs participated as respondents.

Based on the standards set by ICHPER.SD in 2001, the weight distribution of the teaching competency domains or components was as follows: content knowledge – 50 %; pedagogical skills – 30 %; and, professional skills – 20 %. In addition, the indicators for health and physical education in content knowledge were based on the 2004 Praxis Tests Physical Education Series of the Educational Testing Service of the United States while the indicators for pedagogical and professional skills

were adapted from the Entry Requirements for Physical Education Teachers of PED, New Mexico, U.S.A.

A scoring system including descriptive ratings was established with the passing mark set at 50 %. Questionnaires were used to collect data in teacher characteristics, teaching competencies in pedagogical and professional skills as well as problems encountered. A combined paper-and-pencil test and performance test was utilized to gather data in content knowledge competencies. Frequency, percentage distribution, and the mean were used in the analysis and presentation of data. The non-parametric Lambda A formula and the Kruskal-Wallis H test, tested at .01 and .05 levels of significance, were used to determine the associations and differences among the variables.

Data Presentation and Finding Highlights

Teacher Characteristics

Many of the respondents belonged to age brackets 26-35 years old (17 or 30.4 %), 36-45 years old (12 or 24.4 %), and 46-55 years old (14 or 25 %). Majority or 34 or 60.8 % of the respondents were married while 29 or 57.9 % were females. Twenty five or 44.7 % of them were graduates of baccalaureate degrees in PE while 18 or 32.2 % finished the master's degree in PE. Majority of the respondents, 36 or 64.3 %, had attended 5 or more trainings in PE and related fields. Many of them, 38 or 67.9 % passed the Licensure Examination for Teachers (LET) and 30 or 53.6 % had appointments as instructors. As to length of teaching experience, the respondents were almost evenly distributed in the various categories though 19 or 33.9 % had been teaching for 20 years or more.

Level of Teaching Competencies

Teaching Competencies in Content Knowledge

The data presented in Table 1 indicate that teachers of 5 HEIs had scores rated as poor teaching competencies in content knowledge while 4 HEIs had scores rated as satisfactory. The grand mean obtained by the respondents in this teaching competency component was 24.45 which was a little below the passing mark of 25. Thus, the PE teachers were found to

have a poor level in teaching competencies in content knowledge. As further shown in Table 1, of the 7 physical education indicators, the respondents were found to be at their weakest in movement forms analysis particularly in designing physical activity programs. They were, however, found to be quite competent in fitness & exercise science as well as in management of sports. Table 1 also shows that of the four (4) health indicators, the respondents were weak in personal health & care and in music.

This particular finding may bring a lot of implications to practically all sectors involved in the planning and delivery of tertiary physical education programs in Region 10. It must be remembered that disciplinal or content knowledge is at the core of these teaching competencies. Effective and competent teachers pursue their profession primarily as facilitators of learning (Education @ Davidson, 2002). If they are not knowledgeable of the subject matter they are teaching, serious questions may arise on their effectiveness as teachers and as facilitators of learning.

The relevance of this domain has been continuously emphasized by the ICHPER.SD (2000) in its Global Standards for Professional Preparation of Physical Education for Teachers and by its Program-Based Competency Standards of Achievement.

Table 1. Mean Scores & Levels of Teaching Competencies in Content Knowledge

Mean Scores & Levels of Teaching Competencies in Content Knowledge

Indicators	HEI1	HEI2	HEI3	HEI4	HEI5	HEI6	HEI7	HEI8	HEI9	HEI10	Mean Scores
A. Health & Music (15)											
Personal health & Care(4)	1.73	2	1.6	2	2.75	1.5	1.78	1.4	1.25	NR	1.77
Family & Sex Education(4)	2.73	2.5	2.2	3.96	3.25	3	3	1.4	1.25	NR	2.56
Community Health & Diseases (4)	3.27	3	4.6	1.86	3.25	3	2.33	2.2	2.5	NR	2.88
Music (3)	1.2	1	1.2	2	0.5	1.75	1.44	1.6	0.75	NR	1.25
B. Physical Education (35)											
Movement Forms Analysis A: (Dance/Sports(8)	4.2	3.5	4.6	6	5.25	2.25	3.77	2.2	2	NR	3.75
Movement Forms Analysis :Design (6)	0.47	0	2.5	1	0.5	0	0	0	0.25	NR	0.52
Fundamental Movement & Motor Learning (5)	2.13	1	2.8	2.58	2	1.5	1.77	2.4	1.75	NR	1.98
Fitness & Exercise (3)	2.4	1.5	3	2.57	3.5	2.5	1.77	2.4	1.75	NR	2.36
Social Science Foundation (4)	2.4	3	2	1.71	1.5	2	1.22	1	2	NR	1.86
Biomechanics/Kinesiology (4)	2.27	1.5	1.6	2	2	1.5	2	.4	1.5	NR	1.64
Mgt of Sports (5)	3.87	4	4.8	4.84	5.25	3.5	4.11	2.4	3	NR	3.96
Total Scores	26.67	23	30.9	30.42	29.75	22.5	23.19	17.4	18	NR	3.96
Grand Mean										NR	24.53
Descriptive Rating	Satisfactory	Poor	Satisfactory	Satisfactory	Satisfactory	Poor	Poor	Poor	Poor	No Response	Poor

Teaching Competencies in Professional Knowledge & Skills

In this component, the PE teachers of 5 HEIs were found to have scores rated as very good while the PE teachers of 4 HEIs had scores rated as satisfactory as shown in Table 2. The same table also illustrates that the grand mean score obtained by the respondents in this component was 16.7 rated as very good. The findings imply that the PE teachers of

HEIs in Region 10 are very competent in terms of professional skills particularly in responding to the needs of learners with diverse backgrounds, in being reflective about their work as teachers, and are inclined towards professional growth and development as well as in establishing collaboration with parents and the community.

Table 2. Mean Scores and Levels of Teaching Competencies in Professional Skills

Indicators	HEI 1	HEI2	HEI3	HEI4	HEI5	HEI6	HEI7	HEI8	HEI9	HEI 10	Mean Scores
A. Health & Music (15)											
Personal health & Care(4)	1.73	2	1.6	2	2.75	1.5	1.78	1.4	1.25	NR	1.77
Family & Sex Education(4)	2.73	2.5	2.2	3.96	3.25	3	3	1.4	1.25	NR	2.56
Community Health & Diseases (4)	3.27	3	4.6	1.86	3.25	3	2.33	2.2	2.5	NR	2.88
Music (3)	1.2	1	1.2	2	0.5	1.75	1.44	1.6	0.75	NR	1.25
B. Physical Education (35)											
Movement Forms Analysis A: (Dance/Sports)(8)	4.2	3.5	4.6	6	5.25	2.25	3.77	2.2	2	NR	3.75
Movement Forms Analysis :Design (6)	0.47	0	2.5	1	0.5	0	0	0	0.25	NR	0.52
Fundamental Movement & Motor Learning (5)	2.13	1	2.8	2.58	2	1.5	1.77	2.4	1.75	NR	1.98
Fitness & Exercise (3)	2.4	1.5	3	2.57	3.5	2.5	1.77	2.4	1.75	NR	2.36
Social Science Foundation (4)	2.4	3	2	1.71	1.5	2	1.22	1	2	NR	1.86
Biomechanics/Kinesiology (4)	2.27	1.5	1.6	2	2	1.5	2	.4	1.5	NR	1.64
Mgt of Sports (5)	3.87	4	4.8	4.84	5.25	3.5	4.11	2.4	3	NR	3.96
Total Scores	26.67	23	30.9	30.42	29.75	22.5	23.19	17.4	18	NR	24.53
Grand Mean											24.53
Descriptive Rating	Satisfactory	Poor	Satisfactory	Satisfactory	Satisfactory	Poor	Poor	Poor	Poor	No Response	Poor

Teaching Competencies in Pedagogical Knowledge & Skills

The same positive trend is observed in regard to the findings on the respondents' teaching competencies in pedagogical skills as illustrated in Table 3. In all indicators, the PE teachers of all 9 HEIs were found to have scores rated as very good to good. It can further be glimpsed in Table 2 that the grand mean obtained by the respondents in this component was 27.1 rated as very good to good. The findings imply that the PE teachers in Region 10 manage well their classrooms, are effective communicators, are inclined toward growth and development, are very adept in planning and teaching strategies, and are able to conduct fair assessment of learners.

Table 3. Mean Scores and Level of Teaching Competencies in Pedagogical Skills

Indicators (20)	HEI 1	HEI2	HEI3	HEI4	HEI5	HEI6	HEI7	HEI8	HEI9	HEI 10	Mean Scores
Diverse Learners(5)	3.8	5	5	5	5	4	4.8	5	5	NR	4.7
Reflection & Professional Development(7)	5.47	4	4.6	7	6	3.5	5.3	6.2	6.3	NR	5.4
Collaboration (8)	5.6	7	7	8	6.5	5.3	3.8	8	8	NR	6.6
Total Score	14.87	16	16.6	20	17.5	12.8	13.9	19.2	19.3	NR	16.7
Grand Mean											16.7
Descriptive Rating	Satisfactory	Very Satisfactory	Very Satisfactory	Very Satisfactory	Very Satisfactory	Satisfactory	Satisfactory	Very Satisfactory	Very Satisfactory	No Response	Very Satisfactory

Table 4. HEI Scores and Ratings in Teaching Competencies

HEIs	Content Knowledge (50)	Pedagogical Skills (30)	Professional Skills (20)	TOTAL SCORES (100)	Descriptive Ratings
HEI 1	26.4	23.5	14.9	64.8	Satisfactory
HEI 2	22.5	27	16	65.5	Satisfactory
HEI 3	28.6	26.8	16.6	72	Satisfactory
HEI 4	30.4	30	20	80.4	Very Satisfactory
HEI 5	29.9	28.5	17.5	75.9	Very Satisfactory
HEI 6	22.5	24.4	12.8	59.7	Satisfactory
HEI 7	23	27.5	13.9	64.4	Satisfactory
HEI 8	17.8	27	19.2	64	Satisfactory
HEI 9	20	29.6	19.3	68.9	Satisfactory
HEI 10	No Response (NR)	NR	NR	NR	---
Mean Scores Descriptive Rating	24.5 Poor	27.2 Very Satisfactory	16.7 Very Satisfactory	Grand Mean 68.4	Satisfactory

Over-All Level of Teaching Competencies

The PE Teachers of HEI 4 led in terms of teaching competencies in content knowledge, pedagogical and professional skills as illustrated in Figure 2. The grand mean obtained, 68.4 signified an over-all satisfactory level of teaching competencies of PE teachers in Region10.

Meeting the Required Minimum Local and Global Standards

The satisfactory level of teaching competencies is the minimum standard required by both local and global bodies/agencies for physical education. In the absence of local teaching standards that are specific for physical education, the global standards were utilized as basis of analysis particularly the Global Standards for the Professional Preparation of Physical Education Teachers by ICHPER.SD.

In terms of teaching competencies in content knowledge, the teachers handling PE programs of HEIs in Region 10 failed to meet the minimum standards required since they obtained a grand mean score of 24.53 rated as poor. This finding brings a cloud of doubt on the quality of physical education in the tertiary level not only in Region 10 but in the entire country. It must be remembered that content or disciplinary knowledge is at the core of teaching competencies since effective and competent teachers pursue their profession primarily as facilitators of learning (Education @ Davidson, 2002).

However, the findings on teaching competencies in both professional and pedagogical skills shown in Tables 2 and 3, indicate that the PE teachers did meet the required global standards beyond the minimum. They obtained a grand mean score of 16.7 for competencies in professional skills and, a grand mean score of 27.1 for competencies in pedagogical skills both rated as very good to good. As to the overall teaching competencies, Figure 2 shows that the respondents obtained an overall grand mean of 68.4 rated as satisfactory. Thus, the said PE teachers were able to meet the minimum global standards required by ICHPER.SD.

Test Results on Association Between Teacher Characteristics and Teaching Competencies

With the exception of civil status, the rest of the teacher characteristics – age, gender, educational attainment, trainings attended, academic ranks, examinations passed, length of teaching experience, and area of specialization - were found to be associated with content knowledge competencies using the non-parametric Lambda A formula. There is sufficient statistical evidence therefore to warrant the rejection of the null hypothesis stating an association of no significance between these variables except civil status whose consequent null hypothesis has to be accepted.

As to teaching competencies in pedagogical skills, only civil status and academic ranks were found to be significant predictors of pedagogical skills competency scores. Hence, based on this finding, the null hypothesis of no association is rejected in so far as civil status and academic ranks are concerned while the null hypothesis of no significant association has to be accepted as regard the rest of the teacher characteristics variable. Moreover, in terms of the third teaching competency domain of professional skills, civil status, educational attainment, academic ranks, examinations passed, and length of teaching experience were found to be significantly associated with this domain. This finding justifies the rejection of the null hypothesis as to the teacher characteristics mentioned.

Using Kruskal-Wallis H test for most of the teacher characteristic variables, and Mann-Whitney for gender, variations in teaching competency scores were observed when respondents were grouped according to the following characteristics: content knowledge – age, gender, educational attainment, and academic rank; pedagogical skills – age and civil status; professional skills – educational attainment. Therefore, the rejection of the null hypothesis insofar as the aforementioned variables are concerned, is warranted.

Table 5. Results on Tests of Association Between Teacher Characteristics and Teaching Competencies Using Lambda A Formula

	Content Knowledge		Pedagogical Skills		Professional Skills	
	A Value	Remarks*	A Value	Remarks	A Value	Remarks
Age	.21	WA	.06	NA	.09	WA
Gender	.17	WA	.06	NA	.04	NA
Civil Status	.03	NA	.18	WA	.17	WA
Educational Attainment	.26	WA	0	NA	.125	WA
Trainings Attended	.22	WA	.06	NA	.04	NA
Academic Rank	.32	MA	.25	MA	.22	WA
Length of Teaching Exp.	.17	WA	.06	NA	.14	WA
Examinations Passed	.17	WA	.05	NA	.54	MA
Area of Specialization	.28	WA	.06	NA	.0	NA

*WA –Weak Association; NA – No Association; MA – Moderate Association

Table 6. Results on Tests of Differences/Comparisons on Teaching Competency Scores According to Teacher Characteristics

	Content Knowledge		Pedagogical Skills		Professional Skills	
	H Value	Remarks*	H Value	Remarks	H Value	Remarks
Age	7.7	S @ .01	28.7	S @ .01	2.6	NS
Gender (Mann-Whitney)	3.9	S @ .01	-1.6	NS	3.7	NS
Civil Status	-4.7	NS	-12.6	S @ .01	-0.36	NS
Educational Attainment	11.6	S @ .05	.76	NS	25.8	S @ .01
Trainings Attended	4.08	NS	12.1	S @ .05	5.9	NS
Academic Rank	12	S @ .05	1.4	NS	5.9	NS
Examinations Passed	7.6	NS	-8.11	S @ .05	1.05	NS
Length of Teaching Exp.	-5.4	NS	11.3	S @ .05	5.4	NS
Area of Specialization	4.6	NS	10.1	S @ .05	5.8	NS

*S – Significant; NS – Not Significant

Problems in PE Program

When the respondents were asked to rank the problems they encountered in relation to the PE programs, the top problems in their order of priority were as follows: PE classes were too large to handle, lack of functional facilities like playing courts, inadequate sports equipment, lack of opportunities for training and studies, lack of basic amenities in gymnasiums, lack of reference materials, lack of concern on PE programs

by administrators, overloaded teachers, too many extracurricular activities for teachers, inappropriate scheduling of PE courses, and lack of preparation among PE teachers to handle skill-based PE courses.

Conclusions and Recommendations

Based on the Lambda A test results, the domains of teaching competencies were significantly associated with the following characteristics: content knowledge – age, gender, educational attainment, trainings attended, academic ranks, examinations passed, length of teaching experience, and area of specialization; pedagogical skills – civil status, and academic ranks; and, professional skills – civil status, educational attainment, academic rank, examinations passed, and length of teaching experience. Thus, the hypothesis of no significant association between the variables mentioned was rejected. As evident by the results of the Kruskal-Wallis and Mann-Whitney tests, tested at .05 level of significance, it was justified to conclude that there were variations in the teaching competency scores in the three domains when the respondents were grouped according to the following teacher characteristics: content knowledge – age, educational attainment, gender, and academic ranks; pedagogical skills – age, civil status, trainings attended, examinations passed, length of teaching experience, and area of specialization; and, professional skills – educational attainment only.

Based on the findings, the PE teachers of HEIs in Region 10 had poor teaching competencies in content knowledge but were very good in both pedagogical and professional teaching competency skills. Therefore the said teachers did not meet even the minimum standards for teaching competencies in content knowledge set by ICHPER.SD while they did more than satisfactorily meet the teaching competency requirements in pedagogical and professional skills.

It is recommended that the CHED set teaching competency standards specific to teaching physical education; in partnership with the HEIs the CHED must formulate short term and long-term teacher development programs to enhance teaching competencies with special emphasis on upgrading content knowledge. Also, the priority problems encountered by the PE teachers must be properly addressed by both the teachers themselves and the HEI administrators.

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