

## Research Article

# Elementary Sports Coaches' Competences on Pedagogical Content Knowledge and Continuing Professional Development in Taal District, Batangas, Philippines

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**Abstract:** This research aimed to analyze the elementary sports coaches' competences on pedagogical content knowledge and continuing professional development. It utilized the descriptive research design in a quantitative approach. The 57 elementary sports coaches in this study were chosen through random sampling technique. They were from 8 out of 16 public elementary schools of Taal District, Division of Batangas, of the Department of Education, Philippines. Survey questionnaire was used as the major data gathering instrument, validated by experts and subjected to reliability test, garnering 0.90 Cronbach's Alpha. Statistical tools were used like frequency, percentage, ranking, and composite mean in data treatment. Most of the respondents were 30-39 years old, female, married, college graduate, Teacher III, and with 1-9 years of teaching experience. They were both competent in terms of pedagogical content knowledge and continuing professional development. And lastly, only their sports coaching years of experience was significant with their competences.

**Keywords:** Competences, pedagogical content knowledge, continuing professional development.

## Introduction

Competence is a series of knowledge, abilities, skills, experiences and behaviors which leads to the effective performance of individual activities. It is measurable and could be developed through training. It is also breakable into smaller criteria (Maaleki, 2018). Competence is sometimes thought of as being shown in action in a situation and context that might be different the next time a person has to act. In emergencies, competent people may react to a situation following behaviors they have previously found to succeed. To be competent a person would need the ability and capacity to interpret situations in the context and to have the repertoire of possible actions to take and have trained in the possible actions in the repertoire, if this is relevant. Regardless of training, competency would grow through experience and the extent of an individual's capacity to learn and adapt. However, research has found that it is not easy to assess the competencies and competence development (ACE, 2011).

The concept of pedagogical content knowledge gained renewed emphasis with Lee Shulman. He argued that developing general pedagogical skills was insufficient for preparing content teachers as was education that stressed only content knowledge. The key to distinguishing the knowledge base of teaching rested at the intersection of content and pedagogy (Shulman, 1986; Solis, 2009). Pedagogical content knowledge is the teachers' interpretations and transformations of subject-matter knowledge in the context of facilitating student learning. Several key elements of pedagogical content knowledge are knowledge of representations of subject matter or content knowledge,

understanding of students' conceptions of the subject and the learning and teaching implications that were associated with the specific subject matter, and general pedagogical knowledge or teaching strategies. The knowledge base for teaching are curriculum knowledge, knowledge of educational contexts, and knowledge of the purposes of education (Shulman, 1987; Solis, 2009).

Professional development is learning to earn or maintain professional credentials such as academic degrees to formal coursework, attending conferences, and informal learning opportunities situated in practice. It has been described as intensive and collaborative, ideally incorporating an evaluative stage (Speck and Knipe, 2005). There is a variety of approaches to professional development, including consultation, coaching, communities of practice, communities of practice lesson study, mentoring, reflective supervision and technical assistance (NPDCI, 2008). Professional development may include formal types of vocational education, typically post-secondary or poly-technical training leading to qualification or credential required to obtain or retain employment. Professional development may also come in the form of pre-service or in-service professional development programs. These programs may be formal, or informal, group or individualized. Individuals may pursue professional development independently, or programs may be offered by human resource departments. Professional development on the job may develop or enhance process skills, sometimes referred to as leadership skills, as well as task skills. Some examples for process skills are effectiveness skills, team functioning skills, and systems thinking skills (Garet, *et al.*, 2001).

Coaches' perceptions were influenced by their experience, as low experienced coaches rated themselves at lower levels of competence and with more training needs; also, coaches with high education in Physical Education or others, perceived themselves as more competent than coaches with no higher education. The majority of the coaches perceived themselves to be competent but, nevertheless, they indicated to have training needs, which brings important feedback to coach education. Coaches are interested in increasing their knowledge and competence in broad range of areas which should be considered in future coach education programs (Santos, *et al.*, 2010).

In addition, strong leadership of sports coaches has the potential to optimize team functioning, collective efficacy and performance. Coaches always exhibited a higher leadership style in positive in positive feedback, followed by training and instruction, social support and democratic and low in autocratic behavior. It emphasizes that behaviors and practices of training of skills techniques and tactics of the sports; of building of positive atmosphere between coaches and athletes; and of giving of recognition and reward of good performance of athletes. They practice less on independent planning and independent decision making. Coaches, through their style of leadership actions and behaviors can really influence the pupil athletes' knowledge of the game, skill and performance level and team unity. Investigation of leadership behavior of sports coaches is crucial to understand the performance of sports teams. Continuous investigation about coaching leadership style and behaviors can facilitate the improvement of coaching performance as well as sports and athletics performance because effective coaching behavior has been shown to be an important determinant of team success (Ganaden *et al.*, 2017).

It is important to study the competences of elementary sports coaches to know if they possess good coaching competency skills in bringing up potential athletes for the country. Taal District, despite being smaller compared to other municipalities in terms of significant factors like school population and monetary sports fund, has been showing triumph in different sports competitions. The success can be attributed to the sports program being initiated by the district with the coaches spearheading the activities. It is very much true that the quality of the curriculum or an educational program cannot and will never exceed the quality of the teachers or sports coaches. The success of such programs lies within the abilities and dedication of their coaches, how they can transcend these in developing their athletes to be better versions of themselves relative to sports values. The District of Taal had once reached rank number three in the 2013 Division Sports and Athletic Meet Elementary Category out of 31 competing municipalities of the Division of Batangas. After attaining such triumph, the

performance of the district in this level of competition had gone low, even falling lower than rank 20. This has been a major concern of the district and needs to be evaluated and given just actions to realize major improvements.

With such claim that coaches fit a valuable piece in improving sports programs, it is very much necessary to identify the problems and gaps that hinder them in performing efficiently. At the same time, factors that can encourage them to deliver positively should also be considered and recognized. This study addresses all of these concerns as elementary sports coaches from Taal District will be evaluated in line with their competence. It is essential to coaches to determine their strengths and weaknesses regarding their roles in developing youth athletes to reach their full potentials. It will be easier for them to adjust themselves to the current status and situations of their players if they know the motivational factors that boost their interest in coaching young athletes.

### **Research Objectives**

This study aims to analyze the competences of elementary sports coaches in Taal District, Batangas, Philippines. Specifically, it sought to identify the profile of the respondents in terms of age, sex, civil status, educational attainment, teaching position, and years of experience in sports coaching. The teachers' sports coaching competences in terms of pedagogical content knowledge and continuing professional development would be analyzed. Lastly, the relationship between the sports coaches' competences and their profile variables would also be subjected to assessment.

### **Methodology**

This research utilized descriptive design in quantitative approach. The group of 57 sports coaches who served and participated as respondents of this study were from 8 out of 16 public elementary schools of Taal District, Division of Batangas, Department of Education, Philippines, during the School Year 2019-2020. The number of respondents was identified from the official list of sports coaches in Taal District. The chosen 8 schools were considered the bigger ones considering the school enrolment, as compared to the other half. It employed random sampling technique in identifying the number of sports coaches.

Survey questionnaire was the major data gathering instrument in this research. It was validated by experts in education and was subjected to reliability testing. It gained a 0.90 Cronbach's Alpha, which means that the instrument is good enough to be utilized and well-prepared for administration. Descriptive statistical tools like frequency, percentage, ranking, and weighted mean were used in treating and analyzing the data.

### **Results and Discussion**

Table 1 shows the profile of the teacher-respondents in terms of age, gender, civil status, educational attainment, teaching position, and sports coaching years of experience.

**Table 1. Profile the Teacher-Respondents**

<b>Profile Variables</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Rank</b>
<b>Age</b>			
20-29 years old	11	19.3	2 <sup>nd</sup>
30-39 years old	25	43.9	1 <sup>st</sup>
40-49 years old	11	19.3	2 <sup>nd</sup>
50-59 years old	10	17.5	4 <sup>th</sup>
<b>Sex</b>			
Male	08	14.0	2 <sup>nd</sup>
Female	49	86.0	1 <sup>st</sup>
<b>Civil Status</b>			
Single	12	21.1	2 <sup>nd</sup>

Married	42	73.7	1 <sup>st</sup>
Widowed	03	05.3	3 <sup>rd</sup>
<b>Educational Attainment</b>			
B.E. Ed.	36	63.2	1 <sup>st</sup>
BEED with MA units	20	35.1	2 <sup>nd</sup>
Master's Degree Graduate	01	01.8	3 <sup>rd</sup>
<b>Teaching Position</b>			
Teacher I	15	26.3	2 <sup>nd</sup>
Teacher II	14	24.6	3 <sup>rd</sup>
Teacher III	25	43.9	1 <sup>st</sup>
Master Teacher I	03	05.3	4 <sup>th</sup>
<b>Sports Coaching Years of Experience</b>			
1-9 years	25	43.9	1 <sup>st</sup>
10-19 years	23	40.4	2 <sup>nd</sup>
20-29 years	09	15.8	3 <sup>rd</sup>

The profile of the sports coaches is presented on Table 1. Most of them were 30-39 years old (25 or 43.9%), female (49 or 86%), married (42 or 73.7%), graduate of Bachelor in Elementary Education (36 or 63.2%), occupying Teacher III as faculty rank (25 or 43.9), and has been coaching for 1-9 years (25 or 43.9%).

**Table 2. Elementary Sports Coaches' Competences in terms of Pedagogical Content Knowledge**

<b>Pedagogical Content Knowledge</b>	<b>Mean</b>	<b>Verbal Interpretation</b>	<b>Rank</b>
1) seeks opportunities to learn	3.39	Competent	1 <sup>st</sup>
2) establishes a coaching style that fits	3.30	Competent	3 <sup>rd</sup>
3) adapts to the learner	3.35	Competent	2 <sup>nd</sup>
4) implements coaching cues	3.18	Competent	6 <sup>th</sup>
5) maximizes participation opportunities	3.25	Competent	5 <sup>th</sup>
6) gives effective feedback	3.28	Competent	4 <sup>th</sup>
<b>Composite Mean</b>	<b>3.29</b>	<b>Competent</b>	

The sports coaches were competent (3.29) in terms of their pedagogical content knowledge. Teachers in the Department of Education attend regular trainings and seminars for further enhancement. Lacayanga (2020) further recommended different enhancement program for teachers like seminar and orientation for teachers on integrating teaching across all learning areas; next is workshop on developing learners differentiated instructional materials; another is strengthening Learning Action Cell (LAC) session program per grade level; followed by seminar workshop in using Information and Communication Technologies (ICTs); and mentoring and coaching. The teachers seek opportunities to learn because of their competent students also. Social media, perhaps, is a big influence in the learning process of pupils today. In just one click, of facebook, youtube and all other websites, pupils could see the step-by-step process and follow it. Teachers seek opportunities to learn, more especially in coaching, so that they would not be left behind by the technology-driven world.

The result of Santos' *et al.*, (2010) study supports this analysis relating that coaches are interested in learning and increasing their knowledge and competence in broad range of areas, ascribing the importance of educational needs to improve their coaching perspective and ability. Moreover, Devi, Gouthami, and Lakshmi (2019) said in their research that social media are becoming the most important tools for interaction among people, where everybody can share, exchange, comment,

discuss and create information and knowledge in a collaborative way. Social media tools are rapidly changing the communications landscape, their emergence has impacted significantly how students learn and the way instructors teach. In today higher education settings, instructors, students and others collaborate on the tasks of knowledge construction.

In addition to that, the teachers adapt to the learners because this is one of the trends nowadays. There new styles and techniques in coaching that the pupils may want to and aware of, and from there starts the interest of the pupils. The teacher-coach should be able to get along with the interest of the pupils so that trust would be developed between them. One the value of trust is developed, it would be easier to get along with the pupils, and easier to do the training and coaching matters. Collie and Martin (2016) in their research disclosed that a defining feature of teaching work is that it involves novelty, change, and uncertainty on a daily basis. Being able to respond effectively to this change is known as adaptability. Adaptability for teachers and their healthy and effective functioning in the workplace are important. Approaches for assessing adaptability and describe several important implications for practice and research that are relevant to the development of teachers' adaptability and furthering knowledge should be considered in this important area.

Establishing a fitted coaching style is necessary and that they are competent on it because these are techniques which are possible to make the team wins all the games they would be facing. Kao, Hsieh, and Lee (2017) in their research revealed that individual and group level evaluations of the four-dimensional Coaching Competency Scale like motivation, game-strategy, technique, and character-building competencies, positively predicted trust in the coach; furthermore, group-level coaching competency was the primary contributor to this relationship. Therefore, improving the psychological and tactical skills of coaches and their skill detection abilities and instruction at training together with a positive attitude toward sports may help improve the trust of athletes in their coaches.

**Table 3. Elementary Sports Coaches' in terms of Continuing Professional Development**

<b>Pedagogical Content Knowledge</b>	<b>Mean</b>	<b>Verbal Interpretation</b>	<b>Rank</b>
1) regularly attends trainings, workshops, and seminars on sports coaching	3.47	Competent	1 <sup>st</sup>
2) gains learning from magazines, published books or internet sites	3.12	Competent	4 <sup>th</sup>
3) adapts efficient coaching styles from other coaches	3.19	Competent	3 <sup>rd</sup>
4) enrolls in courses in line with coaching	2.40	Moderately Competent	5 <sup>th</sup>
5) learns from past coaching experiences	3.30	Competent	2 <sup>nd</sup>
<b>Composite Mean</b>	<b>3.10</b>	<b>Competent</b>	

The teachers were competent in terms of continuous professional development (3.10). It could be noted that 21 or 36.9 percent of the teachers have master's degree units and graduate of relevant master's degree, making them competent coaches. This professional development competence could be also attributed to their regular attendance to trainings, workshops, and seminars on sports coaching, learning from their coaching experiences, adapting efficient coaching styles. Bartleton (2018) concluded that teachers' cite continuing professional development has significant benefits in terms of updating subject knowledge, sharing of good practice and the opportunities it provides for collaboration, reflection and future progression. They were also competent because they read magazines, sports coaching books, and surf websites on sports coaching, particularly watching different sports and games in YouTube. They learn from these activities, conceptualize, adapt, and

then apply it in real life— particularly in teaching and sports coaching. Dwiyogo and Cholifah (2016) found out that in developing and improving teacher's professionalism, especially for physical education teachers at the elementary school level, it is necessary to improve the quality of professional teacher through Continuing Professional Development or CPD. Blended learning is one of the concepts that will be able to bring the learning environment which is integrated by ITC environment in order to promote 21<sup>st</sup> century skills. Blended learning in CPD would help to improve the professional competence, skills, and attitude for the physical education teachers at the elementary school.

However, the teachers were moderately competent in enrolling courses in line with sports coaching because they probably don't much engage with it. In most cases, courses offered by professional organizations, colleges and universities, and even online usually require a certain amount. And because there local trainings and seminars offered in the district or division level, they take those opportunities to learn; but, they are not limited to attend and enroll in various courses if they would like too. Yaqub, Owusu-Cole, and Ofosua (2020) revealed that colleges of education do not maximize the full potential of benefits that accrue from CPD programs due to some profound challenges such as lack of a systematic and comprehensive training needs analysis and weak interaction between the institution seeking the training and the institution providing the training.

**Table 4. Summary of Teachers' Sports Coaching Competences**

<b>Teachers' Sports Coaching Competences</b>	<b>Composite Mean</b>	<b>Verbal Interpretation</b>	<b>Rank</b>
1) Pedagogical Content Knowledge	3.29	Competent	1 <sup>st</sup>
2) Continuing Professional Development	3.10	Competent	2 <sup>nd</sup>
<b>Grand Mean</b>	<b>3.20</b>	<b>Competent</b>	

It could be noted on Table 4, that the sports coaches showed competence in sports coaching both in pedagogical content knowledge and continuing professional development. This means that the sports coaches may be led to more chances and opportunities to continuously enhance their competences in all aspects. Santos, Mesquita, Gracia, and Rosado (2010) revealed that majority of the coaches perceived themselves to be competent but, nevertheless, they indicated to have training needs, which brings an important feedback to coach education. This suggests that coaches are interested in increasing their knowledge and competence in a broad range of areas which should be considered in future coach education programs.

**Table 5. Relationship between Sports Coaches' Competences and their Profile Variables**

<b>Profile Variables</b>	<b>f-value</b>	<b>p-value</b>	<b>Verbal Interpretation</b>
1) Age	0.964	0.416	Not significant
2) Sex	0.746	0.146	Not significant
3) Civil status	1.348	0.268	Not significant
4) Educational attainment	0.379	0.686	Not significant
5) Teaching position	0.459	0.712	Not significant
6) Sports Coaching Years of Experience	4.102	.022	Significant

It could be noted that sports coaching years of experience is significant to the sports coaches competences. This strengthens the idea that the longer your experience in doing or working on something, there is a big possibility in becoming an expert to it. In the research of Santos, Mesquita, Gracia, and Rosado (2010), they found out that their coach-respondents' perceptions were influenced by their experience. On the other hand, other profile variables like age, sex, civil status, educational attainment, and teaching position had no significant relationship with the sports coaches' competences. This means that whether the sports coaches are young or nearing retirement, male or

female, single or married, with or without advanced degree, and spent few or many years in teaching and sports coaching, are insignificant reasons that may affect their competence in coaching. This is related to the research conclusion of Moen and Federici (2013) that coaching competencies that are focusing on relationship issues such as trust and respect, attending behavior, powerful questioning, active involvement and facilitating for learning and results, and being clear about the athlete's responsibility in the learning process, seem to be important in order to build successful relationships between coaches and athletes in sport. Athletes who are more satisfied with their own progress in sport in general score their coaches higher on these different dimensions.

### **Conclusion**

Most of the teacher sports coaches were 30-39 years old, female, married, graduates of Bachelor of Elementary Education, occupying T3 or Teacher III position, and had spent 1-9 years in sports coaching. They were competent in terms of content and pedagogical knowledge in coaching and continuous professional development. It was found out that age, sex, civil status, educational attainment, and teaching position are not significant to their sports coaching competences; only the sports coaching years of experience had significance with the sports coaches' competence. Additionally, it could be noted that the sports coaches are relatively young as they are just nearing to half of the average age of service of a teacher. They have more opportunities to enhance their sports coaching knowledge, skills, and abilities, particularly their coaching content and pedagogical knowledge and professional development. Better chances also await them because they could possibly gain points if they will continue to attend and learn from the trainings, workshops, and seminars in sports coaching. It could also be wind up that learning from experience is an important application among sports coaches.

### **Recommendation**

Sports-coaches shall continuously seek enhancement of their skills and knowledge relative to the task through attending seminars, trainings or sports clinic and enrollment in formal sports-coaching classes. Appropriate recognitions should be given to sports-coaches not only in times of winning yet appreciation should also be shared even in just mere participation. The promotion system should also be properly explained to the teachers clarifying that sports-coaching can also lead them to career advancement in teaching. The school sports coordinators as well as the school head should come up with a sports program or an appropriate training schedule that will give sports-coaches enough time to address role conflicts for both mentoring athletes and classroom teaching. They should also allocate sufficient budget for the sports-training as well as the needed equipment through available funds. Solicitation from stakeholders relative to addressing financial constraints may also be considered as an option.

**Conflicts of interest:** The authors declare no conflicts of interest.

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