Assessing the Training Needs of Teachers on the 21st Century Pedagogical Skills and Personal Development

Nicette N. Ganal
ganal.nn@pnu.edu.ph
Philippine Normal University - North Luzon

Ma. Lina P. Sario
sario.mlp@pnu.edu.ph
Philippine Normal University - North Luzon

Marissa R. Guiab
guiab.mr@pnu.edu.ph
Philippine Normal University - North Luzon

Abstract The study identified and assessed the training needs of teachers on the 21st century pedagogical skills and personal development. The participants included randomly selected 92 (30%) of 307 elementary school teachers from the Department of Education in Alicia, Isabela. In gathering data, the researchers administered a survey questionnaire and informal interview. Data analysis focused on descriptive statistics such as frequency, percentage and mean. Findings revealed that teachers need professional training on the following 21st century pedagogical skills: content knowledge, use of ICT, strategies for developing critical and creative thinking, and research-based knowledge and principles in teaching and learning. They also need personal development training in stress management, interpersonal and communication skills and balancing work and family. They have moderate to high level of training need. They prefer presentation format like demonstration, lecture, use of videos and field trip, and flexible schedule. The study may help school administrators to develop and implement a contextualized training and development program package for a specific group of teachers.

Keywords: needs assessment, pedagogical skills, professional development, teachers, training

Introduction

The fast transformation of education happening today has caused many countries to take actions to reform in many aspects of the curriculum, and the teaching and learning process. The expansion of pedagogy, environmental approach to teaching, the digital generation and the changes taking place, and the innovation in teachings lead to the renewal of teaching methods (Mynbayeva, Sadvakassova, & Akshalova, 2018). These reforms aim at providing learners with higher quality of education to meet the needs of life and work in the 21st century (Schleicher, 2012). Apparently, the curriculum and the 21st century teaching and learning activities should cover all skills needed in this education era (Nooraini & Abd Halim, 2017), and the different skills must be mastered by students to be able to compete with the rapid changes in the world. To achieve the 21st century learning skills (critical thinking and the ability to communicate effectively, innovate and solve problems through negotiation and collaboration), teachers must deliver quality teaching.

Teaching and Teacher Quality

Quality teaching drives reform and pursue the development of holistic individuals who are impregnated with values and equipped with 21st century skills that include life and career skills; information, media and technology skills; and learning and innovation skills such as critical thinking, communication, collaboration and creativity (Wagner, 2016). Quality teaching is evident through teachers' practice and engagement in learning and refining different kinds of teaching activities inside and outside the classrooms supported by teaching models, resources, logistical changes, emotional assistance, and collegial culture (Carver & Feiman-Nemser, 2009). Teaching quality is evident in teachers' use of teaching practices that contribute to improving student achievement.

In the country context, the Philippine Professional Standard for Teachers (PPST) describes teacher quality reform through well-defined domains, strands, and indicators that provide measures of professional learning, competent practice, and effective engagement. The PPST explicitly articulates what teachers should know, be able to do and value to achieve competence, improve student learning outcomes, and eventually quality education. Additionally, the PPST supports teacher professional development on pedagogical skills that focus on improving practices in instruction by giving teachers new knowledge; enhance capability, competency, and strategies and techniques in assessing teaching-learning to improve students learning (Wei, Darling-Hammond, Richardson, & Orphanos, 2009). These empowered and capacitated teachers are able to produce Filipinos who passionately love their country and are capable of helping the Philippines to development and progress (DepEd Order No.36, s.2013). Consequently, assessment of "teachers" needs may inform specific details on their professional development.

Needs Assessment and Training

Needs assessment helps an organization determine the gaps that are preventing it from reaching its desired goals (Jannetti, 2017). These gaps can exist in knowledge, practices, or skills. Knowing what is working well and what needs to be changed is crucial to progressing effectively towards those goals, thus making an organization successful. Furthermore, needs assessment helps determine whether there is a need for training, ensures that the training is related to the organizational needs, identifies content and scope of the training, gains organization and participant support, and determines the desired output.

Relatively, McDowall and Saunders (2010) argued that the recognition of training importance led some employers to realize that success relies on the skills and abilities of their employees, consequently requiring considerable and continuous investment in training and development. In fact, the type of

training implemented (training content and trainee expertise) affects the training outcomes (Driskell, 2011). This means that the success of the training program also depends on the training methods, and the capability and attitude of participants. Even Tabassi, Mahyuddin, and Hassan (2012) mentioned that training and motivation can sustain or increase employees' current productivity. In fact, motivation influences their willingness to follow the training program, to exert more energy towards the program, and to transfer what they learn onto the job.

Individuals and teams benefit from training and professional development as per review of Aguinis and Kraiger (2009). Admittedly, schools use professional development as a strategy to ensure that teachers continue to strengthen their practice throughout their career (Hirsh, 2010). Schools even utilize variety of schedules to provide collaborative learning and worktime for teachers to learn and apply new knowledge and skills that will improve their teaching-learning process (Mizell, 2010).

21st Century Pedagogical Skills and Personal Development

Twenty-first century pedagogy capacitates educators to employ innovative and research-supported teaching strategies, learning technologies and real world applications (Saavedra & Opfer, 2012). Expectedly, teachers should provide opportunities for learners to apply the 21st century skills across content areas for deeper understanding. In particular, competency-based learning combined with innovative learning methods that make use of technologies, and inquiry-based approaches would help learners develop higher order thinking skills (Scott, 2015).

How can teachers best support learners to develop essential skills for the 21st century? Pupils learn in variety of ways, so the challenge for teachers is to discover approaches that help the learners learn most effectively. Research suggests that some forms of pedagogy are more effective and successful than others in helping students acquire a deeper understanding of 21st

century skills. These pedagogies that support deeper learning include personalized learning strategies, collaborative learning and informal learning (Redecker & Punie, 2013). It is generally recognized that 21st century competencies and skills are complex and often challenging to teach. Saavedra and Opfer (2012) even argued that learners do not develop these competencies and skills unless they are explicitly taught. This means that teachers must ascertain what knowledge learners have acquired so as to decide which pedagogical skills to use in teaching.

Consequently, teaching practices that provide positive learning community effectively support deeper learning through the acquisition of content knowledge and the development of intrapersonal and interpersonal competencies (National Research Council, 2012). By challenging their thinking, teachers can use learner responses as opportunities to evaluate their readiness for deeper understanding, and to introduce new concepts accordingly (Bolstad, 2011).

Fundamentally, quality learning requires highly competent and committed teachers employing active pedagogies (UNESCO-IBE, 2013). To achieve these goals, countries must ensure that there is an adequate supply of well-trained and motivated teachers and school leaders; and that, they must invest on teacher's training as well as conditions of service and deployment; and offer ample professional development opportunities (UNESCO and UNICEF 2013a).

In sum, the literature points out to the demands and opportunities to be relevant to 21st century curriculum and pedagogy, and the importance of professional and personal development training. As a matter of fact, schools in the 21st century are striving to be in tune with global standards in education. Read literature also revealed that school leaderships are aware that to achieve quality 21st education, they need to improve teachers' knowledge, capabilities, competencies, skills and morale. However, there are education managers who could

not realize such due to their inadequacies or limitations on some critical issues and trends. Consequently, teachers are not provided with appropriate and relevant training to enhance their professional competency and personal development.

In response, one of the strategic directions of one University Campus in North Luzon is responsiveness to stakeholders. The Department of Education in Alicia, Isabela is one of the local stakeholders of this institution. Responding to the persisting need for capacitating and empowering the teachers promises a good opportunity for collaboration and partnership with the department. Although it might be tempting to quickly put together a teacher training program, it would be much wiser to first determine whether there is really a need for such. Thus, the study grounds on a concept that, a need assessment can help make such determination, and ensure effective implementation of the training program for teachers.

Framework of the Study

The assessment of training needs of teachers is anchored on contingency theory, reinforcement theory and social learning theory. The Contingency theory of management believes that whenever there is something new that calls for new knowledge and skill to meet the needs of individuals and achieve the goals of an organization, a decision and action appropriate to the need at hand should be done. The rapid transformation in education calls for immediate action from school leadership to update teachers' knowledge in content and pedagogy. The Reinforcement theory implies that training is a strategic tool to motivate teachers to improve themselves for quality and high performance. The Social Learning theory posits that ability to learn new skills can be achieved through encouragement, confirmation and observation of others. When teachers acquire new knowledge and skills through observation on how their trusted and respected colleagues perform, when their observation confirms the effectiveness of their own pedagogy, they become more confident.

These theories consequently led the researchers to theorize that assessing the training needs of teachers on the 21st century pedagogical skills and personal development envisions providing help in planning a more relevant and effective training program for teachers.

Purposes of the Research

The study assessed the training and development needs of teachers to identify the areas for improvement to enable them to effect quality teaching.

Specifically, the study sought answers to the following queries:

1. What are the training needs of teachers for professional and personal development?

2. What is the extent of the teachers' professional and personal development needs?

3. What presentation formats are the teachers interested in?

4. What days and times do the teachers prefer to attend professional development activities?

Methodology

Research Design

The study used descriptive research, which makes possible to predict the future on the basis of the findings of the prevailing conditions, and on the basis of reactions of people toward certain issues (Calderon & Gonzales, 2013).

Participants

The researchers selected the participants with the permission of the Schools District Supervisor of the three school districts of Alicia, Isabela namely: Alicia East, Alicia North and Alicia South using random sampling technique. The lists of teachers from the three school districts were used in selecting the participants. Ninety two (out of 307 or 20%) teachers, where forty-five composed the primary school teachers and 47 included the intermediate school teachers were the participants. There were 15 male and 77 female participants.

Table 1.   Profile of Teachers

Age				Educational Attainment	F	%
	Bracket	F	%	Bachelor of Elementary Education	80	86.96%
	20-25	2	2.17	Bachelor of Secondary Education	9	9.78%
	26-30	8	8.69	Bachelor of Arts	1	1.09%
	31-35	10	10.87	Bachelor of Science	2	2.17%
	36-40	17	18.48	Total	92	100%
	41-45	7	7.61	Masters Degree in Educational Management Major in		
	46-50	19	20.65	Educational Administration	9	8.70%
	51- 55	17	18.48			
	56-60	11	11.96			
	61-above	1	1.09			
	Total	92	100%	Mathematics	7	8.61%
Gender	Male	15	16.30	Technology and Home Economics	1	1.09%
	Female	77	93.70	English	2	2.17%
	Total	92	100%	Total	19	20.65%
Civil Status	Single	8	8.70	Doctorate Degree	1	1.09%
	Married	78	84.78			
	Other	6	6.52	**Eligibility**		
	Total	92	100%	Teacher's Exam	1	1.09%
Number of Children	0	5	5.45%	Professional Board Examination for Teachers (PBET)	41	44.56%
	1	13	14.13%	Licensure Examination for Teachers (LET)	40	43.47%
	2	26	28.26%	Civil Service Examination	8	8.70%

3	35	38.04%	Agriculture Office	1	1.09%
4	8	8.70%	RA 4670 (Magna Carta)	1	1.09%
5	3	3.26%	Total	92	100%
6	2	2.17%			
Total	92	100%			
Subject Handled	**F**		**Years in Service**	**F**	**%**
English	26		Below 1	3	3.26
ESP	6		1-5	20	21.74
EKAWP	1		6-10	6	6.52
Filipino	21		11-15	7	7.61
Makabayan	21		16-20	12	13.04
MAPEH	10		21-25	6	6.52
MTB	6		26-30	31	33.70
Values	10		31-35	6	6.52
All subjects	43		36-above	1	1.09
Total	92			92	

Instruments

The instrument relates to assessment of teachers' training needs for pedagogical skills and personal development. It is composed of three parts. The first part deals with the profile of the participants. It gathers information on age, gender, civil status, number of children and subject handled by the participants. The second part includes the preferences on day and time to attend seminars, trainings, and presentation format or method. The third part is on the training needs of teachers on professional and personal development. It inquires about the training and extent of the participants' need for professional and personal development. The data gathered from the instrument were supported by interviews from the teacher-participants chosen by grade level. The instrument was subjected to validation. The content validity index of the instrument is 1.0; and the Cronbach alpha coefficient reliability analysis yields value of .88.

Data Collection and Analysis

The researchers conducted an orientation of the participants where they discussed the rationale of the study; sought participants' consent, and assured them that their responses would only be seen by the researchers.

Survey

The researchers conducted the survey within a three week period. They personally administered the instrument to the 92 respondents to insure 100% retrieval of questionnaires. Informal interview was done after administering the survey questionnaire. Teachers were asked to answer the questions on what training do they need, why they need training, and why do they prefer particular presentation format and schedule of training.

Post Survey

The responses of teachers on the survey questionnaire were analyzed using descriptive statistics specifically frequency, percentage, and mean. The answers to questions during the interview were taken as they were, and served as enrichment to the gathered data.

Results and Discussion

Training Needs of Teachers on Professional and Personal Development

Table 2 shows that teachers need varied professional and personal development training in different areas of interest and with different levels or extent of need for training.

Table 2.   Training and extent of teachers' need for professional and personal development

Topics for Training and Development	1	2	3	4	Mean	Qualitative Description
Professional Development						
1. Content and performance standards in my main subject field(s)	0	11 11.96%	48 52.17%	33 35.87%	3.24	Moderate
2. Teaching methods/ techniques/ strategies	0	4 4.34%	44 47.83%	44 47.83%	3.44	Moderate
3. Differentiating instruction for individual differences (Diversity of Learners)	0	15 16.30%	20 21.74%	57 61.96%	3.46	Moderate
4. Lesson Planning (Curriculum Planning)	4 4.35%	30 32.61%	45 48.91%	13 14.13	2.73	Moderate
5. Teaching students with special learning needs (disabilities, giftedness and talents)	13 14.13%	9 9.78%	41 44.57%	29 31.52%	2.94	Moderate
6. Small group and large group instruction	0	27 29.35%	44 47.83%	21 22.82%	2.93	Moderate
7. Strategies in giving remediation and enrichment activities		11 11.96%	25 21.17%	56 60.87%	3.49	Moderate
8. Creating and administering formative and summative assessments	2 2.17%	26 28.26%	36 39.13%	28 30.44%	2.98	Moderate
9. Interpretation and utilization of test results	2 2.17%	19 20.65%	37 40.22%	34 36.96%	3.14	Moderate
10. Student Counseling		16 17.39%	43 46.74%	33 35.87%	3.29	Moderate

						Mean	
11.	Developing thinking skills of students	0	14 15.22%	18 19.56%	60 65.22%	3.51	High
12.	Classroom Management	2 2.17%	5 5.44%	56 60.97%	29 31.52%	3.22	Moderate
13.	ICT skills for teaching	1 1.09%	13 14.13%	25 27.17%	68 73.91%	4.07	High
14.	School management and administration		31 33.70%	27 29.35%	34 36.95%	3.02	Moderate
15.	Current trends in my main subject field(s)		14 15.22%	39 42.39%	39 42.39	3.27	Moderate
16.	Conducting an action research		4 4.35%	37 40.22%	51 55.43%	3.51	High
Personal Development							
1.	Balancing Work and Family	2 2.17%	28 30.44%	30 32.61%	32 34.78%	3.0	Moderate
2.	Coping with Stress	2 2.17%	18 19.57%	29 31.52%	43 46.74%	3.23	Moderate
3.	Interpersonal Skills (Professional links with colleagues)	3 3.26%	23 25%	40 43.48%	26 28.26%	2.98	Moderate
4.	Communication Skills	10 10.86%	27 29.35%	31 33.70%	24 26.09%	2.75	Moderate

Legend: 4-high 3-moderate 2-low 1- no need at all

Table 2 reveals the pedagogical and personal development needs of the participants. The teachers generally need capacitating activities on teaching methods/strategies, teaching students with special learning needs (disabilities, giftedness and talents), strategies in giving remediation and enrichment activities, developing thinking skills of students, ICT skills for teaching, and conducting action research as shown in the extent of their needs rated as *moderate*. The study discloses that teachers need training on these skills. Furthermore, teachers also need personal development training together with stress management, interpersonal and communication skills. These teachers also realize that professional links with colleagues enhance their competence and boost their morale.

Table 3. Responses of the participants in the interview by school district

Alicia East District	Alicia North District	Alicia South District
"Honestly, at 60, I could hardly cope with the changes on technology. Hence, I need training in ICT."(Grade IV Teacher)	*Alicia East District teachers express similar needs for training.*	*Alicia South District Teachers admit they need training in using differentiated instruction and scaffolding.*
"I already have my master's degree. Nevertheless, I still have to learn new trends and innovations to be more competent." (Grade V Teacher)	*"I am not so familiar with the differentiated instruction. I believe I need a seminar on this and other new strategies." (Grade V, VI Teachers)*	*"I need professional training to promote good learning environment."(T14)*
"I am a young teacher and new in the grade assigned for me to teach. The training would be fine with me. I need training on contents, strategies and assessment techniques."(Grade VI Teacher)	*"I really need seminars because my strategies are already outdated)"(Grade III Teacher, 55 years old)*	*"I have heard about 21ˢᵗ century pedagogy like differentiated instruction and scaffolding. But I am not sure if I can use these approaches and strategies effectively.(T28)*
"I am confident in teaching Filipino and English. However, I need to learn more strategies in teaching other subjects.	*"I am too old for ICT. But I am interested to learn for my pupils."(Grade II Teacher, 51 years old)*	
My school head expects me to be an effective teacher." (Grade III Teacher)	*"I do not know how to deal with a pupil with special need in my class. I always spend time with him. The whole class is affected…." (Grade II Teacher)*	
"I really need training in content and strategies and remedial instruction."(Grade II Teacher)		

The teachers of Alicia East District confirm that they need trainings and seminars to capacitate themselves. The teachers of Alicia North District admit that they need training in ICT, new trends of assessment techniques and strategies. The teachers of Alicia South District also need more trainings and seminars to further improve their competence.

While innovation and trends in the 21ˢᵗ century education abound in literature, it is a fact that a great number of teachers are not properly trained using teaching models and approaches. If quality learning requires highly competent and committed

teachers (UNESCO-IBE, 2013), it is imperative that, school leadership should ensure that teachers are well-trained and motivated. Needs assessment helps identify the gap in knowledge, practices and skills that prevent the teachers to achieve their desired goals (Jannetti, 2017).

Teachers' responses emphasize that there is a need for professional training and personal development activities to enhance their capability and competence, improve their performance, and help teachers accept new technologies and techniques (Falola, Osibanjo, & Ojo, 2014). In the end, empowered and capacitated teachers will be able to produce Filipinos who love their country and help propel the Philippines to progress (DO No.36, 2013).

Furthermore, Tahir, Yousafzai, Jan and Hashim (2014) aver that training and development improve performance at individual and organizational levels. Teaching is the heart and soul of the school (Al-Qhatani, 2015) therefore, teachers should engage in learning and refining the curriculum using teaching models, approaches, emotional assistance and resources to improve students' achievements (Carver & Feiman-Nemser, 2009). Improvement of performance could be achieved when the organization's manager transfer to employees his vision as well as help them perform better (Jehanzeb & Beshir, 2013).

It may be said that the management's prompt action on the needs of teachers would increase self-esteem and improve the quality of instruction as it is the primary duty and obligation of the management to address teachers' issues and concerns. These claims corroborate with the findings of Carver and Feiman-Nemser (2009) that teaching quality upholds the standards in the profession as shown in the improved student achievements. Relatively, the aim is to further instruction through updating teachers' existing knowledge and enhancing their capability and competency to increase students' learning (Wei et al., 2009).

Table 2 also reveals that the participants need training on personal development specifically on balancing work and family, coping with stress, interpersonal skills, and communication skills.

The following responses from the teachers reasonably confirmed the need for the conduct of the training:

> *"Training offers opportunities for promotion and to connect and work with leaders, experts and peers."(MT-1)*

> *"I love attending training, seminars and conferences. I become more confident when I re-echo the seminar in the school."(MT-2)*

The PPST explicitly maintains the need to improve the system that promote teacher professional development, and be given utmost consideration for better outcomes. Implicitly, professional development should focus on improving practices in instruction by giving teachers new knowledge; enhanced ability, competency, strategies and techniques in assessing teaching and learning to improve teaching and learning quality (Wei et.al., 2009). It is also a fact that teachers carry good human relations and communications skills. But others still need training on these competencies to be more equipped with 21st century skills (Wagner, 2016). The teachers are aware of the importance of training for their professional and personal development. They have the interest and motivation to become better contributors to society when they transfer what they have learned into the work place (Tabassi et al., 2012).

The high level of need for training on content and performance standards is one of the domains required of teachers to be effective in the 21st century. Quality teachers make quality education as implied by Barber and Mourshed (in Karpati, 2017) in their claim that quality of education system does not exceed the quality of its teachers. Research has also shown that teachers who participate in professional and personal development activities

have pupils who perform better in class and in other school programs (Nischithaa & Narasimha Rao, 2014). Evidently, these teachers are committed to deliver quality teaching to ensure that students can master the 21st century learning skills (critical thinking and the ability to communicate effectively, innovate, and solve problems through negotiation and collaboration) (Wagner,2016). Therefore, teachers of the 21st century should demonstrate; 1) strong grasp of pedagogical approaches specific to the subject matter and the learners (also called pedagogical content knowledge); 2) varied lesson activities combined with learning technologies and real world application (Saavedra & Opfer, 2012); and 3) a positive attitude towards students and belief in their capacity to learn combined with innovative learning methods to develop higher order thinking skills (Scott, 2015).

As mentioned earlier, development and innovations in education are inevitably taking place, hence, teachers are encouraged, and are required to grow continually. Admittedly, one of the measures to achieve this end is assessing their pedagogical skills and personal development needs for proper and quick inclusion during the strategic planning-workshop of school managers.

Training Methods or Format of Training Presentation

Teachers are also interested in some presentation formats of training as shown in Table 4.

Table 4.   Preference of presentation format of training

Presentation Formats	Strong Interest f (%)	Little Interest f (%)	No Interest f (%)
Demonstration	71 (77.17%)	10 (10.87%)	11 (11.95%)
Hands-on workshop	73 (79.35%)	13 (14.13%)	6 (6.52%)
Lecture	54 (58.70%)	36 (39.13%)	2 (2.17%)
Discussion or group dialogue	49 (53.26%)	42 (45.65%)	1 (1.09%)
Web seminar	44 (47.83%)	46 (50.00%)	2 (2.17%)

Keynote address followed by related breakout sessions	46 (50.00%)	41 (44.57%)	5 (5.43%)
Video	67 (72.82%)	21 (22.83%)	4 (4.35%)
Field trip	62 (67.39%)	26 (28.26%)	4 (4.35%)

As gleamed from Table 4, teachers prefer hands-on workshop (73, 79.35%), demonstration (71, 77.17%), video (67, 72.82%), field trip (62, 67.39%), lecture, discussion or group dialogue, with keynote address followed by breakout sessions. According to some respondents, they *prefer demonstration and hands-on because they learn best when they actively participate in the process.* Their responses show that they have preference on presentation formats.

These formats that the participants prefer are believed to meet and satisfy their needs and interests. They claim that they could understand, participate more actively, and learn worthily with these strategies. Nonetheless, the presentation format they are least interested include the Web Seminar since *they have to learn ICT first before they can use ICT effectively in the classroom.* With that, the success of the training program then depends also on the training methods (Driskell, 2011). This means that when teachers see that their interests are considered, they are motivated to participate because motivation influences their willingness to exert more energy toward the program, and consequently apply what is learned onto the job (Tabassi et al., 2012). Obviously, the training methods could be used to advantage in preparing the training program to help them grow their ability, skills, commitment, interpersonal skills, understanding, self-confidence and experience (Nischithaa & Narasimha Rao, 2014).

On Day and Time of Training

Schools have variety of ways of scheduling professional development activities that somehow affect the participation of teachers. Asked when is the appropriate day and time to schedule training, teachers give varying answers as per Table 5.

Table 5. Teachers' Preference on Days and Times of Professional Development Events

Day	Least Convenient		Most Convenient		
	1	2	3	4	5
Monday	28	3	3	6	5
Tuesday	18	7	6	7	5
Wednesday	12	8	9	9	4
Thursday	11	6	11	11	3
Friday	**7**	**2**	**3**	**16**	**31**
Saturday	**6**	**2**	**9**	**16**	**37**
Sunday	23	2	7	7	4

Time	Least Convenient		Most Convenient		
Morning	1	2	3	4	5
8:00-10:00	4	3	3	7	26
9:00-11:00	5	1	13	8	14
8:00-12:00	3	1	6	**36**	**44**
10:00-12:00	12	2	12	8	2
Afternoon					
1:00-3:00	9	2	9	6	17
2:00-4:00	4	0	8	12	20
3:00-5:00	9	1	9	5	7
1:00-5:00	5	2	8	17	7
Whole day	12	5	5	7	20
Multiple-day	16	5	5	4	3

Accordingly, Fridays and Saturdays are the most convenient days to attend professional development activities. They believe that trainings should be held at nine o'clock to eleven o'clock in the morning and at one o'clock to four o'clock in the afternoon. The respondents considered Monday and Sunday as the least convenient days of attending trainings. The teachers emphasize that the day and time of training should not interfere with their family concerns so they can attend the training without neglecting their children. They affirm that Sunday is a family day, a day of doing household chores, preparing many things and attending to concerns for the succeeding work weeks. They also prefer

trainings to be held in the morning for a half-day only because during this time, they are better engaged, motivated and focused on the different activities. Moreover, they prefer half-day training in order that they could go home early because the residences of some teachers are in barangays, which are far from training venues.

Their statements support the respondents' preferences on day and time of professional developments:

> *"I don't attend seminars or workshops on weekends. There are many concerns at home. We are not allowed on school days because of the No disruption of classes policy."(T2)*

> *"If the seminar is for two or three days, maybe the school officials can schedule it on three consecutive Saturdays, from 8:00-11:00 o'clock in the morning and from 1:00-4:00 o'clock in the afternoon. Many of the teachers are from the barangays; they need to go home early. If classes are affected, the training could be half days only…preferably in the morning so I can attend to my class in the afternoon."(T12).*

> *"Training should be held during Friday and Saturday because Sunday is for family also."*

The foregoing data imply that teachers prefer schedules that would not affect the quality time spent with their families. They should be free from any worries and problems in order to focus on the training because such require reflective and intellectual processing (Randall, 2010). The management should therefore regard this as one of the important elements in their planning to ensure a successful and productive endeavor.

The results also emphasize that professional development activities enhance teachers' capability and competence, improve teacher performance, help teachers accept new technologies and

techniques, but should be planned with consideration to personal needs of teachers to insure participation and commitment.

Conclusion and Recommendations

The study assessed the needs of teachers for training on 21st century pedagogical skills and personal development. While broad literature offers programs and activities for implementing 21st century pedagogy, the study avers that teachers need professional and personal development in their own contexts. The training would equip teachers with relevant knowledge and skills enabling them to perform their tasks and functions optimally.

The teachers need training on pedagogical skills that include ICT skills for teaching, developing thinking skills of students, strategies in giving remediation and enrichment activities and conducting action research. They also need training on balancing work and family, coping with stress, interpersonal skills and communication skills. Furthermore, teachers have moderate to high level of training needs, have interests on different training presentation formats, and have several preferences on the schedule of professional development. The need assessment reveals that teachers have their own specific professional challenges and personal needs to be met in order to enhance their 21st century pedagogical skills.

The study proves the importance of needs assessment in planning and implementing appropriate programs and training that will result in achieving quality performance in the workplace. Practically, this is a call for school leadership to start with assessing the teachers' training needs based on their own professional and personal context to ensure relevant and effective learning that yield high performance of students. Consequently, appropriate contextualized training contributes in motivating teachers to upgrade teaching skills and in confirming effectiveness of their own pedagogy by trusted and respected colleagues thereby promoting self-confidence and job satisfaction.

The study although timely and relevant is limited in methodology. Its weakness lies on the small number of respondents and category of teachers. Therefore, it is suggested that bigger samples of teachers in different categories - kindergarten, primary, intermediate teachers, be considered. The process would provide more input in developing a contextualized training and development program package for a specific group of teachers.

...

References

Aguinis, H. and Kraiger, K. (2009). "Benefits of training and development for individuals, teams, organizations and society," *Annual Review of Psychology, 60*(4), 51-74.

Al-Qahtani, H.M. (2015). Teachers' voice: A needs analysis of teachers' needs for professional development with the emergence of the current english textbooks. *English Language Teaching, 8*(8).

Bolstad, R. (2011). Taking a future focus in education- what does it mean? *NZCER working paper*. Wellington, New Zealand Council for Education Research. Retrieved on March 28, 2019 from www.nzcer.org.nz/system/files/taking-future-focus-in-education.pdf.

Calderon, J. & Gonzales, E. (2013). *Methods of research and thesis writing.* Manila: National Book Store.

Carver, C.L,. and Feiman-Nemser, S. (2009). Using policy to improve teacher education: Critical elements and missing pieces. *Educational Policy*, *23*(2), 295-328.

Dep Ed Order No. 36, s.2013.

Driskell, J. E. (2011). "Effectiveness of Deception Detection Training: A Meta-analysis," *Psychology, Crime and Law,* (10), 1-19.

Falola, H., Osibanjo, A. & Ojo, S.I. (2014). Effectiveness of training and development on Employees' performance and organization competitiveness in the nigerian banking industry. *Bulletin of the Transylvania University of Brasov Series V: Economics Sciences. 7*(56), I-2014.

Hirsh, S. (2010). *Why professional development matters.* Retrieved from *www.learningforward.org.*

Jehanzeb, K., & Beshir, N.A. (2013) Training and development program and its benefits to employee organization: A conceptual study. *European Journal of Business and Management*, 5, 243-252.

Jannetti, A. J. (2017). *How to conduct needs assessment Part I: What is it and why do it*. Retrieved from *https://www.ics.ncsu.edu.>Blog*.

Karpati, A.(2017). *Teacher training and professional development.* Retrieved from http.%20NEEDS%20ASSESS-MENT/chapter8%20importance%20of%20teacher%20training.pd.

McDowall, A., and Saunders, MNK. (2010). Conceptions of training and development. *Journal of European Industrial Training*. 34 (7), 609-630.

Mynbayeva, A., Sadvakassova, Z., & Akshalova, B. (2018). Pedagogy of the twenty-first century: Innovative Teaching methods. Retrieved from *http://www.intechopen.com/...pedagogical...21st_century.../pedagogy_of_the_twenty_f.*

Mizell, H. (2010). *Why professional development matters.* Retrieved from www.learningforward.org.

National Research Council 2012.

Nischitaa, P., & Narasimha, R. (2014). The importance of training and development programmes in hotel industry.

International Journal of Business and Administration Research Review. 1(5), 50-53.

Nooraini, O., and Abdul Halim, A. (2017). *The readiness of secondary school Mathematics teachers in implementing the 21ˢᵗ century learning and teaching process.* Thesis. pp. 567-584. Faculty of Education. University of Technology Malaysia.

Philippine Professional Standards for Teachers 2017.

Randall, V. S. *The Importance of teacher education: A critical discussion on policy reform relating to 2010 White Paper and its implications for preparing teachers.* Retrieved from ASSESSMENT/TEACHER%20 TRAININGRandall-UCET.pdf.

Redecker, C., & Punie, Y. (2013). *The future of learning 2025: developing a vision for change.* Future Learning, Vol.1, 3-17. Retrieved from www.academia.edu./6470910/ The-Future-of-Learning—2025-Developing-a-vision-for change.

Saavedra, A., & Opfer, V. (2012). *Teaching and learning 21ˢᵗ century skills: Lessons from the learning sciences. A global cities education network report.* New York, *Asia Society*. Retrieved from http://asiasociety.org.files/rand-0512report.pdf.

Schleicher, A. (2012). *Preparing teachers and developing school leaders for the 21ˢᵗ century: Lessons from around the World*. OECD Publishing.

Scott, C. (2015). *The futures of learning 3: What kind of pedagogies for the 21ˢᵗ century?* Retrieved from repositorio. minedu.gov.pe/handle/123456789/3747.

Tabassi, Amir A., Mahyuddin, R., & Abu Hassan, A.B. (2012). Effects of teaching and motivation practices on teamwork

improvement and task efficiency: The case of construc-tion firms. *International Journal of Project Management*, *30*(2), 213-224.

Tahir, Y. (2014). The impact of training and development on employees performance and productivity. A case study of united bank limited peshawar city, KPK, Pakistan. *International Journal of Academic Research in Business and Social Sciences. 4*(4).

UNESCO-IBE. (2013). *Statement on learning in the post 2015 Education and Development Agenda.* Geneva, UNESCO International Bureau of Education. Retrieved from www.unesco.org/newfileadmin/MULTIMEDIA/HQ/ED/PDF/UNESCOIBEStatement pdf.

UNESCO and UNICEF 2013a. *Envisioning education in the Post- 2015 Development Agenda: Executive Summary. Paris, UNICEF and UNESCO.* Retrieved from http://en.unesco.org/post2015/sites/post2015/filesPost-2015_en_web_pdf.

Wagner, T. (2016). *21st century skills.* Retrieved from http://www.21st centuryschools.com/.

Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad.* Dallas, TX: National Staff Development Council.