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## RESEARCH ARTICLE

### 3R'S FOR THE 21ST CENTURY EDUCATIONAL CHANGE IMPLEMENTATION IN DEPED

\*Dr. Jennifer B. Gonzales

Cebu Normal University, Philippines

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#### ABSTRACT

This study describes the level of readiness, relevance and resources of the DepEd teachers as personally perceived and as observed by the school heads. This study is conducted to formulate an emergent theory which could be helpful in providing interventions and improving the teachers' competencies in providing the desired 21<sup>st</sup> century education. The study was conducted in the school year 2017-2018 and validated in the school year 2018-2019 in DepEd Danao City. A research made questionnaires were utilized in collecting the data, validated by interview of the randomly selected research participants. The result showed that the teachers are highly ready and relevant towards becoming educational change agents, yet they are struggling to be the functional resources. It is also proven that the school readiness, relevance and resources are major indicators for the teachers to reach their full potentials as change agents. It is theorized that 21<sup>st</sup> Century school resources and professionally developed teachers create a 21<sup>st</sup> century ready, relevant, and resourceful Department of Education in the Philippines. It is recommended that the school will provide training to improve the teachers' competence and support the teachers with sufficient 21<sup>st</sup> century resources.

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## INTRODUCTION

The technological boom around the globe has influenced a lot of changes, which include changes in the educational landscape in the Philippines. However, the capacity of the school to initiate and develop the innovation depends on the teachers' readiness, relevance and resources which are prerequisites for the successful implementation of educational change. Dubbed as digital natives, today's students are more exposed to technology (Parren, 2015) however, they need somebody who teaches them to properly use the machines. Although Mitra (2011) claimed that teachers are not very significant in the classrooms anymore, students need teachers as internet safety wall to help them process information for better thinking and learning experiences. Teachers are needed in the classroom for the technology-oriented students to harness the power of technology in engaging students in authentic tasks and in solving real-world problems. The Basic Education has responded the challenge of facing the change through the implementation of RA 10533 or the Enhanced Basic Education Act of 2013, which is an essential program for making the Philippine Education system at equivalence and become competently leveled with the rest of the countries (UNESCO, 2012). 21<sup>st</sup> century related training were afforded to the teachers, however they contended that these are not enough for them to be significant to the 21<sup>st</sup> century changes. The most challenging issue in the 21<sup>st</sup> century Philippine Basic Education is that teachers may not be ready and relevant to

function properly in the classroom. Prensky (2001) pointed out that teachers are digital migrants, which in the Philippines, many teachers were born before the widespread use of digital technology. Although DepEd teachers adapted the use of technology, the assurance of their level of readiness, their relevance to facilitate the change and their teaching competencies as a school resource need to be verified. It is not only challenging to manage a Millennials in a 20<sup>th</sup> century classroom, it is also haunting for the teachers to compete against the students' easy access of the social media, which takes much of the students' attention. Due to easy access of information students may easily get bored in classes. Price (2010) posited that "Millennials are easily bored in the "twitch speed" world they've been raised in, so they multi-task to stay engaged". There is no appreciation of information for information's sake as has been in the past, simply because information is so easily accessible to this generation (Edglossary.org, 2016). For these reasons, a ready, relevant teachers become the strongest school resources in facilitating students' transformation in finding, interpreting, and using information. It is the teachers' task to prepare the students for the future jobs where they are required to be knowledge workers and self-learning individuals.

#### A. Statement of Objectives:

This research delved into the level of readiness, relevance and resources of the DepEd Junior High School teachers in facing

\*Corresponding author: Dr. Jennifer B. Gonzales,  
Cebu Normal University, Philippines.

the 21<sup>st</sup> century educational challenges. It specifically sought to:

1. Compare the level of readiness, relevance and resources of the teachers as personally perceived;
2. Compare the level of readiness, relevance and resources of the teachers as perceived by the school head;
3. Generate a theory.

## MATERIALS AND METHODS

**Research Design:** This study employed quantitative research method which centered on investigating the level of the readiness, relevance and readiness of the DepEd teachers both personally perceived and perceived by their immediate superior. This was a purely descriptive study whereby the means of the level of the teachers' personally perceived readiness, relevance and resources were compared, described and interpreted in order to reveal the implications and opportunities, and identify which area needs to be focused. As means of data validation, the result was compared to the data collected from the principals and assistant principals. No statistical treatment was needed in this research.

**Research Locale:** The locale of this research was the Division of Danao City. *DepEd Division of Danao City* was created in 1963 and started its operation of overseeing the educational institutions of the city. A number of secondary public schools were founded years later. As of the present there are a total of 16 secondary schools. At present, it has 16 schools.

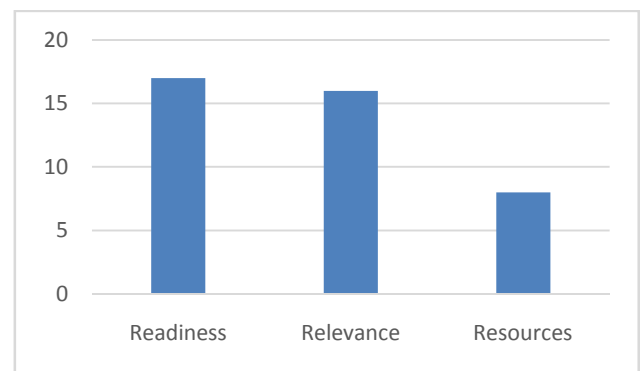
**Research Respondents:** The respondents of this research were high school teachers of 30 – 40 years old Junior High School teachers. The sampling was purposive, which was selected based on the age of the teachers. A universal population was tested from among the 30 – 40 years old. Junior High School teachers were the subjects of the research hence almost all of them were in the system for at least 3 years.

**Research Instrument:** This research used a researcher-made questionnaires as method for gathering the data. The instrument was a nominal survey type – yes or no with 20 questions in each of the Fullan's 3Rs. 60 questions are set to determine the level of the teachers' readiness, relevance and resources, each with 20 questions. 30 questions were used to collect the same data from the school heads, which comprised of 10 for readiness, 10 for relevance and 10 for resources. The tools are linked to each other in order to verify and validate the data gathered. A pilot test was done in order to validate the research tools prior to the actual collection of the data. The result is tested with a result of 0.79.

**Data Gathering Procedures:** An approval from the Schools Division Superintendent was first sought prior to the data collection and a necessary documentation for research ethics was first done. The questionnaires were administered to all 30-40 years old secondary teachers-respondents to gather the data needed. As means of data validation and triangulation, a relevant set of questionnaires were given to the school heads to answer, and an interview of few teachers was conducted. Presentation and Analysis of Data. The data was presented in graphs for easy visual reference and the actual responses of the teachers were quoted to support the data collected.

## RESULTS AND DISCUSSION

**The Readiness, Relevance and Resources of the DepEd Teachers personally perceived:** The graph below presents the comparative level of readiness, relevance and resources of the DepEd teachers. The figure above shows that the level of teachers' readiness 23 as mean, relevance is 19 and resources is 11. This reveals that comparatively the teachers level of readiness is the highest, among the three, followed by their relevance. It is also evident that they perceive themselves as low in terms of resources. It appears that the teachers are ready to plan for lessons that cater to the 21<sup>st</sup> century learning needs of the students, they are ready to use technology to keep track of their workloads and ready to assume shared responsibilities collaboratively.



**Figure 1. The Comparative Level of Teachers' Readiness, Relevance and Resources as Personally Perceived**

The areas that the teachers are not ready include designing and using instructional materials that are 21<sup>st</sup> century relevant, conducting and using research based information for their classes and enrolling in graduate studies to further their knowledge and skills. These are supported by the teacher's statement below:

*I already know what a 21<sup>st</sup> century teacher should be and I am ready, although. Not 100%. However, there are certain aspects, which includes the financial situation of the basic education in the Philippines, which made the students so disconnected to the classroom. It is difficult when the teachers are willing but the students are not because the school environment is not helping them. It is frustrating. (T05)*

On the other hand, the teachers feel relevant in giving the students a chance to learn among themselves, in assuming varied responsibilities not only as a school teacher and in making sure that the students ideas are catered and accepted in class. They seem not relevant in having Master or Doctoral degree or experiencing trainings related to 21<sup>st</sup> century educational trends and in using online tools for their classes as mentioned by the teacher as:

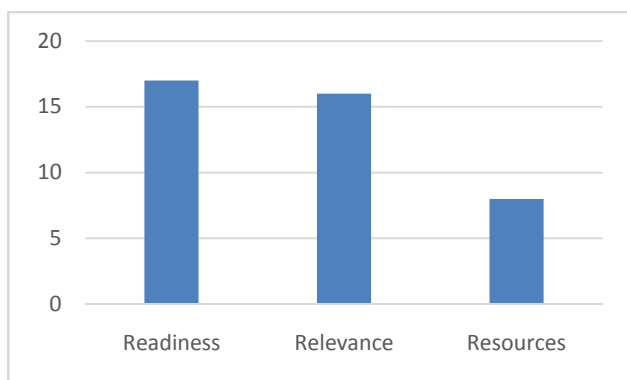
*I feel emotionally and psychologically relevant. I make sure that I function not only as a teacher but as a mentor, a coach an adviser and other tasks or responsibilities of a teacher. However, compared to those who are teaching in higher education, I feel that I am less relevant because almost all of the HEI teachers are graduate of Doctors degree or Masters, many of us in the basic education public schools are not, anyway having a higher degree is not a requirement. So I feel that, I am less confident and less relevant. (R01)*

Similarly, as resources the teachers feel that they are skilled at making the classroom a conducive place for learning however, they feel strong at the need for financial assistance to be trained, take further studies to make themselves more competent at facilitating 21<sup>st</sup> century learning, which includes using online resources. This is supported by the teacher's statement:

*We, in the public schools basic education teachers, are used to using our own money in order to provide the needed materials in the classroom for our students. Sometimes we spend too much to improve the classroom, and we have very less for ourselves. This is the reason that I cannot afford to attend to trainings that are expensive, or attend graduate studies. Yes, I am a resources because I value my students, but I maybe it is not enough to compete globally. (R04)*

The salary of the secondary teachers in the Philippines is lower compared to the neighboring Asian countries (Dios, 2014). The Department of Education need to raise the bar of teacher qualification and provide teachers with opportunities for professional development. The huge difference in terms of the level the teachers' readiness and how they perceive themselves as resources for 21<sup>st</sup> century educational change apparently means that the teachers have enough knowledge in terms of the needed 21<sup>st</sup> century changes in the classrooms yet could hardly make themselves as the right resources to make the change. This further implies that although teachers are perceived to be the most functional agents of change (Fullan, 1999), the DepEd teachers believe that what they have may not be enough to be the desired change agents.

**The Readiness, Relevance and Resources of the DepEd Teachers as perceived by the school heads:** The following figure shows the comparative level of readiness, relevance and resources of the DepEd teachers as perceived by the school heads.



**Figure 2. The Comparative Level of Readiness, Relevance and Resources of the Teachers Perceived by the School Heads**

The second figure shows that the school heads sees the teachers' relevance to the 21<sup>st</sup> century educational change as high with a mean of 17, their level of readiness with a mean of 16 while low in terms of the level of resources with a mean of 8. The teachers, however, weren't able to achieve a maximum level of readiness and relevance. The left out percentage involves innovating and adapting educational practices, which is affected by the fact that the school itself is not fully ready with the changes, which includes providing facilities and equipment aligned with the 21<sup>st</sup> century standards and

reinforcing teachers with 21<sup>st</sup> century instructional materials. This is supported by the statement below:

*The teachers are very eager to be competent ones, they showed signs of innovations and initiatives to be competent, however due to the obsolete training that they or we have, it seems that shifting practices may be very difficult. We also don't have enough facilities like laboratories in the schools to be able to expose students to the necessary training that they need. (R03)*

Because of the information revolution, teachers are expected to be able to master the technological advances (Turnbull, 2007). Thus providing them training and necessary skills in technology will raise the quality of the basic education. The school heads, further, collectively affirmed that the teachers are relevant to the ideals of the K to 12, that they understand their mission as educators, they aim for improvement and are open for change, yet again they seem having a hard time aligning their classroom practices to the international standards like taking-in foreign students.

*Of course we are trying to integrate technology into the classroom, we even have facebook groups in order to make communication easy. Yet, the internet connection in the Philippines is very slow, so it is difficult. We are very open to change, yes, but if we are willing to accept foreign students in the mainstream classroom, not yet. (R02)*

In terms of resources, the school heads see that the teachers may not be enough, hence, the school as well cannot provide enough resources for the teachers. These include the needed classroom tools such as chairs, white board, technological tools. The school heads also collectively confirmed that the teachers are bombarded with other tasks aside from teaching which keep them out of the classroom and leaving the students behind. Aside from which, the teachers have so much paper works to do. These are evident in the following lines:

*As human resources, some teachers have the potentials, but there are also those who are not. They always complain about the lack of tools and technology to use in the classroom, which impeded them to be 21<sup>st</sup> century educators. (R04)*

Apparently, the school heads see the teachers' readiness and relevance but as a total potential human resources, they confirmed that the teachers needed to be improved in general. They also affirmed that there are factors that inhibit the teachers to reach their potentials, major one is the school and its capabilities to support the teachers and improve themselves personally and professionally. This implies that without the readiness, relevance and resources of the school, the teachers cannot reach their full potentials to be agents of 21<sup>st</sup> century educational change.

## Theory development

The inductive theory development approach is utilized in the study to generate a theory. The following axioms are formulated based on the result of the study.

### A. Axioms

**Axiom 1:** Teachers are almost ready and relevant but rarely have professional development to make themselves functional

resource for the implementation and sustainability of 21<sup>st</sup> century educational change. In the society where there is a free flow of information, teachers and lifelong learners, when they are afforded with professional development, there is a higher degree of acceptance to change, which triggers them to become active participants of their own learning. They become self-directed, empowered, innovative and professionally skilled (Fullan, 1999). Teachers who adopted and implemented teaching using technology in the classroom have better impact to students (Schroll, 2007). Therefore, teachers coming-out of their comfort zones by learning virtually is a way to be able to connect to their learners (Telford, 2009). Because it is needed for the 21<sup>st</sup> century teachers to negotiate with the fast changing world the Department of Education need to raise the bar of teacher qualification and provide teachers with opportunities for professional development.

**Axiom 2:** The schools seldom provide 21<sup>st</sup> century training to the teachers. Teachers' transformation in preparation for the 21<sup>st</sup> century is a must. This transformation includes upgrading and updating their personal and professional development (Durban & Catalan, 2012). Yet, this professional development may not be a priority for the Department of Education. With the present conditions of the teachers in the public schools only very few can afford a proper training, unless government intervenes and provide upgrading activities for free. Providing training to the teachers on the 21<sup>st</sup> century educational strategies will help them improve the quality of their work.

**Axiom 3:** The schools rarely support the teachers with the desired school equipment and instructional materials aligned with the 21<sup>st</sup> century standards. One of the haunting issues in public basic education in the Philippines is the lack of facilities and equipment for the 21<sup>st</sup> century education implementation. The readiness of the school, which includes the improvement and maintenance of the of the school resources including laboratories and facilities as well as the enhancement and strengthening of the school industry linkages (Emaden, 2015), is needed in implementing the 21<sup>st</sup> century education and is relevant in aiding the teachers facilitate classroom activities needed to cope with the changes of time. Accordingly, Scheir (2014) argued that the needed facilities and relevant resources are not met by the schools.

## B. Propositions

Based on the axioms formulated, the following propositions are made:

**Proposition 1:** Professional development provided by the schools produces fully ready and relevant teachers for the implementation and sustainability of the 21<sup>st</sup> century change. (Axiom 1, 2)

**Proposition 2:** Teachers' training and school equipment helps teachers to be highly competent school resources.

## C. Hypothesis

Based on the propositions, the following hypothesis is created:

**Hypothesis 1:** Professionally developed teachers are ready, relevant and are excellent resources of the school for the implementation and sustainability of the 21<sup>st</sup> century change.

**Hypothesis 2:** Provided with training and sufficient 21<sup>st</sup> century facilities and instructional materials, the school produces competent teacher as human resources for the implementation of the 21<sup>st</sup> century change.

## D. Theory Generated

21<sup>st</sup> Century school resources and professionally developed teachers create a 21<sup>st</sup> century ready, relevant, and resourceful Department of Education in the Philippines.

## CONCLUSION AND RECOMMENDATIONS

With the foregoing result of the study and the theory generated, the following conclusion and recommendations are made:

### Conclusion

The teachers have opportunities in terms of readiness relevance and resources in becoming the 21<sup>st</sup> century educators supported with professional development and sufficient 21<sup>st</sup> century school facilities and instructional materials.

### Recommendation

In order to maximize the teachers' opportunities as school human resources and make them ready and relevant to the desired 21<sup>st</sup> century education, the school needs to support the teachers with materials and professional development that are relevant to the 21<sup>st</sup> century educational needs. For support on materials and facilities, it would be advisable that DepEd and schools create external linkages and tap into private organizations and institutions for resources support.

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