Perceptions of Science Teachers from Marawi City High Schools on the Kto12 Curriculum Implementation

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Abstract
The Department of Education (DepEd) has an impetus for Kto12 Curriculum implementation. However, this remains an issue due to argument that it is merely a superficial solution. And it does not truly address the country’s more fundamental educational problems. Accordingly, the study was conducted during its second year implementation and it only included grade 7 and 8 science teachers to investigate their perceptions as well as to know the relationships of some variables pertaining to teachers’ characteristics and their type of school. Descriptive with correlational type of research method was employed. The study found out that many science teachers positively perceived on the curriculum implementation and agreed on its rationale, education vision and goals, and benefits stipulated by the DepEd. On the other hand, some had negative impression on the transition due to lack of readiness and discrepancy of reproduced learning materials for the teachers on classroom instruction. In addition, more science teachers from public high schools attended the Kto12 trainings and used the said materials than those from private high schools. Moreover, there was a significant relationship between the teachers’ attendance in the Kto12 trainings and their usage of materials in the classroom instruction. The study suggested that DepEd ought to send their teachers on Kto12 trainings to prepare them for the curriculum transition. Additionally, thorough examination on the Kto12 materials shall be conducted by DepEd to meet what it intends to implement and attain.

Keywords: Kto12 curriculum, public high school, private high school

Introduction
Procuring better education has been everyone’s vision. For this will prepare him with the indispensable knowledge and skills acquired to be practical citizen of the society. As stressed, a good education helps individuals to gain knowledge and wisdom. It enables them to discern truth from error and then make good choices. Further, education and literacy are also keys to personal growth, groundwork for employment and making a meaningful contribution to the society. On the other side, with the past assessments conducted by international agencies such as Trends in International Mathematics and Science Study (TIMMS), Philippines ranks poorly in the tests. And it has been attributed to many factors; probably, the kind of curriculum which exists in the country may be one of those. Thus, as part of the efforts of Aquino administration, the Department of Education (DepEd) had directed the implementation of Kto12 Curriculum. Additionally, Bacani (2014) pointed out that benchmarking the Philippine education curriculum’s content and structure is needed to affirm that basic education in the country meets the demands of the twenty-first century. It is envisioned that graduates of K to 12 Basic Education Program
are envisaged to be better prepared for life as they are expected to possess sufficient mastery of 21st century core skills. And they will be emotionally developed and competent to live a meaningful life; be socially aware and be pro-active in civic affairs. Aside from these, they will be adequately prepared for the world of work or entrepreneurship or higher education; be legally employable; and be globally competitive (Salan, 2014).

Nevertheless, this remains an issue because some teachers as well as educators and many parents have argued that it is merely a superficial solution. And it does not truly address the more fundamental problems of the educational system. Besides, critics also interrogated the relationship between education cycle length and education quality. In fact, they cited studies conducted by TIMSS that longer education cycles do not necessarily result to better performance of students, contrary to what is believed. Further, one of the major concerns of the critics is the parents' additional expenses on their children’s school cost. For the longer education cycle may add burden to households. Subsequently, it may end to higher dropout rates. Because, in spite that the government can provide free public education, parents still carry the responsibility defraying the allowances, transportation, education supplies, and other school expenses. Meanwhile, some are apprehensive on the urgency to its enactment. For one, if publicly funded, the rush implementation of the program may have inadvertent effects on social equity. Primarily, it is due to many poor families not reaching beyond the secondary level of educational attainment (PIDS, 2014).

**Statement of the Problem**

This study aimed to investigate the perceptions of science teachers from Marawi City High Schools on the Kto12 Curriculum implementation. Specifically, it sought to answer the following: 1) What is the comparison of the teachers' characteristics from public and private high school in terms of age, civil status, highest educational attainment, employment status, and number of years in teaching? 2) How do the public and private high school science teachers differ in their attendance in the Kto12 seminar/training, positive perception on the Kto12 curriculum implementation; and usage of Kto12 materials in their classroom instruction? 3) Is there a significant relationship between the teachers’ attendance in the Kto12 seminar/training and their positive perception on its implementation? 4) Is there a significant relationship between teachers’ attendance in the Kto12 seminar/training and their agreement on the rationale, education vision, goals, and benefits of the curriculum? 5) Is there a significant relationship between the teachers’ attendance in the Kto12 seminar/training and their usage of Kto12 materials in their classroom instruction? 6) What are the perceptions of the teachers on the Kto12 curriculum implementation?

**Significance of Study**

Although, the acceptability on the enactment of the new curriculum is mandated for the teachers, the study will give imperative insights regarding the views of the teachers specifically to provide the school administrators with some feedbacks on the perceptions of the teachers, to enlighten the policy makers and curriculum designers for the enclosure of seminars and trainings in the program, to offer the DepEd with some informative criticisms on the curriculum implementation, and it may contribute to the fund of knowledge in Science Education.

**Research Design of the Study**

Descriptive with correlational type of research method was employed to investigate the science teachers’ perceptions as well as to know the relationships of some variables pertaining to teachers’ characteristics on the Kto12 curriculum implementation. In descriptive research, it involves detailed descriptions of specific situation(s) through interviews, observations, and document review. It may also include numerical descriptions such as frequency and average. On
the other hand, correlational method encompasses quantitative analyses on the strength of relationships between two or more variables (SBR RTAPS, 2008).

**Sampling Procedure of the Study**
The study was conducted in 2013 and early 2014. Due to Kto12 curriculum second year implementation, the study only covered the grade 7 and grade 8 teachers from Marawi City high schools, particularly those teaching science subjects. Purposive sampling was employed in the study. Subsequently, this resulted to thirty (30) and twenty (20) science teachers from public and private high schools in Marawi City, respectively.

**Collection of Data**
Science teachers’ characteristics and their perceptions were gathered with the use of the following: the questionnaire for teachers’ profile and for the positive and negative feedbacks of the implementation and these were supported by Likert Scale on how they agreed on the statements formulated by the DepEd on the rationale and benefits of the Kto12 curriculum; the interview guide in which the questions were primarily based on the questionnaire to follow-up and verify the data collected from the respondents; and the observation notes to triangulate the gathered data from the questionnaire on whether or not the teachers used the Kto12 learning materials in their classroom instruction.

**Treatment of the Data**
Through Microsoft excel and statistical software, the collected data were systematically organized and analyzed with the following: the arithmetic mean and percentage to describe the respondents’ characteristics; the histogram graphs to visually identify some variables included in the study; and the Pearson chi square test to know if the relationship between the teachers’ perception on the Kto12 curriculum implementation as well as the usage of Kto12 materials and the attendance in the Kto12 seminar/training is significant or not. Furthermore, the perceptions of the science teachers were categorized as either positive or negative. In addition, some significant accounts under each sort were also identified.

**Findings of the Study**
As shown in Figure 1, most of the grade 7 and grade 8 private high school science teachers were at the age bracket 20-25. While that of public science teachers belonged between 41-55 years of age. It may be explained that most of the teachers from the former were fresh graduates. Private school administrators probably have an easy access to recruit younger teachers. Possibly, in terms of age, teachers from the private high schools were more decided in dealing with curriculum change.
On the other hand, it is interesting to note that the researcher observed that almost all of the respondents were Meranaos, one of the Muslim groups in the country. Being married is a status symbol particularly in Muslims (Gumal, 2012). Furthermore, a married individual in Meranaos has many social obligations; she/he is required to appear in many occasions: wedding, funeral, etc. This may convey that they may have distributed time between social and work obligations. Thus, students may be at risk, particularly if teachers are on excessive social commitments. In other words, it would be difficult to entertain some changes in the teaching specifically in the curriculum. And another time ought to be allotted to study and explore the materials given by the DepEd. However, this inference may not be true for all teachers. Another study ought to be conducted to substantiate such implication.

It can be seen in Figure 2 the comparison between the civil status of public and private high school science teachers handling grade 7 and grade 8. Since younger teachers were noted in the private high schools, the teachers may not be at the period of marrying or perhaps not yet ready for such. Hence, they may give more attention in their teaching career and more open for curriculum transition. Nonetheless, another study must be conducted to support this claim.

Figure 3 expressed the comparison on the highest educational attainment of science teachers from public and private high schools. It is clearly comprehended that both public and private high school had science teachers with masters’ degree units. Since a course on curriculum development is one of the subjects offered in the graduate study, this may mean that teachers may already have thorough knowledge on curriculum transition. And they may have the insights on the previous curriculum and how it differs both in the content and process. Probably, this may affect their perceptions on the Kto12 curriculum implementation. In addition to that, some of them just finished their baccalaureate courses, specifically more from the private high schools. As attested from the previous findings, private schools had more fresh graduates. It is believed that neophytes are more exposed to changes.
Figure 3. Comparison of Highest Educational Attainment Between Public and Private High School Science Teachers

Figure 4 provided information on the employment status of the high school science teachers. As noted, most teachers from the public high schools already gained permanent employment in their school. This may imply that the school administrators may not be hesitant to send their teachers on the Kto12 seminars/trainings as these may be funded by the DepEd. Moreover, they may have an easy contact for the Kto12 materials. Hence, they may use those in their classroom instruction. In contrast to the private high schools, it is apparent that teachers may not stay permanently in their corresponding schools particularly if they find better opportunities. Only those directly connected to the administrators may prefer to stay longer; probably they may have high raise compared to others.

Figure 4. Comparison on the Employment Status between Public and Private High School Science Teachers

As shown in Figure 5, most of the public high school science teachers had longer length of service compared to the private high school science teachers. Most of the latter were still new recruits. This may be explained by the fact that once the teachers find more opportunities, they left the private institutions. However, this may entail that private science teachers may have an easy acceptance on the new curriculum since they were still not “burn-out” in their profession.
As shown in the figure above, most public science teachers handling grade 7 and grade 8 had attended the seminar/training pertaining to the Kto12 curriculum. This is supported by the interview that they were required to attend the said orientations/workshops since these were funded by their schools as obliged by the DepEd. This is then implied that they may gain positive perception on the new curriculum; and that the speakers may have well convinced the teachers to adapt it. As contended by Fajardo (2012) that another factor which sought to determine its influence on Kto12 program’s social acceptability is the speaker’s bureau. Effective communication strategies of the speaker’s bureau in relation to the promotion of and information dissemination about Kto12 may be acquired by the teachers during the seminars.

Similarly, it can be surmised that public high school science teachers may be well acquainted with the curriculum compared to the private high school science teachers. In fact from the interview conducted, some science teachers from the private high schools claimed that they failed to attend the seminar/training because either their school administrators or academic consultants had instead come to such academic event. Afterwards, they conducted a semi-echo of the seminars/trainings. Perhaps, this was so due to financial reasons because some seminars/trainings required expenses either for the registration fees or for the transportation and other fees during the travel once conducted outside Marawi City.
As revealed in the figure shown above, many science teachers had a positive perception on the Kto12 curriculum implementation. It was supported by the interview that aside from the anticipation that the said curriculum may bring positive impact on the performance of the students, whether they like it or not they did not have the choice to say no since it has been put into law through RA 10533 which was signed by President Aquino on May 15, 2013. Apparently, the figure expressed that science teachers coming from the public and private high schools have the same status on how they perceived the curriculum transition.

Figure 8. Usage of Kto12 Learning Materials in the Classroom Instruction

Figure 8 illustrated that most teachers from the public high schools used Kto12 materials in their classroom instruction; this is in contrast to those from private high schools. The figure above can be supported by the previous figure (Figure 6) that many from private high school science teachers had not attended the Kto12 trainings compared to the public high school. This is also revealed in the classroom observations conducted by the researcher. Moreover, some teachers claimed that using the materials without orientation/attendance in the seminar/training may be difficult. Nevertheless, it is shown further in the figure that both sectors had teachers who flanked to use the materials. During the interview, it was found out that some teachers were reluctant to use the Kto12 materials due to detected errors specifically in the modules. In addition to this, some of them were not convinced on the sequence of the lessons given in the modules. They could not find coherence in the presentation of the lessons. The interview also
revealed that many teachers both from the two sectors had initiated to get some materials (softcopy/hardcopy of the module) on their own expenses.

This may mean that module writers through the assistance of DepEd and other agencies ought to improve the materials since this may forfeit the vision of the curriculum to enhance the academic performance of the students. Mistakes cannot correct another mistakes.

Table 1. Correlation on the Attendance in Seminar/Training and the Perceptions on the Kto12 Curriculum Implementation

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Sig. (2-sided)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson chi square</td>
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<td>1</td>
<td>.396</td>
<td>Not significant</td>
</tr>
<tr>
<td>Linear-by-linear association</td>
<td>.707</td>
<td>1</td>
<td>.401</td>
<td></td>
</tr>
<tr>
<td>N of valid cases</td>
<td>50</td>
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</table>

As demonstrated in the table above, there is no significant relationship between the science teachers’ attendance on the Kto12 seminar/training and their perceptions on its implementation since the p-value (0.396) is greater than 0.05 level of significance. This may imply that teachers already had the mind set to accept the curriculum transition since it has already been approved by President Aquino. This would further corroborate that teachers were compliant to whatever the DepEd supports and implements.

Table 2. Correlation on the Attendance in Kto12 Seminar/Training and Agreement on the Rationale, Education Vision, Goals, and Benefits of Enhanced Kto12 Basic Education Program

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<th>Value</th>
<th>df</th>
<th>Sig. (2-sided)</th>
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<tr>
<td>Pearson chi square</td>
<td>.654</td>
<td>1</td>
<td>.419</td>
<td>Not significant</td>
</tr>
<tr>
<td>Linear-by-linear association</td>
<td>.641</td>
<td>1</td>
<td>.423</td>
<td></td>
</tr>
<tr>
<td>N of valid cases</td>
<td>50</td>
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In congruent to the previous table, Table 2 indicated that there is no significant relationship between the science teachers’ attendance on the Kto12 seminar/training and their agreement on the rationale, vision, goals, and benefits of the new curriculum since the p-value (0.419) is greater than 0.05 level of significance. This may confirm that teachers were amenable to the programs implemented by DepEd.

Table 3. Correlation on the Attendance in the Kto12 Seminar/Training and the Usage of Kto12 Materials in Classroom Instruction

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Sig. (2-sided)</th>
<th>Decision</th>
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<tbody>
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<td>.022</td>
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<td>Linear-by-linear association</td>
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<td>.020</td>
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<td>N of valid cases</td>
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Table 3 revealed that there is significant relationship between the science teachers’ attendance in the Kto12 seminar/training and the usage of Kto12 materials in classroom instruction since the p-value (0.022) is below 0.05 level of significance. This may suggest that in order for the DepEd
to have full implementation of the curriculum, they ought to provide more seminars/trainings to
the teachers. Through these, they would be encouraged and enlightened to use the materials. On
the other hand, they should examine first those materials before using in classroom instruction
because this may only lead to more problems in the students’ learning process. Eventually,
wrong concepts may result to useless new curriculum.

**Perception of Science Teachers**

Since, the perceptions of the teachers coming from public and private science teachers on the
Kto12 curriculum implementation were alike, the data were generally categorized according to
whether positive or negative perceptions.

**Positive Perceptions**

As revealed from the questionnaire and the interview, many science teachers (88.20%) from
grade 7 and grade 8 in public and private high schools in Marawi City claimed that Kto12
curriculum may bring improvement on the educational system of the country. They also stressed
that since the curriculum was approved by the President, they have to support it. Many of them
positively responded on the rationale, education vision, goals, and benefits of the curriculum
claimed by the DepEd.

**Negative Perceptions**

On the other hand, 11.8% of the teachers were doubtful on the implementation. It was found
out from the interview that they were not ready for the curriculum transition specifically those
teaching in the private high schools. They asserted that more seminars and trainings ought to be
conducted so as to prepare the teachers. Similarly, they found the Kto12 materials with
discrepancy which made them unenthusiastic towards the use of it. However, many of them
instead use the materials as references.

The above two general perceptions of the science teachers may suggest that the DepEd still
needs to widen their campaign on the implementation through trainings so as to increase the
awareness of the teachers. Importantly, they have to assess the materials before releasing them to
the different schools to avoid more inaccuracy.

**Conclusions and Implications of the Study**

The teachers’ characteristics such as age, civil status, highest educational attainment, employment
status and number of years in teaching may have inferred different influences on their
perceptions in the Kto12 curriculum implementation. Further, more science teachers from the
public high schools had attended the Kto12 seminars/trainings than those from the private high
schools. Similarly, there were the same positive perceptions on the Kto12 curriculum
implementation between the science teachers from public and private high schools. Nonetheless,
more public high school science teachers had used the Kto12 materials in the classroom
instruction than those from private high schools. And there was no significant relationship
between the teachers’ attendance in the Kto12 seminar/training and their positive perception on
its implementation. Similarly, there was no significant relationship between teachers’ attendance
in the Kto12 seminar/training and their agreement on the rationale, education vision, goals, and
benefits of the program. However, there was a significant relationship between the teachers’
attendance in the Kto12 seminar/training and their usage of Kto12 learning materials in their
classroom instruction. Additionally, many science teachers positively perceived on the Kto12
curriculum implementation as well as agreed on the rationale, education vision and goals, and
benefits of the curriculum cited by the DepEd. On the other hand, some had negative
impression on the transition due to lack of readiness and inconsistency of the materials reproduced by the agency for the teachers in classroom instruction.

Accordingly, it is necessary for the DepEd and school administrators to send their teachers on Kto12 seminars/trainings to prepare them for the curriculum transition. Besides, thorough examination on the Kto12 materials ought to be conducted by DepEd and module/textbook evaluators to meet what they intend to attain. Furthermore, these shall be distributed to the schools for free. Likewise, it is appreciated if DepEd continually coordinates with the private high schools on the implementation of the new curriculum. This may help private high school teachers reduce confusions and hesitations. Finally, it is suggested that for future researchers, they may consider the following: 1) increase the number of respondents and include not only science teachers but also those from other fields; 2) content analyze the Kto12 learning materials provided by the DepEd; 3) develop module in line with the Kto12 curriculum; and 4) explore other variables aside from the parameters covered in this study.

References