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DRAWING CURRICULUM REFORM IMPLICATIONS FROM IN-SERVICE TEACHERS' LIVED EXPERIENCES OF THE 2010 SEC

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Abstract

Secondary school Science teachers (n=30) from the Cavite Division were surveyed and interviewed in order to document their understanding and concerns regarding the implementation of the 2010 SEC framework. Responses from the survey questionnaires and interview together with the archival data (learning plans and classroom observations) were collected, organized and analyzed using descriptive statistics to draw implications on this curriculum reform. Results revealed that teachers have a generally developing conception of the 2010 SEC framework. Teachers are aware of the changes in their role as curriculum implementer; and are sensitive to the changes in behavior of the students. Teachers also revealed emerging realizations in line with the benefits of technology in the teaching–learning process. Conversely, data showed concerns on the skills requisite in designing and executing backward learning plan and apprehensions in implementing the 2010 SEC framework due to other concerns (*ie.* classrooms and other school facilities, instructional materials, quality of teachers, drop out and retention rates, management and supervision, accountability over learning outcomes) that usually hamper a successful implementation. Findings in this study emphasized the effects of the innovation to students as well as the teachers' perceived role in the curriculum reform.

Introduction

The DepEd Order No. 76, s. 2010 ushered in the 2010 Secondary Education Curriculum (2010 SEC) to the Philippine education system. Signed by then DepEd Secretary Mona D. Valisno, the 2010 SEC emerged as an urgent response to the declining school performance as stipulated in the said department order. Substantial data from the DepEd file revealed that the achievement rate (mean percentage score, MPS) in the National Achievement Test (NAT) of secondary students in the last five years, is low compared to the elementary pupil counterpart (Basic Education Statistics, 2011). Getting a higher percentage of passing in the MPS over the secondary students who took the NAT, however, does not ensure better quality education in the elementary level. Early records on the result of the High School Readiness Test (HRT) revealed that the elementary pupils are not yet prepared to face the rigors of secondary education (International Qualification Assessment Service, 2007) as supported by the low performance of the secondary students over the elementary pupils .

As compared to other South East Asian countries, Philippines ranked 7th out of 9 SEA nations (de Leon, 2011) in the area on education and innovation as presented in a forum



on Innovation and Entrepreneurship for a Globally Competitive Philippines. The results of the 2010-2011 Global Competitiveness Report of the World Economic Forum showed that the Philippines only fared better than Cambodia, among the eight Southeast Asian countries that were surveyed. In the area of primary education, the Philippines ranked 99th out of 138 economies, 69th in educational system, 112th in science and math, and 76th on Internet access (de Leon, 2011).

Faced against unsettling facts and figures of the status of Philippine education, the 2010 SEC was designed to address the challenges of education reform with main agenda as follows: (1) maximize the potentials of curriculum change by linking it to increasing student participation and improving the internal efficiency of schooling and (2) provide opportunities for children to develop the 21st Century Core Skills (Andrada, 2008).

In the initial year of implementation for the 2010 SEC, clusters of three–days national conferences held in Manila and Cebu City to orient school heads and teachers, both for public and private institutions, worldwide “teaching for Understanding” model (DepEd Memo No. 472 s. 2009). Respective regional offices also conducted trainings as well as the division offices (DepEd R-IV CALABARON webpage, posted 30 July 2010). In the second year of implementation, a national conference was organized in Manila wherein internationally renowned speakers from home institution of the Backward design, the Association of Supervision and Curriculum Development, served as resource speakers (DepEd Memo 62 s. 2011). Series of regional and division trainings followed as well. After the two–year transition period, it is fundamental to find out if the end–users/implementers of the curriculum reform, had gained understanding of the curriculum. Therefore, a need arises to find out if the training design is effective in breaking through the mindset of traditional education. In as much as it is essential to secure the desired learning outcomes for the learners through backward design, the teachers’ understanding of the new curriculum is equally essential to establish in order to achieve the main agenda of the curriculum. Based on experiences of high–level users of the UbD, it is recommended to use the principles of Understanding by Design as appropriate tenets for effective monitoring of the progress of the program (Brown, 2004). Thus, the present study would like to probe in-service teachers’ understanding and concerns towards the 2010 SEC using the UbD’s six facets of understanding.

Statement of the Problem

This investigation sought to answer the following questions:

1. To what extent do the in-service teachers manifest understanding of the 2010 SEC?
2. To what extent do in–service teachers manifest skills in designing and executing a backward design learning plan?
3. What are the in–service teachers’ concerns regarding the implementation of the 2010 SEC?



4. What do in-service teachers' understandings and concerns imply about the curriculum potential of the 2010 SEC?

Methodology

A descriptive-exploratory survey research approach was employed, where data were mainly derived from the researcher-developed questionnaire patterned from: (1) the UbD's format for assessing understanding, (2) the Stages of Concern questionnaire adopted from the Concern-Based Adoption Model, as well as (3) semi-structured interviews with the teacher respondents. Moreover, archival records (*ie.* teacher observation checklists, classroom observation sheet and lesson plans) were analyzed and used to validate teachers' perceptions and responses to the questionnaires

Sampling

Since only one year level in the public high school is offering the 2010 SEC during this academic year, purposive sampling technique was utilized. The target population included Science II teachers of different public schools throughout Cavite province who has attended the training for the 2010 SEC. Twenty schools were selected from the 66 secondary school of the DepEd Division of Cavite. From the twenty schools, thirty teachers were identified to participate in the study. Out of the thirty teachers, fifteen handled special science classes and the other half handled the general curriculum classes.

Instrumentation

A two-fold evaluation scheme was employed to address teachers' understanding and concerns on the curriculum reform, namely, the context value added evaluation and the level of implementation. Research instruments included: (1) a 6-facet survey questionnaire was developed, which was adopted from McTighe and Wiggins' Professional Development Workbook (2004), which covered the six facets of understanding that probed teachers' understanding of the 2010 SEC; . (2) the Stages of Concern Questionnaire (SoCQ), which is a standardized instrument widely used in many countries for the purpose of measuring teachers' concerns as they become involved in implementing an innovation (Hall et al., 1986). The questionnaire included 35 items, five items for each stage of concern, representing the seven stages of concern. These instrument provided information on the respondents' current understanding of the curriculum that influenced the implementation. Moreover archival documents (such as learning plan design checklist) and semi-structured interviews were conducted to validate the teachers' responses.

Data Analysis

Data from the survey questionnaires, learning plans, and observation checklists were reduced to meaningful data. Data were organized, presented in tabular form, and analyzed using descriptive statistics. Transcribed data from the semi-structured interviews were coded, organized thematically and presented in categories with



corresponding frequencies of responses. The responses from the interview were also used to provide evidence to support the quantitative data obtained.

Results and Discussion

1. To what extent do the in-service teachers manifest understanding of the 2010 SEC?

Based on the results of the 6–facet questionnaire, 70% of the surveyed teachers have the correct conception in explaining the nature of the UbD framework. The data showed that the Informational stage ranks fourth of the teachers’ concern regarding the curriculum reform. From the interviews, it was gathered that teachers’ idea changed after implementing the curriculum for more than a year now, where 19 out of 22 responses indicated that they have constructive explanation of the nature of the UbD framework. While 64% of the teachers surveyed have correct interpretation of the changes in their role in the curriculum reform. Teachers strongly agree that with UbD, teachers are empowered to work collaboratively to determine what students should know, be able to do, and understand; that as teachers, they have to provide student–centered activities and solicit as much students’ responses as possible; and that there is a need to belong in an instructional accountability group. Regarding the stages of concern, the personal stage obtained a percentile score of 87 % indicating high percentage of concern among teachers regarding how they interpret the changes in their role in facilitating the curriculum reform and bring it in their classroom practices. When considering the result of the six –facet questionnaire on application, it can be noted that the over all mean (4.03) and standard deviation (0.25) indicated that teachers manifest understanding of the skills necessary in designing and executing a backward design learning plan. The perspective facet of teachers’ understanding of the 2010 SEC had the lowest grand mean (3.56. This may be due to the concerns that they encountered in the implementation of the curriculum reform. These concerns may have placed added burden to the teachers, other than the novelty of the approach itself, in accommodating the new framework in developing the lesson. Considering the data on stages of concern, the facet of perspective can be drawn from the stage of refocusing. It is in this stage that the teachers are considering other ideas that would work even better. It is therefore, important to manifest the ability to analyze and draw conclusion about contrasting viewpoints. Data showed that the stage of refocusing is the dominant manifested stage among the teacher–respondents. During the semi–structured interview, 5 out of 19 responses mentioned that *it is a rewarding experience to witness students discover and understand lessons on their own*; followed by, *observing students create a simple role play or group presentation within a limited period*; and *when students show collaborative effort in helping the community*.

From among the six facets of understanding, it is in this facet of perspective that teachers manifest emerging level of understanding. It may be attributed to the unsettled conflict between the intention of implementing the curriculum reform and the unresolved concerns: classrooms and school facilities, instructional materials, quality of teacher

trainings, student ratio among others that has been haunting the Philippine education system. Regarding the extent of how the teachers recognize students' behavior in response to the UbD framework of backward design, it was revealed that out of the seven positive expressions of empathy towards learners, 83 % of the teachers recognize that learners are encouraged in active construction of meaning rather than memorization; 67% of the teachers observed that learners achieve a sense of fulfillment in arriving at the big ideas; and that 70% of the teachers noticed that learners anticipate the variety of instructional activities. As with the stages of concern, this facet on empathy is incorporated in the consequence and collaboration stage. In the facet of self-knowledge, teachers responses is leaning towards the agree zone. Moreover, responses during the interview revealed responses that expressed appreciation of the UbD approach and regret that it will soon be replaced; and that, teachers considered that their teaching has improved.

2. *To what extent do in-service teachers manifest skills in designing and executing a backward design learning plan?*

The in-service-teachers' skills in implementing the Backward Design revealed *Very Satisfactory* ratings. The submitted classroom observations were done in different stages of learning development namely: explore phase; firm up phase; deepen phase and transfer phase. Whether the teacher was observed only in one phase, two phases or all of the phase, the teachers got Very Satisfactory ratings. These ratings seem to suggest that the teachers were very good at implementing the lesson using the backward design.

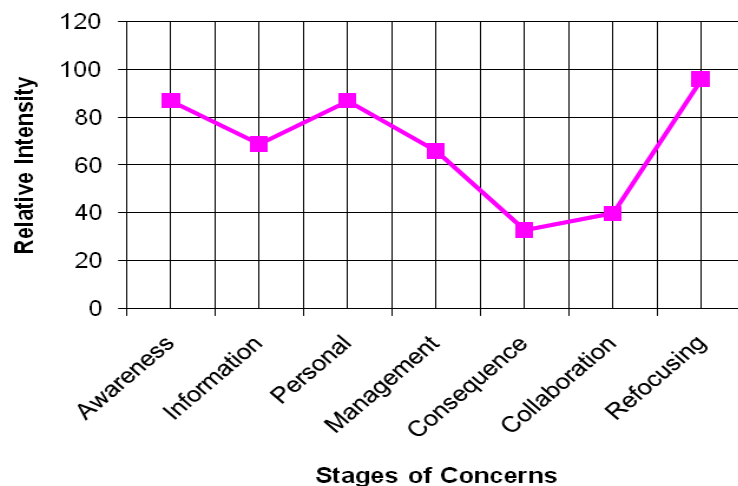


Fig. 1. The in-service teachers' Stages of Concern over the 2010 SEC Framework.

As shown in Fig. 1, the three stages of concern namely, awareness, personal and refocusing were dominantly having a high percentile score. The stage on refocusing obtained the highest percentile score (96%). This means that the in-service teachers'



stage of concern were primarily focused on having alternative ideas to the 2010 SEC. Their thoughts were oriented towards increasing benefits to clients based on substantive questions about the maximum effectiveness of the 2010 SEC thrust. This is supported with two more dominant stages, Awareness and Personal, each with 87 percentile score. Awareness stage indicates that the change on the curriculum is not an area of intense concern among the teachers. In the personal stage, the respondents were uncertain about their ability and role in facilitating the use of the 2010 SEC innovation as indicated in its framework. They have doubts on the adequacy of support, materials and other needs in order to have an effective change in the Science program.

3. What are the in-service teachers' concerns regarding the implementation of the 2010 SEC?

The results indicate that after almost two years of 2010 SEC implementation, majority of the in-service teacher respondents have some concern on teachers' ability and role in facilitating the use of innovation, and were not focused on the innovation itself, rather, their thoughts and perceptions were geared towards improvement of the innovation or the possible replacement of the 2010 SEC. In addition, summarized data from the interviews, the learning plan checklists and the six-facet questionnaires revealed the following concerns regarding the implementation of the 2010 SEC:

- Teachers still have the perception that the UbD framework is based on activity – and coverage – oriented instruction.
- Instruction is geared towards test preparedness.
- Limitation in time to finish the intended scope of the lesson.
- Insufficient skills in delivering the learning plan with high level of confidence, sustaining students' interests and in providing assessment.
- Inadequacy in the complete understanding of the UbD framework
- Deficiency of instructional materials and school facilities

4. What do in-service teachers' understandings and concerns imply about the curriculum potential of the 2010 SEC?

In this study, the teachers' extent of understanding and concerns on the 2010 SEC framework render interesting implications regarding the curriculum potential of the UbD framework: (1) in-service teachers were agreeable to accommodate the curriculum change as indicated by their continuing endeavor to implement the 2010 SEC in spite of internal and external impediments; (2) in the pedagogical aspect, in-service teachers were agreeable to venture from inductive learning process to deductive learning process as indicated by their budding interest in the use of multimedia in presenting lessons in the DepEd proposed learning plans.

Conclusion



The in-service teachers involved in this study considered the UbD framework as a possible beneficial alternative to their conventional teaching standard and that they could satisfactorily employ this framework. To attain such, teachers stressed that they be given ample time to adapt several changes in their teaching practices, undergo intensive training and be provided with periodic follow up to ensure effective compliance and promote professional development. The teachers recognized the favorable changes in the behavior of students toward learning through discovery and inquiry in the UbD framework so that when teachers provide consistent challenging learning experiences, it could lead to an alternative mindset of students towards developing life long learning skills, habits and attitudes.

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