TEACHERS' TEACHING STYLES AND STUDENTS' LEARNING STYLES: BASES FOR TEACHING LEARNING ACTIVITIES FOR VARIED TYPES OF LEARNERS

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ABSTRACT

This study sought to determine the Grade 9 teachers' teaching styles and the Grade 9 students' learning styles of public high schools of the Second Congressional District of Cagayan. The study further investigated the teachers' teaching styles with respect to defined grouping scheme such as the school, highest educational attainment, trainings attended, years of teaching, and subject taught. The study utilized the Index Learning Styles (ILS) Questionnaire by Fielder and Solomon to collect data on the students' learning style and the Teaching Style Survey by Grasha-Reichmann (2014) to collect data on the teachers' teaching style. Results revealed that the predominant teaching style of all teacher-participants as assessed by the teachers in Science, English and Mathematics is Expert. On the other hand, the results showed that the dominant learning styles of students in the Processing, Perception, Input, and Understanding domains are Reflective, Intuitive, Visual, and Global, respectively. The study further revealed that teachers do not differ in terms of their teaching styles, when grouped according to school, highest degree earned, number of years in teaching, and subject taught. In addition, students' learning styles do not differ significantly in all three subject areas.

INTRODUCTION

The Department of Education is continuously improving the country's quality of education. With much concern on the unstable status of quality education in the Philippines, the Department of Education (DepEd) never stops benchmarking and constantly searching for the best programs and strategies that can be adopted by the Philippines educational system to uplift the quality of education.

In 2011, the DepEd took on the challenge of transforming the Philippine Basic Education wherein the focal points are on: (1) Engaging broad stakeholder support; (2) Good governance transparency, and accountability; (3) Strengthening the institution through BESRA; and (4) the K to 12 Basic Education Program.

The implementation of the K to 12 is as follows: (1) decongest the curriculum to improve mastery of basic competencies; (2) ensure seamlessness of primary, secondary and post-secondary competencies; (3) improve teaching through the use of enhanced pedagogies (e.g. spiral progression in Science and Mathematics) and medium of instruction; and (4) to expand job opportunities to reduce jobs-skills mismatch and provide better preparation for higher learning.

Unfortunately, amidst all these programs for the purpose of uplifting the quality of education, still the results of the National Achievement Test (NAT) conducted by the NETRC for the past years which was administered in all public secondary schools is too far from the targeted mean percentage score for mastery level of 75 percent.

Furthermore, based from the competency assessment result conducted to fourth and eighth grade levels in Science and Mathematics through the Trends in International Mathematics and Science Study (TIMSS), a tool in assessing quality and student achievement in Mathematics and Science conducted globally, in 1999 and 2003 showed that the Philippines ranked third to the last among 25 countries on competencies in Science and Mathematics for the fourth graders while 41st rank for the second year students among 45 countries.

The unsatisfactory results of the Achievement Test and TIMSS and failure to attain the goals of BESRA by the public secondary schools are very serious issues which demand immediate solutions. This challenge must be properly addressed by all concerned and must not be ignored or else this shall create a tremendous downfall to the country's educational system. But, this can also be avoided through concerted effort, coupled with dedication and commitment of all stakeholders for the common goal for high quality education to be attained.

On the other hand, it is also important to consider that teachers should be effective, efficient and competent enough to meet the demands of the learners in order for the teaching-learning process to be conducted successfully inside the classroom. The best teaching styles by teachers suitable to the learning styles of the students should be the upmost priority in the teaching-learning interactions.

Hence, the local issues on quality education has challenged the researcher to pursue this study because the researcher believes that no matter what factors would affect the learners, this issue would always bounce back to the classroom scenario where the possible cause to the problem of poor academic performance level of learners could be the incompatibility of teachers' teaching styles and the learners' learning styles. Despite the erring complaints of teachers, the researcher still believes that the lack of interest of the learners could be the adverse effect of incompatibility between the teaching styles of the teacher and the learning styles of the students, if resolved can be the instrument to better understanding and assimilation of the lesson.

With the result of this study, a set of teaching-learning activities are proposed for varied types of learners that are complementary to the particular learning styles of students.

Conceptual Framework

Styles are overall patterns that provide direction to learning and teaching. Styles influence how students learn, how teachers teach and how the two interact. This study identified the teachers' teaching styles and students' learning styles.

The figure below presents the paradigm with which the study was anchored.

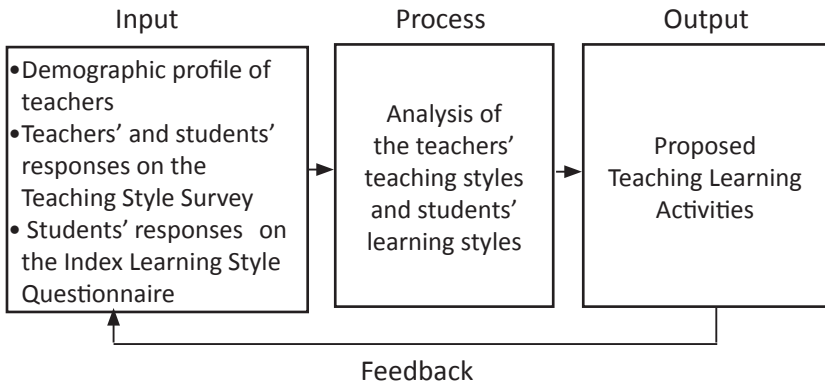| Input	Process	Output
•Demographic profile of teachers •Teachers' and students' responses on the Teaching Style Survey • Students' responses on the Index Learning Style Questionnaire	Analysis of the teachers' teaching styles and students' learning styles	Proposed Teaching Learning Activities

Feedback

Figure 1. Paradigm of the Study

As shown, the teachers' profile, the teachers' and students' responses in the Teaching Style Survey and students' responses in the Index Learning Style Questionnaire were the inputs of the study. The results of the said surveys were analyzed to determine the teachers' dominant teaching styles and the students' dominant learning styles. The output of the study is an instructional material that includes a set of teaching-learning activities in the three subject areas that are tailored fit to students' learning styles.

Statement of the Problem

This study sought to determine the Grade 9 teachers' teaching styles and the Grade 9 students' learning styles in selected secondary public schools in the Second Congressional District of Cagayan.

Specifically, it sought answers to the following problems:

1. What is the profile of the teachers on the following:
    1.1 School;
    1.2 Highest Degree attained;
    1.3 Trainings and Seminars Attended which are Related to Teaching Strategies/Style;

1.4 Number of Years Teaching the Subject; and
1.5 Subject Taught?

2. What are the teachers' teaching styles when grouped according to profile variables?

3. Is there a significant difference on the teachers' teaching styles when they are grouped according to profile variables?

4. What are the students' learning styles in terms of the learning style domains?

5. Is there a significant difference on the students' learning styles when they are grouped according to subjects?

6. Do the teachers' teaching styles match with their students' learning styles?

7. What teaching-learning activities can be proposed to address varied types of learners?

METHODOLOGY

The study applied the descriptive survey method since it explored on the teachers' teaching styles and students' learning styles. Comparative analyses on the students' learning styles among defined subject groups were also undertaken. The results of the study served as the bases for the proposed teaching-learning activities for varied types of learners in the six selected general secondary schools in the Second Congressional District of Cagayan.

The Index Learning Styles Questionnaire (ILS) by Fielder and Solomon was utilized to obtain data on students' learning style. The Teaching Style Survey (TSS) by Grasha-Reichmann (Alexander, 2014) was utilized to determine teachers' teaching style. The TTS Survey was done online for both teachers and students as the interpretation of scores is done online.

The questionnaires on ILS consisted of 44 items categorized under the following dimensions as items indicated against each:

A. Processing   : Items 1, 5, 9, 13, 17, 21, 25, 29, 33, 37 and 41 (11 items)
      All (a)   : Active learners
      All (b)   : Reflective learners
B. Perception   : Items 2, 6, 10, 14, 18, 22, 26, 30, 34, 38 and 42 (11 items)
      All (a)   : Sensitive learners
      All (b)   : Intuitive learners
C. Input : Items 3, 7, 11, 15, 19, 23, 27, 31, 35, 39 and 43 (11 items)
      All (a)   : Visual learners
      All (b)   : Verbal learners
D. Understanding : Items 4, 8, 12, 16, 20, 24, 28, 32, 36, 40 and 44 (11 items)
      All (a)   : Sequential learners
      All (b)   : Global learners

The teachers and students rated their teachers' teaching styles in terms of 40 items using the 5-point Likert scale.

The data obtained in the study were organized and analyzed through the use of simple frequency counts, percentages, weighted means, and Chi-square. The frequency and percentage were used to present the profile of the teachers and students. Weighted mean was used to determine the assessment of the students on their teachers' teaching style in terms of the specific indicators. These means were encoded online to categorize their teachers' teaching styles. Chi-square test was used to determine the significant difference on the teachers' teaching styles or the students' learning styles with respect to a specific grouping scheme.

RESULTS AND DISCUSSION

On the Teachers' Profile

Among 6 schools, three teachers were taken in five schools while five teachers were taken in one school.

In terms of educational attainment, most (45%) of the participants

are master's degree holders, 7 or 35% finished Bachelor's degree while 4 or 20% are those with master's units. This implies that most of the teacher-participants undertook advanced studies for professional growth and continual improvement in their teaching career.

All teacher-participants were trained in the K-12 Mass Training Program for Grade 9 as well as in the In-Service Trainings conducted in their respective schools or Cluster. The seminar further equipped them with innovative ideas to improve instruction.

Majority or 55% of the teacher-participants have been teaching for at most 6 years. Only very few have teaching experiences for 6-12 years, 11-15 years, 16-20 years and more than 20 years as reflected by the percentages of 20%, 5%, 5% and 15%, respectively.

On Teachers' Teaching Style

The teachers' assessment results showed that half of the participants were identified as Experts, 5 or 25% as Facilitators, 3 or 15% as Delegators while the remaining few were assessed with Combi-teaching styles with 2% for each combination.

On the other hand, the students' assessment showed different results. Most of the teachers were assessed as Facilitators (30%) while some were Delegators (20%); whereas, a few (2%) were either Experts, Formal Authority or with Combi or Multi- teaching styles.

Among the six participant-schools, only one school had the same assessment results on the teachers' teaching styles coming from the students and their teachers. The Expert emerged as the teachers' dominant teaching style.

The teachers assessed themselves as Experts regardless of educational attainment which means that educational attainment has no bearing on their teaching styles. On the other hand, the students' assessment showed different results where teachers with Bachelors' degree were assessed predominantly with Combi-Teaching styles, those

with Masteral units were dominantly Experts; while, those with Master's degree were assessed with four dominant teaching styles particularly Expert, Formal Authority, Facilitator and Delegator.

The teachers' assessment revealed that teachers below 6 years, 6 to 10 years and 16 to 20 years teaching experience were Experts while those with 11 to 15 years of teaching experience were assessed as Delegators; those who taught for more than 20 years have multi-teaching styles. On the other hand, the students' assessment showed that teachers below six years of experience are Experts while those ranging from 6 to 20 years were identified as Facilitators, teachers with more than 20 years of teaching experience were identified as Delegators.

The teachers' assessment showed that all teacher-participants were predominantly Experts. On the other hand, the students' assessment showed that Science teachers were predominantly Experts while the English teachers were assessed as dominantly both Experts and Delegators while the Mathematics teachers were assessed with varied teaching styles such as Formal Authority, Facilitators and Delegators.

Significant Difference on the Teachers' Teaching Styles when Grouped according to Profile Variables

There is no significant difference in the teachers' teaching styles when grouped according to school, highest degree attained, number of years teaching in Grade 9, and subject taught.

Students' Learning Styles in the Different Domains

In the processing domain, the Reflective style emerged as the dominant learning style manifested by the student–participants in the Science subject while the Active learning style was dominant in the areas of English and Mathematics. Generally, the results showed that Reflective learning style is dominant among the student-participants.

The dominant learning style of the students in the Perception domain under the different subjects is Intuitive learning style.

The dominant learning style manifested by the students in the Input domain under the three subjects is Visual learning style.

The dominant learning style manifested by the students under the three subject areas in the Understanding domain is Global learning style.

Significant Difference on the Students' Learning Styles when they are Grouped according to Subject Areas

There is no significant difference in the students' learning styles along processing, perception, input and understanding domains when grouped according to subject areas.

Analysis on the Teachers' Teaching Style and Students' Learning Styles

The predominant teaching style of all teacher-participants as assessed by the teachers in Science, English and Mathematics is Expert. On the other hand, the dominant learning styles of the students for each domain are as follows:

Processing domain   : Reflective learning style
Perception domain   : Intuitive learning style
Input domain   : Visual learning style
Understanding domain : Global learning style

Proposed Teaching-Learning Activities

The proposed teaching-learning activities are toolkits that provide effective learning experiences in different subject areas to cater to the varying learning styles of students with respect to the four dimensions: processing, perception, input and understanding. The toolkit is composed of learning activities that define the activities for each subject area, learning tasks that provide the instruction to be performed by teachers and students, learning outcomes that define the skills to be developed by the students, assessment strategies to assess students' outputs and resources which include instructional materials to facilitate learning.

CONCLUSION

Based on the findings of the study, the following conclusions have been drawn:

The learners have a predominant personal preference of learning style for each of the dimensions. Through the identification of students' learning styles, teachers will be able to determine most of the students' individual strengths which can consider the appropriate teaching strategies to match their teaching style to strengthen their potential.

Teachers can help students to be more effective both in and out of the classroom if they are aware of their students' learning styles and can assist them in determining their preferences.

As a student, it is vital to be self-aware of preferences to adjust study techniques even when the information and instruction provided do not match the preferred style.

The students' preferred style of learning has direct contact with materials, topics or situations being studied. Hence, considering the students' learning styles according to their preferences will help teachers develop lesson structures that correlate instructional goals and students' learning style preferences.

RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are offered:

The researcher may disseminate the results of the study to the participating schools for the teachers to utilize the results in employing strategies that will match the learning styles of their students.

The proposed Teaching Learning Activities (TLA) may be utilized by the teachers of the participating schools in their daily instruction to enhance and enrich students' learning.

The teachers in other disciplines may identify their teaching styles and assess their students' preferences on how instruction is to be delivered in the classroom to obtain better results.

The teachers and school administrators may support the implementation of the study especially with the diverse range of learners' abilities.

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