**PERCEPTUAL LEARNING STYLE PREFERENCES OF GENERAL CHEMISTRY**

**STUDENTS IN ALDERSGATE COLLEGE**

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**ABSTRACT**

The study is entitled "Perceptual Learning Style Preferences of General Chemistry Students in Aldersgate College". Generally, the objective of the study was to determine the perceptual learning style preferences of the freshmen nursing students of Aldersgate College. Specifically, this study attempted to determine the profile of the freshmen nursing students of Aldersgate College in terms of gender, occupation of parents and type of high school graduated from; find out the perceptual learning style preferences of the General Chemistry students in terms of the elements of auditory, tactile, visual, and kinesthetic; find out the level of performance of the respondents in General Chemistry; determine the significant relationship between the students' profile and their perceptual learning style preferences in General Chemistry; and determine the significant relationship between the level of performance in General Chemistry and the perceptual learning style preferences of the respondents.

The study employed the descriptive-correlation research method where the respondents' profiles were correlated to their perceptual learning style preferences. The perceptual learning style preferences of the respondents were also correlated to their level of performance in Chemistry.

The respondents of the study were the General Chemistry students of Aldersgate College, Solano, Nueva Vizcaya and were subjected to tools that were used in this study such as Perceptual Learning Style Preferences Questionnaire (PLSPQ), which determined their score in four elements- auditory, tactile, visual, kinesthetic, and the Personal Information Questionnaire (PIQ), which determined the profile of the respondents such as gender, occupation of parents and type of High School graduated from.

The research instruments used in this study are the PLSPQ adapted from Dunn and Dunn Learning Style Questionnaire, copyright by Joy Reid and the PIQ to determine whether gender, occupation of parents and type of High School graduated from relate to perceptual learning style preferences. The items in the PLSPQ were scored in the following manner: 5, 4, 3, 2, 1 for strongly agree, agree, undecided, disagree and strongly disagree respectively. The weighted mean and average weighted mean were computed to determine the perceptual learning style preferences of the respondents. To determine the Level of Performance in General Chemistry of the respondents, the descriptive equivalent of their final grade was used. In the Personal Information Questionnaire, the responses of the respondents were grouped for comparative analyses.

The study yielded that seventy one and sixty seven hundredths percent (71.67%) are female; thirty eight and thirty three hundredths percent (38.33%) of the respondents father are agricultural, animal husbandry, forestry workers and fishermen and twenty one and sixty seven hundredths percent (21.67%) of the mothers are either professionals, technical and related workers, managerial, executive and administrative workers or production process workers, transport equipment operator, laborers or housewives. Seventy five percent (75%) of the respondents graduated from public high schools; and twenty five percent (25 %) graduated from private high schools. Eighty three and thirty three hundredths percent (83.33%) had satisfactory level of performance and sixteen and sixty seven hundredths percent (16.67%) of the respondents had very satisfactory level of performance in General Chemistry.

The auditory learning style, Rank 1 with a weighted mean of 3.75 followed by visual learning style, Rank 2 with a weighted mean of 3.65 with slight difference on kinesthetic learning style, Rank 3 with a weighted mean of 3.64. The tactile learning style, Rank 4 with a weighted mean of 3.57, and interpreted as Agree.

There is no significant relationship between the profile and the perceptual learning style preferences of the General Chemistry students.

There is no significant relationship between the level of performance in General Chemistry and the perceptual learning style preferences of the respondents.

**Background of the Study**

In the field of psychology and education research into learning styles of cognitive styles has been of interest. The kinds of preferences make us wonder if there is indeed a formula for learning in the basis of children and adults. In the 1970's & 1980's, when research into learning styles became popular, the term cognitive style was most frequently used. Newer theorists tend to use the term learning style because they believe more is involved than just cognitive style; learning style includes physiological, affective and cognitive styles (Thompson and Crutchlow, 1993).

There are dozens of learning style models and instruments to measure them. These concepts include holistic versus analytic thinking, and verbal versus visual representation. Holistic (or global) thinkers want to get the whole picture quickly, or get the gist of things. They want to see broad categories before they look at details.

How can a classroom teacher match the learning style of every student in the class? How many teachers are testing their students to even know what the learning styles are? Is it good for students to settle into one learning style and not be encouraged to expand their repertoire? Should matching be done only in remedial learning settings? Many experts support the position that although students have preferred learning styles, they can be helped to work on developing other learning styles (Clevery, 1994; Flannery, 1993; Grasha & Yangarber Hicks, 2000, Reynolds, 1997).

Cognizant of the importance of perceptual learning styles in the learning process, was what prompted the researcher to conduct this study. Likewise, she hopes to gather benchmark data that could serve as bases for an intervention program.

**Research Problems**

1. What is the profile of the General Chemistry students in terms of:

1.1 Gender

1.2 Occupation of parents

1.3 Type of high school graduated from?

2. What is the perceptual learning style preferences of the General chemistry students in terms of the following elements:

2.1 auditory

2.2 tactile

2.3 visual

2.4 kinesthetic?

3. What is the level of performance of the respondents in Chemistry?

4. Is there a significant relationship between the profile and the perceptual learning style preferences of the respondents in General Chemistry?

5. Is there a significant relationship between the level of performance in General Chemistry and the perceptual learning style preferences of the respondents?

**Respondents and Sampling Procedures**

The respondents of this study included all freshmen nursing students in Aldersgate College who took the General Chemistry subject in the 1st Semester of School Year 2007-2008. The researcher conducted the study using total enumeration.

**Findings**

This study was conducted to determine the perceptual learning style preferences of the General Chemistry students of Aldersgate College. Specifically, it aims to find the respondents' profile in terms of gender, occupation of parents and type of High School graduated from and level of performance in General Chemistry and finally, to find the significant relationship between the profile and level of performance in General Chemistry and the perceptual learning style preferences of the respondents.

Total enumeration was used to identify the respondents' profile, level of performance in General Chemistry and perceptual learning style preferences. The instruments used in the study were the Perceptual Learning Style Preferences Questionnaire and the Personal Information Questionnaire. Frequency counts and percentages were used to describe the profile of the respondents; mean and ranking were utilized to determine the preferred learning styles of the respondents and Chi-square was used to test the hypotheses posed in the study.

Based on the statistical analysis, the study yielded the following findings; seventy one and sixty seven hundredths percent (71.67%) are female; thirty eight and thirty three hundredths percent (38.33%) of the respondents father are agricultural, animal husbandry, forestry workers and fishermen and twenty one and sixty seven hundredths percent (21.67%) of the mothers are either professionals, technical and related workers, managerial, executive and administrative workers or production process workers, transport equipment operator, laborers or housewives. Seventy five percent (75%) of the respondents graduated from public high schools and twenty five percent (25%) of them graduated from private high schools. Eighty three and thirty three hundredths percent (83.33%) had satisfactory level of performance and sixteen and sixty seven hundredths percent (16.67%) had very satisfactory level of performance in General Chemistry. The first choice of the respondents is, auditory learning style with a weighted mean of 3.75 or Agree followed by kinesthetic learning style which has an average weighted mean of 3.64 or Agree, tactile learning style which has an average weighted mean of 3.57 or Agree, and visual learning style which has an average weighted mean of 3.65 or Agree. There is no significant relationship between the profile and the perceptual learning style preferences of the General Chemistry students. There is no significant relationship between the level of performance in General Chemistry and the perceptual learning style preferences of the respondents.

**Conclusions**

1. The Auditory learning style with a weighted mean of 3.75 is the first learning style preference of the respondents. The second preference is Visual learning style with a weighted mean of 3.65. It is slightly higher than Kinesthetic learning style with a weighted mean of 3.64. The last preferred learning style of the respondents is Tactile with a weighted mean of 3.57. There are very slight differences among the weighted mean for each of the four elements in the learning style preferences which suggest that the respondents can learn best in any of the four perceptual learning styles.
2. All the Chi-square computed values for profile and level of performance in General Chemistry are lower than the critical value at 0.05 level of probability. The results show that there is no significant relationship between the profile and level of performance in General Chemistry and the Perceptual learning style preferences of the Aldersgate College students.

**Recommendations**

1. The curriculum of the students can also be considered for determining learning styles in future studies.
2. A follow-up study should be made to include more variables like age, curriculum, amenities in the home, and other factors which affect leaning styles.