University of Perpetual Help Rizal

Abstract

Name of Institution:	University of Perpetual Help-Rizal
Address:	Las Piñas City
Title:	Correlates of Performance of Industrial Engineering (IE) Students of De La Salle University-Dasmariñas for the SY 2000 – 2001
Author:	Obias, Ma. Jeannette Umali
Degree:	Master of Science in Education Major in Science
Type of Manuscript:	Thesis
Date Started:	June 2000
Date Finished:	March 2001

This study sought to determine and analyze the correlates of their performance in College Inorganic Chemistry and their demographic profile in terms of age, gender and type of school in high school (private or public). And the demographic profile of teachers in terms of age, gender, years of teaching experience and work values. It will also try to correlate their performance in

University of Perpetual Help Rizal

College Inorganic Chemistry with some independent variables such as gen. average in high school Chemistry, university entrance examination – verbal and numerical ability and the Attitude Inventory in Chemistry.

The performance of the Industrial Engineering students was based on the average final grade of Chemistry lecture and laboratory. A total of 103 students were involved in this study and they are all non-repeater of the subjects, College Inorganic Chemistry, or transferees from other schools.

Specifically the study attempted to answer the following questions.

1. What is the demographic profile of:

    1.1 Students in terms of:

    1.1.1   Age and Gender

    1.1.2   Types of School

    1.2 Teacher in terms of:

    1.2.1   Age and Gender

    1.2.2   Number of Years of Teaching Experience

    1.2.3   Work Values?

2. What is the performance of the students in:

    2.1   College Inorganic Chemistry

    2.2   Gen. Average in High School Chemistry

    2.3   University Entrance Examination – Verbal Ability

2.4   University Entrance Examination – Numerical Ability

2.5   The Attitude Inventory in Chemistry?

3. Is there a significant relationship between the student's performance in College Inorganic Chemistry and each of the following independent variable:

3.1 Demographic Profile of Students in terms of:

3.1.1   Age and Gender

3.1.2   Type of School

3.2 Demographic Profile of Teachers in terms of:

3.2.1   Age and Gender

3.2.2   Number of Years of Teaching Experience

3.3 Gen. Average in High School Chemistry

3.4 University Entrance Examination – Verbal Ability

3.5 University Entrance Examination – Numerical Ability

3.6 The Attitude Inventory in Chemistry?

3   Is there significant relation between College Inorganic Chemistry and teacher's work values?

'The respondents used in this study were the 103 freshmen Industrial Engineering (IE) students. They are composed of 68.21percent sample from the total population of 151 students of De La Salle University -Dasmariñas.

University of Perpetual Help Rizal

The study used the descriptive method research. The instrument used is Attitude Inventory in Chemistry developed by the research and validated by several Chemistry teachers in De La Salle University - Dasmariñas.

The following statistical tools were used in the study: frequency distribution (to determine the frequency and the percentage equivalent), Pearson-r (to determine the correlation of the dependent variables, performance in College Inorganic Chemistry, with the independent variables, general average in high school Chemistry, university entrance examination (verbal and numerical ability) and Attitude Inventory in Chemistry, and demographic variables, demographic profiles of students in terms of age, gender and types of school and number of years of teaching experience), Chi-square (to determine the correlation of the performance of Industrial Engineering students and demographic profile of teacher in terms of work values).

The following findings were drawn from the investigations.

1. Demographic Profile of the Students and Teachers.

1.1 Sixteen is the average age both for male and female students. For male students, 60.66 percent is the highest percentage and for female students, the highest percentage is 63.11 percent.

1.2 Most of the students came from a private school in which it has a percentage of 85.25 percent for male and 82.52 percent for female.

University of Perpetual Help Rizal

1.3 There were only six teachers (three male and three female) concerned in this study such that their age ranges from 23 to 42.

1.4 With regards to teaching experience, one teacher has 13 years of teaching experience and the lowest is 1.5 years.

1.5 Male and female teacher have higher work values since most of their answers in the questionnaire given to them are always and oftentimes in which it is considered as high evaluation of one self.

2. Performance of the Students in College Inorganic Chemistry, Gen. Average in High School Chemistry, University Entrance Examination (Verbal Ability and Numerical Ability) and Attitude Inventory in Chemistry.

2.1 Among the respondents the highest percentage obtained is 39.81 percent got a grade of 2.25 to 3.5 as general average for College Inorganic Chemistry.

2.2 The General average in High School Chemistry mostly of the respondents ranges from 81 to 85 since it has the highest percentage of 46.60 percent

2.3 For University Entrance Examination – Verbal Ability, the highest percentage is 26.21 percent in which it ranges from 31 to 40.

2.4 For University Entrance Examination – Numerical Ability, the highest score if 20.40 percent and ranges from 91 to 100.

University of Perpetual Help Rizal

2.5 Students' response in Attitude Inventory questionnaire ranges from 2.50 to 3.49 in which it has the highest percentage of 95.15 percent.

3. Relationship of Students Performance in College Inorganic Chemistry and several Independent Variables.

3.1 The computed chi-square is 28.07 and tabulated value was 7.815. There was significant difference between the students' performance and demographic profile the students in terms of age.

3.2 The computed chi-square is 5.47 and the tabulated value of chi-square is 7.815. Therefore, there was no significant correlation between students' performance and difference in their gender.

3.3 The value of chi-square is 28.07 and the tabulated chi-square obtained is 7.815. This means that there is a significant difference between the performance of the students in College Inorganic Chemistry and types of school in High School.

3.4 The age of the teachers is not directly related to the performance of the students in College Inorganic Chemistry.

3.5 The gender of a particular teacher is significant with the performance of the students in College Inorganic Chemistry.

3.6 The number of years of experience of a teacher is not significant with the performance of the students.

3.7 The Work Values of a teacher denotes little correlation with the performance of the students with a 0.503 t- computed against 0.194 t-tabular.

3.8 Average grade in High School Chemistry is directly related to the performance in College Inorganic Chemistry. With coefficient of correlation r= 0.35 in combined gender, t- value of 3.5 and the relationship is significant.

3.9 The University Entrance Examination – Verbal Ability is directly related to the performance in College Inorganic Chemistry of the respondents. With coefficient of correlation r = 0.18 and t computed value of 1.84 with 0.05 level of significance.

3.10 The University Entrance Examination – Numerical Ability is also directly related to the performance of the students in College Inorganic Chemistry.

3.11 Attitude Inventory in Chemistry is not significant in the performance of the students in College Inorganic Chemistry. With coefficient of correlation r = - 0.16 and t value of – 1.63.

Based on the results of the study, the following conclusions were drawn:

1. Most of the respondents have an average age of 16 years old since they are in first year level and that they came from a private school in High School. The teachers who taught Chemistry have evaluated themselves on a high which means that they work efficiently regardless of their age and years of teaching experience.

University of Perpetual Help Rizal

2. The results show that the students perform well since they were able to get a grade of 2.25 to 3.5 in College Inorganic Chemistry even most of them have an average grade of 81 to 85 in High School Chemistry. With regards to their attitude in Chemistry subject most of them are uncertain of their feelings.

3. De La Salle University – Dasmariñas has been successful in implementing its policy of accepting students for Industrial Engineering since the study revealed that the students have high performance, satisfactory grades in high school chemistry and University Entrance Examination in favorable specifically for numerical ability.

4. The age and type of school are significant with the performance of the students while the gender of the students has no significant relation. With age and number of years in teaching experience are also not significant with the performance of the students but gender and work values of the teacher shows a directly relationship with the performance of the students. All independent variables are positively correlated except Attitude Inventory in Chemistry.

The following recommendations are all based on the findings and conclusion are presented:

1. The De La Salle University – Dasmariñas should continue its policy of accepting students for Industrial Engineering students.

University of Perpetual Help Rizal

2.Since the De La Salle University – Dasmariñas entrance examination – numerical ability and verbal ability was found to positive relation with the performance of the students, the office-in-charge should be strict enough in accepting engineering students.

3.Administrators in high school Chemistry curriculum should continue in improving to enhance its predictive value.

4.Administrators should evaluate on the work values of a teacher. They should also continue on giving seminars to improve one's skill in teaching.

5.Future research should be conducted using other variables for Chemistry subject.

6.Others researches involving the same variables should be conducted to confirm the findings of the study.