International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2018): 7.426

Student's Performance of BSIE and BSHE in Drawing Subjects in the University of Eastern Philippines: Basis for the Curricular Enhancement

Antonieto L. Adora[1], Nelia M. Adora, Ph.D.[2]

Faculty Member, College of Education, University of Eastern Philippines, University Town, Northern Samar, Philippines

Abstract: ***The study aimed at determining the Bachelor of Science in Industrial Education (BSIE) and Bachelor of Science in Home Economics (BSHE) student's performance in their Drawing subject. Specifically, the study determined the socio-demographic profile of the respondents in terms of age, sex, type of high school graduated, educational attainment of parents, and learning resources at home; found out the level of performance of the respondents in their Drawing subject; tested the significant relationship between the respondent's profile and the level of performance in the Drawing subject. The study was conducted at the University of Eastern Philippines, University Town, Northern Samar, Philippines. Descriptive design was employed because the study involved description, recording, analysis, and interpretation of student's performance in drawing subjects. Further, correlational design was also used because this study delved into the relationship between students' profile and their performance in drawing. There was a complete enumeration of BSIE and BSHE students enrolled in the Drawing subject. A survey questionnaire was used in gathering the necessary data of the study to determine the socio-demographic profile of the respondents. Furthermore, the rating/grades in the Drawing subject of the respondents were secured from the University Registrar's Office and were used as the basis to quantify the respondents' academic performance for the subject. Although other parameters which affect the performance of the students like background in Drawing, sufficient tools and most importantly instructional material are also to be considered.The study found out that majority of the respondents have a good performance in their Drawingsubject.Generally, this was due to the application of exploratory approach through project method where the students learned to analyze data and applied principles on concepts presented. This method enabled the students not only to acquire knowledge but also skills. Other method like the demonstrative which provides the students to understand, learn and appreciate a particular subject demonstrated by the professor. However, the remainder of respondents failed in the subject claiming that their difficulty was due to lack of background in drawing during their secondary school studies. It is, therefore, recommended that a workbook in Drawing be provided to aid and supplement both students and instructors in the study of the subject and a need to revisit the Curriculum on BSIE and BSHE focusing on the subject Drawing if there is a need to increase its unit or revise the nomenclature, to address the learning needs of the students.***

Keywords: performance, drawing, students, curricular enhancement

1. Introduction

Among the subjects to be taken by Industrial Arts and Home Economic Students is the Drawing subject. This subject supplements the area of specialization in technical course. It is one of the skills to be acquired by Industrial Arts and Home Economics Students for an edge in securing a better job after finishing university. Despite the subject's importance, it has been observe by the researcher as a Drawing teacher that student have lesser interest or untoward attitude whenever they are confronted with the application of drawing theories and principles in class during laboratory activities. Still very few of them realize the importance of good knowledge and skill in drawing. This might be due to the limited background and exposure of students to Drawing as a subject.

Henceforth to overcome this challenge, the greatest task in the educational and learning process rely heavily on teachers. There is so much demand from them being the focal person. In the desire to give students the quality and relevant educational and instructional processes. There is clarity in the strong impact that teachers bring in reshaping existing and future educational and instructional models that are reactive to the needs and requirements in the elevation of the students' achievement levels. The Philippine Educational System is continuously searching and experimenting programs to improve methodological approaches. In the institution where the researcher is teaching, every teacher is encouraged to conduct investigations on how to improve the learning capabilities of students. In fact, the researcher as the Drawing subject professor has utilized various teaching methodologies in imparting the needed knowledge to his students. However, despite employing various instructional approaches and teaching models, there is lot of improvement to be done. It is in this light, therefore, that the researcher became interested and motivated in conducting this study to determine the necessary steps to improve students' academic performance in the Drawing subject.

2. Objectives of the Study

This study aimed in determining the student' performance of BSIE and BSHE in the University of Eastern Philippines.
Specifically, this study intended to:

1) Determine the socio-demographic profile of the student-respondents, in terms of:
   1.1. age
   1.2. sex
   1.3. type of school graduated
   1.4. monthly income of parents
   1.5. parents educational attainment
   1.6. learning resources at home
2) Find out the level of performance of the respondents in their drawing subject;

3) Look into the significant relationship between the respondent's profile and their performance in drawing subject.

3. Methodology

The study was conducted at the University of Eastern Philippines, University Town, Northern Samar, Philippines. Descriptive design was employed because the study involved description, recording, analysis, and interpretation of student's performance in drawing subjects. Further, correlational design was also used because this study delved into the relationship between students' profile and their performance in drawing. There was a complete enumeration of BSIE and BSHE students enrolled in the Drawing subject. A survey questionnaire was used in gathering the necessary data of the study. Furthermore, the rating/grades in the Drawing subject of the respondents were secured from the University Registrar's Office and were used as the basis to quantify the respondents' academic performance for the subject. Data concluded were treated statistically using percentage, weighted mean, and multiple regression analysis.

4. Results and Discussion

Profile of the Respondents

Age of the Respondents

Table 1 showed that almost half of the respondents are in the range of 21 to 25 at 58 or 44.62 percent, at 54 or 41.54 percent are aged 16 to 20, while 18 or 13.85 percent are in the range from 26 to 30. The table below showed that most of the respondents' age is within the usual age of a college student.

Table 1: Age of the Respondents

Age	*Frequency*	*Percent*
16-20	54	41.54
21-25	58	44.62
26-30	18	13.85
Total	*130*	*100.00*

Sex of the Respondents

The next table showed the sex of the respondents. It showed that majority of the respondents are female at 80 or 61.54 percent. Only 50 or 38.46 percent are male. This table showed the courses BSIE and BSHE are popular among females. This data further reflects the fact that teachers in the field are populated mostly by females.

Table 2: Sex of the Respondents

Sex	*Frequency*	*Percent*
Male	50	38.46
Female	80	61.54
Total	*130*	*100.00*

Type of Secondary School Graduated

The next table presented the type of secondary schools where the respondents graduated from. It showed that majority, at 85 or 65.38 percent, were graduates from national/public school across the province. There were also student who graduated from vocational/trade schools at 25 or 19.23 percent. Only 17 or 13.08 percent graduated from private schools, while 3 or 2.31 percent graduated from agricultural schools. These figures showed that most students who take BSIE and BSHE courses came from public high schools where financial requirement is minimal.

Table 3: Type of Secondary School Graduated

Type of School Graduated	*Frequency*	*Percent*
Vocational/Trade School	25	19.23
National/Public School	85	65.38
Private School	17	13.08
Agricultural School	3	2.31
Total	*130*	*100.00*

Educational Attainment of Parents

Table 4 showed the educational attainment of the parents of the respondents. As to the father, 32 or 24.62 percent of them have fathers who just finished high school. Only 16 or 12.31 percent have fathers who finished a college degree, while 3 or 2.31 percent have earned post-graduate education. These findings how that most of the respondents' father were not able to reach college level. As regards to the mother's education, 36 or 27.69 percent did not graduate from high school, while 19 or 14.62 percent graduated from college. These figures show that most of the respondents' mother did not earn a college degree. A number of them reached college but were not able to finish their degrees which may be attributed to financial incapability.

Table 4: Educational Attainment of Parents

Educational Attainment of Parents	*Father*		*Mother*	
	Frequency	*Percent*	*Frequency*	*Percent*
Elementary Level	23	17.69	15	11.54
Elementary Graduate	11	8.46	3	2.31
High School Level	26	20.00	36	27.69
High School Graduate	32	24.62	20	15.38
College Level	19	14.62	35	26.92
College Graduate	16	12.31	19	14.62
Post-Graduate	3	2.31	2	1.54
Total	*130*	*100.00*	*130*	*100.00*

Learning Resources at Home

The following table showed the respondent's learning resources at home. It shows that most of them possess one or more smart cellular phones as their means of acquiring information. This is followed by books and dictionary having both ranks of 2.5.Other learning resources mentioned were the internet and magazines. These findings showed the ubiquity of smart phones as a learning medium in most homes. It showed that although most of the students come from poor parents, they can afford to buy smart cellular phones. This is however understandable as most smart cellular phones have nowadays become cheap and affordable.

Table 5: Learning Resources at Home

Learning Resources at Home	*Frequency*	*Rank*
Books	46	2.5
Internet	29	4
Journals	8	8
Magazines	27	5
Encyclopedia	22	7
Computer	25	6
Dictionary	46	2.5
Smartphones	122	1

Performance in Drawing

Table 6 showed the academic performance of the respondents in Drawing. It showed that most of them had fair (2.5-3.0) performance at 92 or 70.77 percent had very good performance, while 9 or 6.92 percent had a good performance. However, it is sad to note that 19 or 14.62 percent failed the subject having grade of 5.00. This finding showed the difficulty in performing well in the subject. It could be implied that some respondents were not exposed to Drawing during their high school days. This finding should be taken seriously as Drawing is an important subject for BSIE and BSHE teacher education students.

Table 6: Performance in Drawing

Performance in Drawing	*Frequency*	*Percent*
1.2-1.50 (Very Good)	10	7.69
1.75—2.25 (Good)	9	6.92
2.50-3.0 (Fair)	92	70.77
5.0 (Failure)	19	14.62
Total	*130*	*100.00*

Relationship between Profile and Performance in Drawing

To test the relationship between profile and performance in Drawing of the respondents, multiple regression analysis was used. Result of the analysis showed that age (β=0.234, $p<0.05$), educational attainment of mother (β=0.568,$p<0.05$), and learning resources at home (β=0.342,$p<0.05$) significantly predicted performance in Drawing of the respondents. However, sex, type of secondary school graduated, and educational attainment of father did not show significant relationship with performance having low beta coefficient or significance values greater than the five percent margin of error. The significant effect of age on drawing performance means that older students are most likely to perform better compared to younger ones. This means that maturity is a factor among the respondents' performance in the subject. As for the educational attainment of the mother, it means that students with mothers who had higher educational attainment have positive effect on their performance. Indeed, mothers could have done much better in bringing the best out of their children compared to fathers. Lastly, the significant relationship between learning resources perform better in the subject compared to other subjects who do not have much resources. This finding confirms the researcher's hypothesis that learning resources such as smart phones and dictionaries are important components for the twenty-first century learner. Technologies have become affordable that students are benefiting from these. This finding showed that technology works in the life of students nowadays, probably not only in Drawing but in other subject areas as well.

Table 7: Relationship between Profile and Performance in Drawing

Independent Variables	*Parameters*	*Performance in Drawing*
Age	Beta Coefficient	**0.234****
	Significance	**0.003**
	Interpretation	**Significant**
Sex	Beta Coefficient	-0.076
	Significance	0.286
	Interpretation	Not Significant
Type of High School Graduated	Beta Coefficient	-0.097
	Significance	0.171
	Interpretation	Not Significant
Educational Attainment of Father	Beta Coefficient	0.112
	Significance	0.092
	Interpretation	Not significant
Educational Attainment of Mother	Beta Coefficient	**0.568***
	Significance	**0.019**
	Interpretation	**Significant**
Learning Resources at Home	Beta Coefficient	**0.342***
	Significance	**0.0247**
	Interpretation	**Significant**

Generally, findings on the respondents' profile show that most of the respondents' age is within the usual age of a college student. As to the type of secondary schools where the respondents the respondents graduated from, majority were graduates from national/public schools across the province. Most of them had fathers who finished high school. Only around 10 percent had fathers and mothers who finished college degrees. A number of them have reached college but were not able to finish their degrees. And the learning resources at home of the respondents showed that most of them possess one or more cellular phones. This is followed by books and dictionary and the internet and magazines.

In terms of performance in Drawing, the finding showed that most of the respondents have good performance, while less than 10 percent had a very good performance. However, it is noteworthy that quite a number of respondents failed the subject.

As regard to the relationship between the profile of the respondents and their performance in Drawing, finding showed the significant influence of age, educational attainment of mother, and learning resources at home. While sex, type of school graduated, and educational attainment of father have nothing to do with the performance in drawing of the student respondents.

5. Conclusions

It can be gleaned from the findings of the profile of the respondents that most of them are at their age of college level. Majority of the respondents are female, which implies that the teaching profession is more attractive to females. Majority are graduates of national/public high school, where financial requirement is minimal. The educational attainment of parents indicates that most of the parents of the respondents have finished high school level only. This can be attributed to financial incapacity to support schooling, and cellular phone and books are the most common learning resources at home of the respondents, being affordable nowadays.

The performance in the Drawing Subject of the respondents showed that majority have good performance. Although a significant 19 percent failed in the subject which can be accounted to a lack of interest in Drawing and insufficiency of instructional materials to aid their learning process and also help the teachers facilitate teaching. This findings should be taken with caution as drawing is as important subject in BSIE and BSHE. Thus, workbook n Drawing should be made available to students. This instructional

material must focus on student's needs, particularly guiding them this proper sequence of developing their drawing skills.

The test of relationship between the profile of the respondents and their performance in drawing discloses that sex, type of high school graduated, and education attainment of father have no bearing on the performance in drawing of the students. However, age, educational attainment of mother, and learning resources at home have a significant effect on the performance in drawing of the respondents. This can be gleaned on the fact that maturity and interest are factors in learning; and also the mothers of the respondents who have reached high school and college level can assist at home school activities of their children; and the availability of books and cellular phone enable the respondents to access assignment and aid school work. Thus, workbook in Drawing should likewise consider the level of maturity of the students in such a way that their interest in the subject is sustained. Further, the provision of workbook should reinforce the learning materials at home.

This finding is parallel with the idea of Gray which disclosed that the use of workbook is beneficial resulting in not only higher score on standardized examination but also in an increase in power or self-direction, help retention, skills in fundamental process, reasoning ability and solving problems.

Further, as emphasized by Nicholas, the utilization of workbook improve learning efficiency for both students and teachers, make learning more meaningful and improve motivation, and make their learning process more engaging and enjoyable.

6. Recommendations

1) The younger group should have more focus in the subject through the assistance of their teachers.
2) Monitoring of parents on children's performance in school is important, thus parents should monitor them regularly.
3) Parents should provide other learning resources which aids their children in achieving academic success.
4) Tutorial sessions or remedial classes may be conducted.
5) Due to lack or insufficient materials in Drawing, a workbook in Drawing can be of great help to both students and teachers.
6) Workbook in Drawing must be developed.
7) There is a need to revisit the Curriculum n BSIE and BSHE focusing on the drawing subject if there is a need to increase its unit or revise the nomenclature, to address the learning needs of the students, with more emphasis on skills development.

References

[1] Azodo, A. P. 2017. "Attitude of Engineering Studnets towards Engineering Drawing: A Case Study." ***International Journal of Research Studies in Education***6(1): 61-74.
[2] Barber, B. 2013. ***Drawing Projects Made Easy.*** London, UK: Arctus Publishing Limited.
[3] Callaghan, T. 2013. ***One Painting a Day***. Beverly, MA: Quarry Books.
[4] Dewey, J. 1997. ***Educational and Experience.*** New York, NY: Touchtone.
[5] Diraso, D.K., Manabete, S. S., Amalo, K., and Jaoji, A.A. 2013. "Evaluation of Students' Performance in Technical and Engineering Drawing Towards an Effective Career Choice in Engineering and Technical and Vocational Education." ***International Journal of Educational Research and Development*** 2(4): 89-97.
[6] Elbitar, H.M., and Umadi, K.E. 2016. "Learning Styles in Technical Drawing Courses as Perceived by Studnets in Egypt and Nigeria***." Journal of STEM Teacher Education*** 48 (3): 44-65.
[7] Emotin-Bucjan, M.D. 2011. "Development and Validation of Modules in English 2: Writing in the Discipline." JPAIR Multidisciplinary Journal 6:65-76.
[8] Fajardo Jr., M.B. 2002. "Planning and Designers Handbook." Retrieved June 27, 2016 (https://goo.gl/SvqUW4).
[9] Gray, W.S. 2007. The Teaching of Reading – Thirty-Sixth year Book: Part 1. A Second Report of the National Society for the study of Education, Bloomington UK: Public School Publishing Company
[10] Horton, J. 1998. ***An Introduction to Drawing.*** London, UK: Dorling Kindersley Publishing.
[11] Medupin, R.O., Abubakre, O.K., Adebayo, S.A., Enock, O.I., and Sulayman, F.A. 2015. "Students' Academic Performance in Engineering Drawing in Nigeria Polytechnics: A Case Study of the Federal Polytechnic Bida, Nigeria." ***Journal of Multidisciplinary Engineering Science and Technology (JMEST)*** 2(2): 99-106.
[12] Monaois, G.M. 2008. ***Drafting Volume 2***. Quezon City, Philippines: Phoenix Publishing House.
[13] Nicholas, L. 2013. What a Mastery Level Grading? California, USA Demand Media Inc.
[14] Orleans, A.V. 2007. The Condition of Secondary School Mathematics Education in the Philippines: Recent Development and Remaining Challenges for Substantive Improvement. ***The Australian Educational Researcher.*** Volume 34(1) 33-54.
[15] Probadora, Michelle Millano. 2011. "***Validity and Probability of Prototype Laboratory Resource Materials in High School Physics."*** Unpublished Dissertation, University of Eastern Philippines, University Town, Northern Samar, Philippines