



VALIDITY AND USABILITY OF RIZAL'S LIFE AND WORKS MODULE OF THE STUDENTS IN THE COLLEGE OF TEACHER EDUCATION

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ABSTRACT

The researcher aim to determine the validity and usability of module in studying the life of Jose P. Rizal. Furthermore it gives supplemental instructional materials public and private higher institutions on their implementation of new general education core courses in order to attain the effective and quality education for every Filipino.

Using the control and experimental group module in chapter 1 to 5 gives data about the significant differences of the result to determine its effectiveness in terms of knowledge, comprehension, and application.

Weighted mean and standard deviation was used to describe the mean level of the validation of the workbook in terms of the components on content validity, usability, and effectivity and in terms of the learning process of College of Teacher Education students in terms of knowledge, comprehension, and application. T-test was used to determine the significant effect of the developed workbook to the students of Jose Rizal Life and Works course.

The level of performance of the students under control group in answering the module in terms of knowledge with relative frequency of 16.67, 63.33, 16.67, 3.33, 0 and weighted mean of 14.43 computed standard deviation of 2.23 with verbal interpretation of very satisfactory. While the level of performance of the students under control group in answering the module in terms of comprehension that relative frequency of 0, 33.33, 56.67, 10, 0, and weighted mean of 11.37 with standard deviation of 2.28 interpreted satisfactory. The level of performance of the students under control group in answering the module in terms of application revealed in relative frequency of 0, 46.67, 40, 13.33, 0 with weighted mean of 11.67 and standard deviation of 2.50 with verbal interpretation of satisfactory.

On other hand the level of performance of the students under experimental group in answering the module in terms of knowledge garnering relative frequency of 96.67, 3.33, 0, 0, with mean score of 18.47 and standard deviation of 1.14 interpreted as outstanding. It also revealed that the level of performance of the students under experimental group in answering the module in terms of comprehension mirrored in relative frequency 50, 50, 0, 0, 0 mean score of 16.93 with standard deviation of 1.60 interpreted outstanding.

The level of performance of the students on experimental group in answering the module in terms of application with relative frequency of 0, 46.67, 40, 13.33, 0 garnering weighted mean of 18.47 and standard deviation of 1.28 with a verbal interpretation of outstanding.

The test on the significant difference between using module between the control and experimental, it revealed that the knowledge of control and experimental group with mean difference of -4.04 and t-value of -9.12 interpreted significant. While the comprehension of control and experimental group with mean difference of -5.56 and t-value of -10.11 interpreted significant. In terms of application control and experimental group has mean difference of -6.80 and t-value of -13.45 interpreted significant.

From the data gathered and discussed the following conclusions were derived. The learning process knowledge, comprehension, and application through the use of the developed module in Rizal's Life showed significantly affect between the control and experimental group. The null hypothesis is supported. It is recommended that the faculty handling Rizal's Life Subject will innovate the module as instructional materials.

KEYWORDS: *Validity, Usability, Module*



BACKGROUND OF THE STUDY

In accordance with pertinent provisions of the Constitution that: the state “Shall protect and promote the right of all citizens to quality education at all levels...” (Article XIV Section1); “establish, maintain and support a complete, adequate and integrated system of education relevant to the needs of the people and society” and as reiterated in Republic Act 7722 otherwise known as the “Higher Education Act of 1994”, the Commission on Higher education “shall set minimum standards for programs and institutions of higher learning (Section 8d). According to Republic Act 1425 also known as Rizal Law mandates all public and private educational institutions basic and higher education will integrate the teaching of the life and contribution of Dr. Jose P. Rizal in order to ignite the sense of patriotism and nationalism of every young Filipino citizens.

Higher education plays a central role in national life and all sectors of the economy. It produces the teachers at all education level, the bureaucrats of all positions, the professionals in various services and the executives and technical workers in industry. Tertiary education provides courses of studies geared towards degrees in academic-technical disciplines and professions. It covers a wide scope curriculum from technical-vocational to professional degree programs. The technical-vocational program is usually taken between one to three years of schooling while professional degree programs require four to five years in schooling. The production and development of locally produced teaching materials shall be encouraged. In line to this study, this workbook will serve as a guide and can be the teaching material of the teacher.

Teachers play an instrumental role in improving learning outcomes and it is important that they are aware of the impact that their practice has a student learning (Timperely et.’al., 2007). Some research argues that the relationship between teachers and students is most effective when both are willing to engage in an open discussion about the learning process in order to ensure that instructions are clear and goals are met (Higgins,et. al., 2007).

Whether the instruction for a whole class or a student the teacher should be able to plan, organize and develop suitable instructional materials. The basic education curriculum is in need of instructional materials such as workbooks which can be used by the institution to encourage independent study, critical thinking, resourcefulness and cooperation among students.

Appropriate assessment practices and feedback are additional important factors in improving

factors in improving student learning. Assessments are most effective when they are closely aligned to curriculum goals (UNESCO, 2013). When explicit instructions are given, assessments can be used to ensure that there is mutual understanding between teachers and students of the learning tasks and goals (Higgins, et. al., 2007).

The researcher aim to determine the validity and usability of module in studying the life of Jose P. Rizal preparedness of those private higher institutions on their implementation of new general education core course in order to meet the effective and quality education for every Filipino.

LITERATURE

Frankel and Wallen (2006) define validity as referring to the appropriateness, meaningfulness, correctness and usefulness of the inferences researches make.

They further discuss validity as the most important idea to consider when preparing or selecting an instrument for use. More than anything else, researchers want the information they obtain through the use of an instrument to serve their purposes. Apparently, Mitchell and Jolley (2007) as cited by Samaniego (2016) treat content validity as important. They further argue that the students cannot defend that their measure logically follower from an accepted definition of the concepts; few would accept the measure as valid. However, they must do more than claim that you have sets of questions that measure each important aspect of the constructions, objectives, statistical evidence to that claim.

Wallen, Mitchell et’al agreed that validity is about the content of any instructional materials and its usefulness for every learners, it is measure through objectives and statistical evidence about the module’s validity. Aquino (2011), explained in the summary of their finding in the Effectiveness of the modular work text material in the Basic Integration. Formula in Integral Calculus concluded that programmed instruction such as module. Work text form is a important educational innovation and a teaching instruction for a more efficient mass education and more effective individual instruction and modular instruction was found to be as effective as if not more effective than the traditional method based on the improved performance of the students in respective subject.

Concerning the work text usefulness, one of the external criteria derived from this research, Zulueta, et. al., (2004) as cited by Navia (2015) identified types of power which one is utility power where in followers follow because of the benefits that come to them if they



do something. The followers have something the leader wants (time, money, personal resources, interest, talent and support), and the leader has something they want (information, money, promotions, camaraderie, security and opportunity). It is being acknowledged that the relationship based on the power often leads to individualism rather than to team work and group effectiveness as each individual is reinforced for paying attention to his own perspective and desires. Aquino and Zulueta agree that usefulness is something that brought impact to the person who used workbook with specific objectives and valid content of information. Furthermore effectiveness it also refer where the person perform different competency on the topic included in workbook or any instructional materials.

According to Ornstein (2004) as cited by Garantuzza (2015), usability of such a teaching material is its ability to be understood, to administer and score, within budget limitations, if it has to be purchased, suitable to the test conditions (for example time available), and appropriate in degree of difficulty. This module in Rizal's life works and writing will give help to the instructor in attaining learning objectives and to the students learning. Ornstein enumerated the different factors affecting usability: unclear directions, sentence construction and vocabulary, inappropriate level of difficulty, poorly constructed evaluation, ambiguity, improper arrangement of item, etc. In addition usability also referred to the effectiveness of instructional materials in order to attain the learning objectives.

OBJECTIVES

This study have the following aim to;

1. Understand deeply the life of Dr. Jose Rizal
2. Appreciate the moral legacies of Dr. Jose Rizal
3. Built personal identity inspired by Dr. Jose Rizal.
4. Further the researchers aim to determine the significant of the use of module in the students of Laguna State Polytechnic University.

The findings will give supplemental instructional materials for the students in course of Rizal's Life Works and Writings. It also helps to the educator to attain their learning competencies of the students.

Time and place of the Study

This study was conducted at Laguna State Polytechnic University Santa Cruz Main Campus in the College of Teacher Education this second semester academic year 2016-2017 consist of control and uncontrolled group.

METHODOLOGY

Descriptive method of research will be used in this study. Descriptive method describes the information contained many indices such as the mean and median. It is the survey, as when researchers summarize the characteristics of individuals or groups or physical environments (Fraenkel and Wallen, 2006). Furthermore, Calderon and Gonzales (2010) affirm that one of the advantages of descriptive research contribute much to the establishment or standard norms of conduct behaviour or performance.

The students in the College of Teacher Education are respondent those 30 experimental and 30 control of the formulated module in Rizal's Life Works and Writing subjects to find out the effectiveness of developed module to their learning process. The researcher seek instructors assistance to validate the module in Rizal's Life Works and Writing, after their further readings and give their corrections and suggestions the researcher make corresponding corrections and improvements of the module. The researcher asks permission to conduct the study to College Associate Dean and execute the module to the selected group of students. The adapted questionnaire used by the researcher in order to determined the validity and usability of the module in Rizal's Life Works and Writing course

The researcher guided by the Outcomes-Based Education learning instructions of Jose Rizal's Life Works and Writing course after conducting further readings the researcher formulating objectives and exercises based on the competencies such knowledge, comprehension, and application. Upon the construction of the content of the module the researcher presents to the instructor for validation. At this stage the researcher make necessary revision of the module based on the suggestion of the evaluator. The researcher used the module to the sixty students. To determine the usability and effectiveness of the module the researcher administer assessment test to 30 students used the module and 30 non-user of the module. The following are the statistical tools that the proponent will use in treating the data and information.

Weighted mean and standard deviation was used to describe the mean level of the validation of the workbook in terms of the components on content validity, usability, and effectivity and in terms of the learning process of College of Teacher Education students knowledge, comprehension, and application.

T-test was used to determine the significant effect of the developed workbook to the students of Jose Rizal Life and Works course.



RESULTS AND DISCUSSIONS

Level of Performance of the Students (control group) in Answering the Module in terms of Knowledge

Table 1. Level of Performance of the Students (control group) in Answering the Module in terms of Knowledge

Scores	Frequency	Relative Frequency (%)	Remarks
17-20	5	16.67	Outstanding
13-16	19	63.33	Very Satisfactory
9-12	5	16.67	Satisfactory
5-8	1	3.33	Fair
0-4	0	0	Poor
Total	30	100 %	
Weighted Mean= 14.43 SD= 2.34			Very Satisfactory

Legend:

Scores	Verbal Interpretation
17-20	Outstanding
13-16	Very Satisfactory
9-12	Satisfactory
5-8	Fair
1-4	Poor

Table 1 presents the level of performance of the students under control group in answering the module in terms of knowledge with relative frequency of 16.67,

63.33, 16.67, 3.33, 0 and weighted mean of 14.43 computed standard deviation of 2.23 with verbal interpretation of *very satisfactory*.

Table 2. Level of Performance of the Students (control group) in Answering the Module in terms of Comprehension

Scores	Frequency	Relative Frequency (%)	Remarks
17-20	0	0	Outstanding
13-16	10	33.33	Very Satisfactory
9-12	17	56.67	Satisfactory
5-8	3	10	Fair
0-4	0	0	Poor
Total	30	100 %	
Weighted Mean= 11.37 SD= 2.28			Satisfactory

Legend:

Scores	Verbal Interpretation
17-20	Outstanding
13-16	Very Satisfactory
9-12	Satisfactory
5-8	Fair
1-4	Poor

Table 2 presents the level of performance of the students under control group in answering the module in terms of comprehension that relative frequency of 0,

33.33, 56.67, 10, 0, and weighted mean of 11.37 with standard deviation of 2.28 interpreted *satisfactory*.



Table 3. Level of Performance of the Students (control group) in Answering the Module in terms of Application

Scores	Frequency	Relative Frequency (%)	Remarks
17-20	0	0	Outstanding
13-16	14	46.67	Very Satisfactory
9-12	12	40	Satisfactory
5-8	4	13.33	Fair
0-4	0	0	Poor
Total	30	100 %	
Weighted Mean= 11.67 SD= 2.50			Satisfactory

Legend:

Scores	Verbal Interpretation
17-20	Outstanding
13-16	Very Satisfactory
9-12	Satisfactory
5-8	Fair
1-4	Poor

Table 3 presents the level of performance of the students under control group in answering the module in terms of application revealed in relative frequency of 0, 46.67, 40, 13.33, 0 with weighted mean of 11.67 and

standard deviation of 2.50 with verbal interpretation of *satisfactory*.

Table 4. Level of Performance of the Students (Experimental group) in Answering the Module in terms of Knowledge

Scores	Frequency	Relative Frequency (%)	Remarks
17-20	29	96.67	Outstanding
13-16	1	3.33	Very Satisfactory
9-12	0	0	Satisfactory
5-8	0	0	Fair
0-4	0	0	Poor
Total	30	100 %	
Weighted Mean= 18.47 SD= 1.14			Outstanding

Legend:

Scores	Verbal Interpretation
17-20	Outstanding
13-16	Very Satisfactory
9-12	Satisfactory
5-8	Fair
1-4	Poor

On table 4 presents the level of performance of the students under experimental group in answering the module in terms of knowledge garnering relative frequency of 96.67, 3.33, 0, 0, with mean score of 18.47 and standard deviation of 1.14 interpreted as *outstanding*.

On table 5 presents the level of performance of the students under experimental group in answering the module in terms of comprehension mirrored in relative frequency 50, 50, 0, 0, 0 mean score of 16.93 with standard deviation of 1.60 interpreted *outstanding*.

**Table 5. Level of Performance of the Students (Experimental group) in Answering the Module in terms of Comprehension**

Scores	Frequency	Relative Frequency (%)	Remarks
17-20	15	50	Outstanding
13-16	15	50	Very Satisfactory
9-12	0	0	Satisfactory
5-8	0	0	Fair
0-4	0	0	Poor
Total	30	100 %	
Weighted Mean= 16.93 SD= 1.60			Outstanding

Legend:

Scores	Verbal Interpretation
17-20	Outstanding
13-16	Very Satisfactory
9-12	Satisfactory
5-8	Fair
1-4	Poor

Level of Performance of the Students (Experimental group) in Answering the Module in terms of Application

On table 6 presents the level of performance of the students under experimental group in answering

the module in terms of application with relative frequency of 0, 46.67, 40, 13.33, 0 garnering weighted mean of 18.47 and standard deviation of 1.28 with verbal interpretation of an outstanding.

Table 6. Level of Performance of the Students (Experimental group) in Answering the Module in terms of Application

Scores	Frequency	Relative Frequency (%)	Remarks
17-20	28	0	Outstanding
13-16	2	46.67	Very Satisfactory
9-12	0	40	Satisfactory
5-8	0	13.33	Fair
0-4	0	0	Poor
Total	30	100 %	
Weighted Mean= 18.47 SD= 1.28			Outstanding

Legend:

Scores	Verbal Interpretation
17-20	Outstanding
13-16	Very Satisfactory
9-12	Satisfactory
5-8	Fair
1-4	Poor

Table 7. Test on the Significant Difference between Using the Module between the Control and Experimental Group

Criteria	Group	Mean	Mean Difference	Df	Computed t-value	Critical t-value	Analysis
Knowledge	Control	14.43	-4.04	29	-9.12	2.06	S
	Experimental	18.47					
Comprehension	Control	11.37	-5.56	29	-10.11	2.06	S
	Experimental	16.93					
Application	Control	11.67	-6.80	29	-13.45	2.06	S
	Experimental	18.47					

S- Significant



Table 7 presents the test on the significant difference between using module between the control and experimental, it revealed that the knowledge of control and experimental group with mean difference of -4.04 and t-value of -9.12 interpreted *significant*. While the comprehension of control and experimental group with mean difference of -5.56 and t-value of -10.11 interpreted *significant*. In terms of application control and experimental group has mean difference of -6.80 and t-value of -13.45 interpreted *significant*.

CONCLUSIONS AND RECOMMENDATIONS

From the data gathered and discussed the following conclusions were derived. The learning process knowledge, comprehension, and application through the use of the developed module in Rizal's Life showed significantly affect between the control and experimental group. The null hypothesis is supported. It is recommended that the faculty handling Rizal's Life Subject will innovate the module as instructional materials.

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