

Content and Format Validity of a Developed Basic Drawing Workbook

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Abstract: *A developmental study was conducted on the validity of a developed workbook in Basic Drawing along the areas of content in terms of objectives, contents, organization and mechanics and procedures. And further determined its format validity in terms of accuracy, illustrations, presentation, readability, time allotment, and usefulness. Three experts, and faculty and students of the University of Eastern Philippines rated the workbook. The entire study was completed during the School Year 2018-2019. Results of the study showed that the assessment of the faculty on content validity revealed that all of the respondents also agreed on its contents, particularly in the areas of learning objectives, contents, organization and mechanics, and procedures of the workbook and items were found to be much valid. On format validity, results indicated that all of the respondents have agreed and found the workbook to be much valid, particularly on the format in terms of accuracy, illustrations, perspectives, readability, time allotment and usefulness of the workbook.*

Keywords: content, format, validity, workbook, basic drawing

1. Introduction

To make teaching more effective, the teacher should be creative in finding alternative solutions to these problems. One best way to do this is through the development of additional learning materials like laboratory instruction guides, modules, workbooks and manuals, and other resource materials. The use of learning materials is one of the solutions that could make education a truly enlightening experience to both teachers and students. One way of maintaining the interest of the learners is to provide them with activities which they could perform individually after being given the proper motivation, guidance, instruction and encouragement by the teacher. The use of programmed instruction, for example, as a teaching tool such as, workbook or module could make learning more interesting.

Against this background, at the University of Eastern Philippines (UEP), where the researcher is currently teaching, teachers are encouraged to conduct investigations on how to improve the learning capabilities of those students who have low academic performance syndrome. In fact, the researcher, a drawing subject professor, has utilized various teaching methodologies in imparting the needed knowledge to his students. However, it is sad to note that despite his efforts to improve their performance in the subject, students always find difficulty to understand the lessons. Similar observations were revealed by faculty members handling the subject from other campuses. Thus, they claimed that there is a need for the development of instructional materials like manuals and workbooks in **drawing**, due to dearth of materials.

Relative to this, drawing is one of the skills that should be developed by the Engineering, BSIT, Industrial Arts and Home Economics students. Basic Drawing courses train students in three important skills: observing, memorizing, and hand-and-eye coordination. However, it has been observed that students show less interest and motivation whenever they are confronted with physical theories and principles and application in class through the conduct of

laboratory activities. Up to this time, very few of them realize the essence of such useful knowledge. Some faculty members accounted this as might be due to limited emphasis and exposure of students to drawing as a subject during high school.

Therefore, workbook in Basic Drawing as an instructional material was developed through this study with the hope of motivating students' interests for the subject thereby enhancing the learning of any skills-related task for mastery level. In addition, majority of the technical schools, as well as, some tertiary institutions are required to improvise and design large, normally wooden drawing tools and gadgets such as triangles, T-square, scales and other tools to instill the interest of the students.

The researcher strongly believed that the study, most importantly, the output which was a Basic Drawing Workbook could serve as one potent tool in addressing the problem on the dearth of instructional materials, particularly in Drawing subject. Furthermore, the output was an attempt of the researcher to address the lack of workbook in the subject that would cater to the limited exposure of students to Drawing and the need to develop a material that aims to provide practical and hands on exercises targeting in sequence the development of skills of the learners. Feedbacks from the faculty members handling Drawing were analyzed and resulted to the enclosure and sequence of the proposed workbook with the following topics: uses of drawing instruments, practice of lettering, orthographic projection, conventional section, surface and section, and project designing, with the hope of solving the students difficulty and ultimately, contribute to quality education.

2. Objectives of the Study

The study aimed to develop and validate a workbook in Basic Drawing in the College of Education, University of Eastern Philippines, University Town, Northern Samar. Specifically, this study answered the following questions:

- 1) What is the assessment of the experts handling Basic Drawing with respect to content and format validity in terms of:
 - 1.1 Learning objectives;
 - 1.2 Content;
 - 1.3 Organization and mechanics; and
 - 1.4 Procedures?
- 2) What is the assessment of the teacher- respondents on the workbook content validity in terms of the following:
 - 2.1 Learning objectives;
 - 2.2 Content;
 - 2.3 Organization and mechanics; and
 - 2.4 Procedures?
- 3) What is the assessment of the faculty and student-respondents on the workbook in Basic Drawing on the format validity in terms of the following:
 - 3.1 Accuracy;
 - 3.2 Illustration;
 - 3.3 Presentations;
 - 3.4 Readability;
 - 3.5 Time allotment; and
 - 3.6 Usefulness?

3. Methodology

The study employed descriptive developmental method of research. Descriptive research according to Manuel and Medel (1976) involves the description, recording, analysis, and interpretation of the present nature, composition or processes of phenomena. The study was conducted at the University of Eastern Philippines system which specifically includes the UEP main campus; UEP-Laoang campus and UEP-PRMAC campus. The respondents of the study were the professors of the Technological University of the Philippines (TUP), the faculty members, and the students of the University of Eastern Philippines (UEP). Purposive sampling was used to determine the respondents of the study. This was deemed the most appropriate sampling method for the study since the researcher has set a certain criteria in selecting the respondents. Two sets of instruments were used in this study – the focus group discussion guide, and an adapted assessment questionnaire. The research instruments that were used in this study to assess and evaluate the content and format validity of the developed workbook were adapted from the studies of Ramos (2004), Gidayawan (2009), and Robiso (2010).

4. Results and Discussion

Assessment in terms of Content Validity of the workbook by the Experts

Table 1 presents the results on the assessment in terms of content validity of the Basic Drawing workbook as perceived by the experts in drawing. The areas that were assessed were on learning objectives, content, organization and mechanics, and procedures.

Table 1: Mean Ratings on the Content Validity of the Workbook as Assessed by the Experts

| Criterion | μ | DESC. | Interpretation |
|---|-------------|----------|-------------------|
| Learning Objectives | | | |
| The objectives are clearly stated | 4.00 | A | Much Valid |
| The statements are measurable | 3.96 | A | Much Valid |
| The learning objectives are result oriented | 4.17 | A | Much Valid |
| The statements are time bounded | 3.58 | A | Much Valid |
| Average | 3.93 | A | Much Valid |
| Content | | | |
| Activities are based on the content of the course syllabus | 3.57 | A | Much Valid |
| Activities are properly organized and proceeds from simple to complex | 4.18 | A | Much Valid |
| Activities stimulate creative and analytical thinking | 4.00 | A | Much Valid |
| Average | 3.92 | A | Much Valid |
| Organization and Mechanics | | | |
| Components of the activities are systematically lined up and facilitate the attainment of the objectives and expected learning outcomes | 3.87 | A | Much Valid |
| Activities are in proper sequence and are based on the hierarchy of the course content and syllabus | 4.13 | A | Much Valid |
| Procedures of the activities are within the level of comprehension of the students | 3.58 | A | Much Valid |
| Average | 3.86 | A | Much Valid |
| Procedures | | | |
| Procedures are clearly stated | 3.68 | A | Much Valid |
| The language and vocabulary are easy to follow | 3.47 | A | Much Valid |
| Procedures guide the statements in doing the activities | 4.00 | A | Much Valid |
| Average | 3.72 | A | Much Valid |
| GRAND MEAN | 3.86 | A | Much Valid |

As indicated in Table 1, the assessment of the experts showed that on the content validity of the workbook in terms of learning objectives, were all found to be “much valid with an average mean rating of 3.93. Specifically, each benchmark statement has obtained the following mean ratings: the learning objectives were clearly stated (4.0); were measurable (3.96); learning objectives were result oriented (4.17); and statements were time bounded (3.58). From among the statements, the highest mean rating was attributed to “learning objectives were result oriented” with 4.17 mean rating and the lowest was obtained by the condition, “statements were time bounded”.

With these results, it can be inferred that the experts have perceived the learning objectives to have been well stated to trigger the necessary skill or application of the course through doing exercises which would generate results or outputs from the students. On the other hand, for the condition, “statements were time bounded”, the experts were of the belief that the learning objectives, although were crafted so well, still did not reflect very clearly in terms of time limits as to when the contents or lessons be completed.

On the content of the workbook, the following were the mean ratings: “the activities were based on the content of the course syllabus” (3.57); “the activities stimulated creative and analytical thinking (4.00); and “activities are properly organized and proceeds from simple to complex (4.18). All mean ratings were interpreted as “much valid” which resulted to an average mean rating of 3.9 interpreted as “much valid”.

From the results, it can be deduced that the experts assessed the contents to have triggered the concepts and skills necessary to be acquired in Basic Drawing by the students. These concepts and skills were in line with what the course requires vis-à-vis the course syllabus and they were organized in such a way that students have to learn first simple drawing skills before going through more complicated exercises.

On the aspect of organization and mechanics, the mean ratings were as follows: “activities were systematically lined up which facilitated the attainment of the objectives and the

learning outcomes” (3.87); “the activities were properly sequenced based on the hierarchy of the course content and syllabus” (4.13); and “the procedures of the activities were at the level of comprehension among the students” (3.58) which were all interpreted as “much valid”. As such, this criterion variable has obtained an average mean rating of 3.86 interpreted as “much valid”.

It can be gleaned from the results that this aspect was rated a little bit lower as compared to learning objectives and content. However, it still garnered a high rating considering that all conditions were rated as “much valid”. This simply implies that based on the perception of the experts, the workbook has complied with the requirements in terms of organization and mechanics making the workbook suitable and reader-friendly.

In terms of the procedure in the workbook, the following conditions were rated accordingly: “procedures were clearly stated” (3.68); “the language and vocabulary used were easy to follow” (3.47); and “procedure guides the statement in doing the activities” (4.00). As can be gleaned from the results, it was on the clear procedure that guides reader to do the activities that have obtained the highest mean rating while the lowest was on the vocabulary used. The results obtained an average mean rating of 3.72.

It can be deduced from the results in the aspect of procedure that the experts have perceived the workbook to have clear procedures making the students more guided and facilitated as they go through with the different exercises.

Generally, the grand mean on the content validity of the workbook as assessed by the experts in the Technological University of the Philippines was 3.86 interpreted as “much valid” which simply implies that the experts were in agreement that the workbook has conformed to the requirements for it to be valid in terms of its learning objectives, content, organization and mechanics and the procedures.

Assessment in terms of Content Validity of the workbook by the Teacher-Respondents

The assessment of the teacher-respondents on the workbook in terms of content validity was based on its learning objectives, content, organization and mechanics and procedures. Table 2 presents the results.

Table 2: Mean Ratings on the Content Validity of the Workbook as Assessed by the Teacher-Respondents

| Criterion | μ | DESC | Interpretation |
|---|------|------|----------------|
| Learning objectives | | | |
| The objectives are clearly stated | 3.94 | A | Much Valid |
| The statements are measurable | 4.04 | A | Much Valid |
| The learning objectives are result oriented | 4.12 | A | Much Valid |
| The statements are time bounded | 3.99 | A | Much Valid |
| Average | 4.02 | A | Much Valid |
| Content | | | |
| Activities are based on the content of the course syllabus | 3.98 | A | Much Valid |
| Activities are properly organized and proceeds from simple to complex | 4.25 | A | Much Valid |

| | | | |
|---|------|---|------------|
| Activities stimulate creative and analytical thinking | 4.18 | A | Much Valid |
| Average | 4.14 | A | Much Valid |
| Organization and Mechanics | | | |
| Components of the activities are systematically lined up and facilitate the attainment of the objectives and expected learning outcomes | 3.99 | A | Much Valid |
| Activities are in proper sequence and are based on the hierarchy of the course content and syllabus | 3.58 | A | Much Valid |
| Procedures of the activities are within the level of comprehension of the students | 3.78 | A | Much Valid |
| Average | 3.78 | A | Much Valid |
| Procedures | | | |
| Procedures are clearly stated | 4.15 | A | Much Valid |
| The language and vocabulary are easy to follow | 4.18 | A | Much Valid |
| Procedures guide the statements in doing the activities | 3.88 | A | Much Valid |
| Average | 4.07 | A | Much Valid |
| Grand Mean | 4.00 | A | Much Valid |

As reflected in Table 2, the assessment of the teacher-respondents showed that on the content validity of the workbook in terms of learning objectives, were all found to be “much valid with an average mean rating of 3.93. Specifically, each benchmark statement has obtained the following mean ratings: the learning objectives were clearly stated (3.94); learning objectives were measurable (4.04); learning objectives were result oriented (4.12); and statements were time bounded (3.99). As such, this aspect has obtained an average mean rating of 4.02 interpreted as “agree” or equivalent to “much valid”.

It can be implied that on the part of the teachers, the content validity in terms of learning objectives were clearly laid down by the researcher. For them, these objectives have met the necessary learning outcomes that the workbook intends to achieve.

In terms of content of the workbook, the following were the mean ratings: “the activities were based on the content of the course syllabus” (3.98); “the activities stimulated creative and analytical thinking (4.25); and “activities are properly organized and proceeds from simple to complex (4.18). All mean ratings were interpreted as “much valid” which resulted to an average mean rating of 4.14 interpreted as “much valid” or “agree.”

The results manifest that teachers were confident that the contents of the workbook were in line with the required concepts and skills necessary for students to learn in a drawing subject. These concepts were drawn out from the mandated topics outlined in the course syllabus and were arranged in such a manner that students were given the opportunity to gradually develop their drawing skills from simple to complex.

Meanwhile, the aspect of procedure in the workbook has obtained the following results: “procedures were clearly stated” (4.15); “the language and vocabulary used were easy to follow” (4.18); and “procedure guides the statement in doing the activities” (3.86). As can be gleaned from the

results, it was on the vocabulary used which the highest mean rating was obtained while the lowest was on procedure that guides reader to do the activities. The results obtained an average mean rating of 4.07.

With the results indicated, the teachers were of firm disposition that the activities or exercises contained in the workbook are in proper sequence and vertically aligned with the course content and syllabus. Moreover, procedures in doing the activities were easy to grasp by the students whenever they need to answer or do the activity.

The grand mean of the assessment of the teacher-respondents on the workbook content was 4.00 which could be interpreted as much valid. The data could be implied that on the side of the teachers, the indicators or criteria in making workbook have been met in all aspects.

Assessment of the Teachers and Students on the Format Validity of the Workbook

The assessment of the teachers and student-respondents on the workbook in Basic Drawing subject on format validity were based on accuracy, illustration, presentation, readability, time allotment and usefulness. Table 3 presents the results on the mean ratings of the format validity of the workbook in terms of accuracy.

Table 3: Mean Ratings on the Format Validity of the Workbook in Basic Drawing in terms of Accuracy

| Criterion | Teachers | | | Students | | | Teacher and Students | | |
|--|-------------|------|-------------------|-------------|----------|-------------------|----------------------|----------|-------------------|
| | μ | DESC | Int. | μ | DESC | Int. | μ | DESC | Int. |
| ACCURACY | | | | | | | | | |
| Can develop students' accuracy in: | | | | | | | | | |
| Identifying/classifying different kinds of lines | 4.35 | A | Much Valid | 3.67 | A | Much Valid | 4.01 | A | Much Valid |
| drawing and sketching different kinds of lines | 4.09 | A | Much Valid | 3.87 | A | Much Valid | 3.98 | A | Much Valid |
| drawing arcs, curves and circles | 4.13 | A | Much Valid | 3.90 | A | Much Valid | 4.01 | A | Much Valid |
| Can improve students' accuracy in: | | | | | | | | | |
| following procedures | 4.12 | A | Much Valid | 3.57 | A | Much Valid | 3.84 | A | Much Valid |
| following instructions and directions | 4.24 | A | Much Valid | 3.27 | U | Valid | 3.75 | A | Much Valid |
| using the appropriate drawing instruments | 3.99 | A | Much Valid | 3.68 | A | Much Valid | 3.83 | A | Much Valid |
| Can improve students' accuracy in: | | | | | | | | | |
| freehand drawing of different kinds of lines | 3.58 | A | Much Valid | 3.60 | A | Much Valid | 3.59 | A | Much Valid |
| sketching different classifications of letters | 4.37 | A | Much Valid | 3.97 | A | Much Valid | 4.17 | A | Much Valid |
| sketching different letter styles | 4.12 | A | Much Valid | 4.01 | A | Much Valid | 4.06 | A | Much Valid |
| developing accurately the used of guidelines | 4.00 | A | Much Valid | 3.50 | U | Valid | 3.75 | A | Much Valid |
| familiarizing the different instruments, their uses and how to use them properly | 4.13 | A | Much Valid | 3.58 | A | Much Valid | 3.85 | A | Much Valid |
| constructing and applying geometric forms | 3.67 | A | Much Valid | 3.24 | U | Valid | 3.45 | U | Valid |
| Average Mean | 4.07 | | Much Valid | 3.66 | A | Much Valid | 3.85 | A | Much Valid |

Table 4 presents the results on the assessment of the Basic Drawing Workbook by both teachers and students respondents on format validity in terms of accuracy. Data revealed that the average mean rating obtained was 3.85 interpreted as "much valid". Specifically, almost all of the conditions were rated as "much valid" except for four

statements and these were on, "following instructions and directions" (3.27); "developing accurately the use of guidelines" (3.50); and "constructing and applying geometric forms" (3.45) which were rated by the students to be "valid" only.

Data imply that although generally speaking, the accuracy of the workbook was high as evidenced by high mean ratings, there were areas needing further improvement, particularly on the directions and guidelines and in applying geometric figures in which the respondents have found to be a higher skill. On the other hand, there were teacher respondents who considered identifying different kinds of lines, following instructions and directions, as well as, in sketching different classification of letters as "very much valid" having mean ratings of 4.35, 4.24, and 4.37, respectively. These conditions that obtained "very much valid" results manifest that these were the areas on accuracy that have met high acceptance on the part of the respondents and were clearly manifested in the workbook itself.

Table 4: Mean Ratings on the Format Validity of the Workbook in Basic Drawing in terms of Illustrations and Presentations

| Criterion | Teachers | | | Students | | | Teacher and Students | | |
|--|-------------|----------|-------------------|-------------|----------|-------------------|----------------------|----------|-------------------|
| | μ | DESC | Int. | μ | DESC | Int. | μ | DESC | Int. |
| ILLUSTRATIONS | | | | | | | | | |
| Cravings and images show clear and simple form | 4.27 | A | Much Valid | 4.00 | A | Much Valid | 4.13 | A | Much Valid |
| Motivate students' interest, making learning effect | 4.30 | A | Much Valid | 3.40 | U | Valid | 3.85 | A | Much Valid |
| Profoundness class | 4.15 | A | Much Valid | 3.37 | U | Valid | 3.76 | A | Much Valid |
| Guide the students to follow directions/procedures | 4.20 | A | Much Valid | 3.67 | A | Much Valid | 3.97 | A | Much Valid |
| Adapted to the learning objective | 4.30 | A | Much Valid | 3.50 | A | Much Valid | 3.79 | A | Much Valid |
| Average | 4.22 | A | Much Valid | 3.62 | A | Much Valid | 3.91 | A | Much Valid |
| PRESENTATIONS | | | | | | | | | |
| The exercises present | | | | | | | | | |
| Topics which are chronologically arranged in accord with the syllabus | 4.50 | SA | Very Much Valid | 3.60 | A | Much Valid | 4.13 | A | Much Valid |
| Clearly present the | | | | | | | | | |
| Objectives | 4.10 | A | Much Valid | 4.00 | A | Much Valid | 4.05 | A | Much Valid |
| Procedures | 4.30 | A | Much Valid | 3.37 | U | Valid | 3.85 | A | Much Valid |
| activities plans | 4.30 | A | Much Valid | 3.50 | A | Much Valid | 3.79 | A | Much Valid |
| Well and properly organized activities | 4.15 | A | Much Valid | 4.00 | A | Much Valid | 4.07 | A | Much Valid |
| Procedures are clearly presented in step by step manner to improve students' | | | | | | | | | |
| interest | 4.15 | A | Much Valid | 3.67 | A | Much Valid | 3.91 | A | Much Valid |
| higher order thinking skills | 4.50 | SA | Very Much Valid | 3.57 | A | Much Valid | 4.03 | A | Much Valid |
| teaching time in drawing | 3.90 | A | Much Valid | 3.37 | A | Much Valid | 3.63 | A | Much Valid |
| The procedures are easy to follow and guidelines to work independently on time | 4.15 | A | Much Valid | 3.60 | A | Much Valid | 3.91 | A | Much Valid |
| Average | 4.19 | | Much Valid | 3.73 | A | Much Valid | 3.85 | A | Much Valid |

Table 5 presents the mean ratings on the format validity of the workbook in Basic Drawing in terms of illustrations and presentations. As reflected in the table, only two conditions have obtained "very much valid" results" and these were, "the exercises present topics which are chronologically arranged in accordance with the syllabus" with a mean rating of 4.58 and "procedures are clearly presented in step by step manner to improve students' higher order thinking skills" with a mean rating of 4.60 as perceived by the teachers in the area of presentations. This implies then that on the part of the teachers, these conditions have satisfactorily met the requirements on the test of validity in terms of format, particularly on the way the concepts were presented. Meaning to say, the workbook has complied with the mandates of the University, in particular, and the Commission on Higher Education, in terms of providing students with topics that would develop their higher order

thinking skills and topics were so arranged so as to facilitate better understanding of the concepts.

On the other hand, there were some conditions which were perceived to be only on the average in as far as format validity was concerned. Out of the four conditions given in illustration, there were two which were rated as “undecided: or equivalent to valid while there was one condition rated by the teachers as “undecided” in the area of presentation. All the rest of the conditions were rated as “much valid”. This implies then that although there were areas which were not really perceived to be good, still the workbook has met the requirements in terms of illustrations and presentations for it to be valid.

Table 4: Mean Ratings on the Format Validity of the Workbook in Basic Drawing in terms of Readability, Time Allotment, and Usefulness

| Criterion | Teachers | | Students | | Teacher and Students | |
|---|----------|------------|-----------------|------------|----------------------|------------|
| | μ | Desc. Int. | μ | Desc. Int. | μ | Desc. Int. |
| Readability | | | | | | |
| The language terms, signs and symbols | | | | | | |
| are stated in correct grammar | 4.21 | A | Much Valid | 3.27 | U | Valid |
| are easy to understand | 4.11 | A | Much Valid | 4.14 | A | Much Valid |
| use sufficient familiar vocabulary to ensure learning | 4.67 | SA | Very Much Valid | 4.11 | A | Much Valid |
| are appropriate to target level | 3.69 | A | Much Valid | 3.47 | U | Valid |
| Average | 4.17 | A | Much Valid | 3.75 | A | Much Valid |
| Time Allotment | | | | | | |
| The time set for specific activity | | | | | | |
| allows sufficient duration to complete each activity/plate | 4.27 | A | Much Valid | 4.00 | A | Much Valid |
| gives ample time for the pre-activity discussions | 4.07 | A | Much Valid | 4.11 | A | Much Valid |
| contains sufficient time for analyzing procedures, helping students develop the ability to discover and conceptualize | 4.29 | A | Much Valid | 3.27 | U | Valid |
| Average | 4.21 | A | Much Valid | 3.79 | A | Much Valid |
| Usefulness | | | | | | |
| The actual value of the workbook | | | | | | |
| serves its purpose | 4.64 | SA | Much Valid | 3.97 | A | Much Valid |
| makes the activities of the students systematic and well directed | 3.40 | U | Valid | 3.57 | A | Much Valid |
| helps the students to perform the activity with confidence | 4.50 | A | Much Valid | 3.26 | U | Valid |
| Average | 4.06 | A | Much Valid | 3.54 | A | Much Valid |
| Grand Mean | 4.14 | A | Much Valid | 3.68 | A | Much Valid |

Moreover, on the aspect of readability as reflected in Table 6, the teacher- respondents found out that the languages, signs and symbols were stated in correct grammar and used sufficient familiar vocabulary to ensure learning having obtained the means of 4.21 and 4.67, respectively, which were interpreted as “very much valid”.

On the other hand, in relation to time allotment, teacher respondents found out that the time set for specific activity provides sufficient duration to complete each activity or plate. The workbook also contains sufficient time for analyzing procedure and helping students develop their ability to discover and conceptualize things having obtained mean ratings of 4.27 and 4.29, respectively interpreted as “very much valid”. Furthermore, in terms of usefulness the actual value of the workbook serves its purpose, according to the teacher respondents gaining a mean rating of 4.64 which is interpreted as “very much valid”.

It can be gleaned from the data that the assessment of both the teacher and student respondents in terms of the format validity of workbook was “much valid” having a grand mean of 3.90. This means that in terms of accuracy, illustrations, presentations, readability, time allotment, and

usefulness, the workbook was highly accepted as an instructional material by the respondents and it addresses the needs, interest and level of teaching and learning among the academic members of the University.

5. Conclusions

Based on the findings of the study, the study has drawn out the following conclusions:

- 1) The teachers and students have evaluated the workbook based on their prior knowledge and understanding of the concepts and the necessary skills needed to be acquired in basic drawing.
- 2) The teachers and students were not aware that although on the face of the workbook, it seemed valid and acceptable, still it did not really maintain consistency in measuring what it is supposed to measure.

6. Recommendations

Based on the findings of the study, the following recommendations are forwarded:

- 1) The visual clues of the workbook may be reviewed to suit them to the needs of the learners.
- 2) The vocabulary used in the workbook may be revised to adopt the learning level of the students.
- 3) The steps or procedures may be revised to adjust to the higher order thinking skills and mastery level of the students.
- 4) Instructions in the workbook may be revised along freehand drawing of different kinds of lines, suited to the availability of drawing instruments.
- 5) The workbook should undergo further validation tests by subjecting it to other groups of respondents.

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