ABSTRACT

This study aimed to develop an Instructional Module in Animation for Senior High School Students in Nueva Ecija to aid senior high school students taking the Animation course and teachers with the same discipline. Due to the growth of Animation industry and the newly implemented Animation course in the K to 12 curriculums, the researchers aimed to fill the gap between the demand in entering the course and the instructional materials to help the students who are in this program. The researchers utilized the Input-Process-Output model in developing the module. Specifically, the researchers described the developed module under the following factors: Analysis, Design and Development. Furthermore, they sought the help of thirteen (13) respondents to validate and evaluate the overall acceptability of the developed module in terms of Objectives, Content, Format and Language, Presentation and Usefulness. Moreover, they tested if there were differences among experts’ and teachers’ evaluation. Design and Development method of research was utilized in making this research and expert purposive sampling was used to identify the respondents. Results showed that majority of the respondents strongly agreed that the Objectives, Content, Format and Language, Presentation and Usefulness of the module were highly acceptable. However, there was a significant difference between the evaluation of the teacher and industry expert respondents. In conclusion, the module developed was highly acceptable but the researchers recommended the updating the module once in a while.

KEYWORDS

Education, Instructional Module, Senior High School Students, Teachers, Animation
INTRODUCTION

Animation is the rapid display of static images in a way that creates the illusion of motion. Nowadays animation is used mostly in motion pictures and videos, plus some computer applications, such as moving icons, and in video games. Furthermore, it also used to create special visual effects within movie productions those otherwise use traditional photographic methods. There are the four basic types of animation such as; Stop-motion, Two-dimensional drawn (traditional), Two-dimensional computer-generated and Three-dimensional computer-generated (Vault.com). Moreover, animation is used mainly in entertainment, but also in advertising, education, news, and business communications. The industry creates jobs for artists, writers, voice actors, sound effects technicians, and animators who are skilled with specialized animation software, as well as the computer programmers who create animation tools.

Teaching materials is a generic term used to describe the resources teachers use to deliver instruction with ease and greater effectiveness. These are the materials which support students learning that lead to increased academic performance. Regardless of their variation, they lie in one common ground. It is the ability to support teachers and students as well as the teaching-learning process. Additionally, instructional materials support learning content, allow students to engage in the concepts application and provide an opportunity for evaluation. They are developed to help the teachers facilitate learner’s prior knowledge, assist them to process and understand the new learning, and eventually aid them apply newly acquired knowledge to their practical lives.

Instructional materials are used by teachers to facilitate effective teaching and better quality of learning among students. Instructional materials are created to suit the different ways that students learn. While some students learn and retain information that is fed to them through a lecture, others learn better by reading. Other students however absorb information with the aid of visual cues in addition to the lecture and reading. The use of different instructional materials assures and provides the student with different learning aids to maximize learning and retain the information given to them. Along this context, Lardizabal (1992) stated that the effectiveness of testing process can be increased greatly through the use of instructional materials. In connection to this, learning is made easy through the utilization of a variety of instructional materials; hence, students are more likely to learn as they are motivated to acquire knowledge and skills. This really calls for the teachers to employ varied methodologies in presenting their lessons for their students to attain the set objectives out of the lessons and to satisfy the needs of the students to acquire knowledge and skills in order to improve and grow in their chosen career. Laron (1994) stated that a variety of instructional materials has been proven to produce more effective and efficient learning. Accord-
ing to Flores, instructional materials in the classroom are most effective tools to catch up the interest and understanding of the students and help teachers to teach better.

Modular instruction is one of the latest innovations in the educational system. This innovation in the modular approach contains a series of activities each of which start with teaching instructions addressed to the learners, explanation, exercises and generalizations. A module is defined as a self-contained, independent unit of a planned series of learning activities designed to help the student accomplish certain well-defined objectives.

Modules emphasize analysis and application of concepts and techniques and give concrete style of concepts. They also provide active participation of students in responding and a wait to meet areas of individual interest and help the teacher extend more individualized instruction in school and at home. With these, the learner is able to proceed at his own rate, choose his own learning mode, select along a variety of topics, identify his strengths and weaknesses, and recycle if necessary. Ideally, modules should include pre-test, objective, criteria for success, instructional activities, a post test, and remedial instruction and/or reinforcement.

The use of self-instructional materials is particularly beneficial as a strategy in introducing basic information to an entire class, freeing the lecture discussion hours for more “discussions” and less “lecture”, an enrichment activity for talented students; a strategy to make-up for a student who has been absent and a strategy for a student who is in need of remedial lectures (Macaradang, 2009). It is explained that instructional materials offer the best means by which a teacher can provide direction in her students’ daily search for new understanding and verifications. A self-instructional module is a self-contained, independent unit of instruction prepared for the purpose of attaining defined instructional objectives. It is characteristically self-directing since it includes instruction on how the various investigations will be pursued (Salandanan, 2001).

With the birth of Republic Act 10533, the Enhanced Basic Education Curriculum or popularly known as K to 12 Curriculum, the needs for the instructional materials doubled as the learners stay in the public schools for two (2) additional years. Moreover, 21st century learning yields outcome-based education with students who are very much comfortable in the use of internet and technology. With such idea it is reiterated that as teachers now called as facilitators and distributors of learning, the demand to practice effective facilitation techniques and skills in the proliferation of K to 12 curriculums are inevitable. They must provide instructional materials that suit and satisfy the learner’s hunger for wisdom with rightful consideration of their technological strengths.

Senior High School curriculum is broken down into tracks and strands. Tracks are categories of specialization where a learner may
choose. On the other hand, strands are the expertise under that program. At present there are four (4) tracks (Academic, Technical Vocational Livelihood, Arts and Design and Sports). Furthermore, Technical Vocational Livelihood is one of the tracks for Senior High School that offers four strands: Agri-Fishery Arts, Home Economics, Industrial Arts, and Information and Communications Technology (ICT). Moreover, Information Communication and Technology or ICT strand is designed to provide learners with the technical skills and knowledge in using tools and equipment that allow people to interact in the digital world. Under this strand, students will learn relevant skills and knowledge in various disciplines such as illustration, web designing, computer programming, telecom installation and medical transcription, technical drafting, java programming and animation.

Based on the Department of Education’s Curriculum Guide (CG), TVL ICT-Animation NC II is a specialization course which leads to an Animation National Certificate Level II (NC II). It covers Personal Entrepreneurial Competencies (PECs); Environment and Market; five (5) Common Competencies such as Use of Hand Tools and Equipment, Maintain Hand Tools, Equipment and Paraphernalia, Perform Mensuration and Calculation, Prepare and Interpret Technical Drawing, Practice Occupational Health and Safety; and one (1) Core Competency that a student ought to possess to produce clean-up and in-between drawings.

Unfortunately, at present there is no available learning material or module issued by the Department of Education to help the teachers in teaching Animation lessons. They are only guided by the Curriculum Guide (CG) and most of them only got their references from the internet. That is why; the researchers felt the need for the development of an instructional module in Animation.

**CONCEPTUAL FRAMEWORK OF THE STUDY**

In this study, the researchers utilized the Input-Process-Output (IPO) Model. In this, a process is viewed as a series of boxes (processing elements) connected by inputs and outputs. Information or material objects flow through a series of task or activities based on a set of rules or description points. Flow charts and process diagrams are often used to represent the process. What goes in is the input; what causes the change is the process; what comes out is the output. The IPO model will provide the general structure and guide for the direction of study. The research paradigm as shown in Figure 1 adopted the Input-Process-Output (IPO) model.
In the Planning Phase, the researchers gathered information from relevant topics in the DepEd’s Curriculum Guide and TESDA’s Training Regulation. In the Development and Evaluation Phase, the researcher identified the inclusions in the module such as objectives, content, and assessment. This phase also includes drafting and production of the module and validation by the experts and teacher as the respondents. Finally, the instructional module in Animation is produced.

**STATEMENT OF THE PROBLEM**

This study intends to develop a module for the teaching of animation to senior high school students.

Specifically, the research aims to answer the following questions:

1. How may the development of the module be described in terms of its?
   1.1 Analysis
   1.2 Design and
   1.3 Development

2. How may the experts and teacher-respondents validate and evaluate the developed instructional module described in terms of?
   2.1 Objectives
   2.2 Content
   2.3 Format and Language
   2.4 Presentation
   2.5 Usefulness

3. Is there a significant difference in the evaluation of experts and teacher-respondents?
METHODOLOGY

This research has been defined as the systematic study of designing, developing, and evaluating instructional programs, processes, and products that must meet criteria of internal consistency and effectiveness. The design and development research, first proposed by Brown and Collins in the 1990s, a type of inquiry unique to the instructional design and technology field dedicated to the creation of new knowledge and the validation of existing practice. Currently one among the well-known methods in educational research to test theory and validate is its practicality. The method is also known as developmental research, design research, design-based research, formative research and design-cased and possesses conceptual underpinning and practical aspects of the ‘what’ and ‘how’ of ‘doing’. This paper describes the design and development of an Instructional Module for Animation to be used by Senior High School students under the TVL track taking the ICT-Animation NC II. The effort in generating this learning prototype attempts to design, develop and integrate Animation core competency in a learning module. It is meant to provide a learning experience for learners who wish to be competent in Animation. Respondents’ feedbacks and responses are then gathered and analyzed as the formative evaluation for the design and development principles.

RESPONDENTS OF THE STUDY

The respondents of the research were the Animation assessors and Animation teachers in Public Secondary Schools in Nueva Ecija that are offering Animation courses. The said respondents validated and evaluated the acceptability of the module. There were two (2) Assessors commissioned by TESDA, ten (10) Public school ICT teachers and one (1) Private TVI teacher respondents of the study.

SAMPLE/ SAMPLING TECHNIQUE

The researchers utilized Expert purposive sampling. A purposive sample is a non-probability sample that is selected based on characteristics of a population and the objective of the study. Expert sampling is a form of purposive sampling used when research requires one to capture knowledge rooted in a particular form of expertise. It is common to use this form of purposive sampling technique in the early stages of a research process, when the researcher is seeking to become better informed about the topic at hand before embarking on a study. Doing this kind of early-stage expert-based research can shape research questions and research design in important ways? This type of sampling can be very useful in situations
when you need to reach a targeted sample quickly, and where sampling for proportionality is not the main concern.

**INSTRUMENTS**

In gathering data relevant in this study, the researchers employed respondents’ evaluation questionnaire-checklist of the Instructional Module. In order to have a basis for determining the acceptability of the developed instructional module, a five-point Likert checklist was adapted from the theses of Marin (2003) and Marasigan (2003). Some modifications on the item format were made to better align them with the purpose of the study. With this in mind, the researchers administered the questionnaire-checklist to the respondents to test the acceptability of the module to find out whether such instructional material could help in the learning process and could be used by the students.

The first part of the instrument established the credibility of the respondents. Name, Field of specialization and years served on that field were the bases in establishing respondents’ profile. The second part entails the validation of the module. The tool aims to validate relevant sections of the module. The first set of questions determined the validity of the modules’ objectives through answering if the objectives are clearly stated in outcomes-based form, are well-planned, formulated, organized. Specific, measurable, and attainable, relevant to the topics of each lesson of the modules and take into account the needs of the students.

<table>
<thead>
<tr>
<th>OBJECTIVES OF THE MODULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The objectives are clearly stated in outcomes-based form.</td>
</tr>
<tr>
<td>2. The objectives are well-planned, formulated, and organized.</td>
</tr>
<tr>
<td>3. The objectives stated are specific, measurable, and attainable.</td>
</tr>
<tr>
<td>4. The objectives are relevant to the topics of each lesson of the modules.</td>
</tr>
<tr>
<td>5. The objectives take into account the needs of the students.</td>
</tr>
</tbody>
</table>

The second part is the validation of the contents of the module, the respondent had identified the validity of the following variables; relevance, simplicity, completeness, suitability and equality.

<table>
<thead>
<tr>
<th>CONTENTS OF THE MODULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The content of each lesson is directly relevant to the defined objectives.</td>
</tr>
<tr>
<td>2. The content of each lesson is simple and easy to understand.</td>
</tr>
<tr>
<td>3. The topics of each lesson are fully discussed.</td>
</tr>
<tr>
<td>4. The topics are supported by illustrative examples, and the practice tasks are suited to the level of the students.</td>
</tr>
<tr>
<td>5. Each topic is given equal emphasis in the lesson.</td>
</tr>
</tbody>
</table>

The third part tackles about the module’s format. The tool seeks to evaluate the content’s organization, easy to understand, with clarity, and accuracy.
The fourth part is an evaluation of the modules’ presentation. Through their answers from questions relevant to the logic, originality, clarity, and attractiveness of the module were taken.

The last part of the questionnaire is the usefulness of the module. It evaluated the modules capability to motivate the users, promote mastery efficiency, and skills development.

**PROCEDURE OF THE STUDY**

The study underwent four (4) phases: the planning, designing/developing, validation and evaluation phases; Figure2 shows the planning, designing/developing, validation and evaluation phases of the study.

The planning phase of the study started when the researchers examined books and related materials in producing Cleaned-Up and In-Between Drawings, which are the core competencies of Animation. The researchers also referred to and checked the Curriculum Guide and Training Regulations prescribed by the Department of Education and Technical Education and Skills Development Authority respectively. In this phase, target learners are also identified.

The designing/developing phase of the study, after determining the target learners and the topics to be developed, the researchers structured the module. In the process of developing the module, outlined procedures were determined. Basically, each lesson of the module had the following components: Information Sheet, Self-Check and Task Sheet.
The validation phase of the study, in order to gather evidence to support the adequacy of objectives, content, format and language, presentation, and usefulness of the developed instructional module to its intended users, respondents’ judgments were sought by the researchers. To do this, the first draft of the instructional module was presented by the researchers to an expert. Then, the researchers revised the said module based on the comments and suggestions of the expert who had been requested to read and evaluate the module. Afterwards, the researchers sent the soft copy of the revised instructional module together with the respondents’ evaluation questionnaire-checklist to the email address of the respondents. They examined the module based on five indicators which include: (1) objectives; (2) content; (3) format and language; (4) presentation; and (5) usefulness of the instructional module.

The evaluation phase of the study started after the respondents evaluate the developed module and answering the items on the questionnaire-checklist, the respondents sent them to the researcher’s email address and were printed.
STATISTICAL TREATMENT OF DATA

The researchers utilized descriptive statistics such as frequency and weighted mean, in analyzing the evaluation ratings of the respondents. Frequency is a mathematical function showing the number of instances in which a variable takes each of its possible values. A weighted mean is a kind of average. Instead of each data point contributing equally to the final mean, some data points contribute more “weight” than others. Weighted means are very common in statistics, especially when studying populations.

Textual interpretation was also used in reporting the supporting qualitative data. The rubric shown on Table 1 was used.

RESULTS AND DISCUSSIONS

The results of the study are briefly described as follows:

1. **How may the development of the module be described in terms of its?**

   The developed Instructional Module in Animation went through three (3) phases of development such as analysis, design and development phases.

   **1.1 Analysis**

   During this phase, the researchers examined books and related materials to Animation. Furthermore, they also referred to and checked the desired learning competency, scope and sequence prescribed by the Department of Education’s curriculum guide and Technical Education Skills Development Authority’s training regulation. The researcher identified the core competency to be developed and the scope of the topics and assessment methods that were included in the module. Moreover, they also identified the prescribed duration to which the module should be taught by the teacher and accomplished by the students. Based on the curriculum guide and training regulations of Animation NC II, the module should cover duration of one hundred twenty (120) hours.
1.2 DESIGN AND

In this phase, the design of each learning content in the module consists of (1) Information Sheet which gives the students the learning objectives and content of the learning module, (2) Self-Check which are written works for the students to apply and review concepts or procedures on each lesson and (3) Task Sheets, which consist of performance tasks for the students to apply the learning they acquired on some lessons.

1.3 DEVELOPMENT

In this phase, the development of the instructional module was based on its intended design and applied it to the following learning contents of Produce cleaned-up and in-betweened drawings, such as:

1. Clean-up requirements for drawing (cartoon-simple)
2. Types of model sheets
3. Key drawings and animation breakdowns
4. Animation workflow
5. Drawing animals and props
6. Principles and concept of animation
7. Materials and equipment for animation
8. Production of clean-up drawings (cartoon –simple)
9. Animator keys
10. Familiarization with Line-Test hardware and software
11. Clean-up procedures
12. Procedures and policies in records keeping
13. Application of software animation
14. Concept of line quality
15. Procedures for cartoon drawing construction
16. Drawing proportions
17. Requirements for in-between (cartoon-regular)
18. Model sheets (cartoon-regular)
19. Cleaned-up key drawings for (cartoon - regular)
20. Animation breakdowns and x sheets
21. Materials and equipment (cartoon –regular)
22. Concept of in-betweening
23. Procedures for character posing
24. Techniques for refining line quality
25. Concepts of character design
26. Do’s and don’ts of in-betweening
2. How may the experts and teacher-respondents validate and evaluate the developed instructional module described in terms of?

There were two (2) sets of respondents who validate and at the same time evaluate regarding to the acceptability of develop Instructional Module in Animation in terms of its objectives, content, format and language, presentation and usefulness: Experts and teachers.

2.1 Objectives

The objectives of the developed Instructional Module in Animation were validated and evaluated by the experts and teachers respondents. Table 2 shows the overall rating of the module in term of objectives.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Teachers</th>
<th>Experts</th>
<th>Weighted Mean</th>
<th>Verbal Description</th>
<th>Qualitative Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The objectives are clearly stated in outcomes-based form.</td>
<td>4.73</td>
<td>4.50</td>
<td>4.61</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>2. The objectives are well-planned, formulated, and organized.</td>
<td>4.45</td>
<td>4.50</td>
<td>4.48</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>3. The objectives stated are specific, measurable, and attainable.</td>
<td>4.55</td>
<td>4.50</td>
<td>4.52</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>4. The objectives are relevant to the topics of each lesson of the modules.</td>
<td>4.64</td>
<td>5.00</td>
<td>4.82</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>5. The objectives take into account the needs of the students.</td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>Overall Weighted Mean</td>
<td>4.56</td>
<td>4.70</td>
<td>4.63</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
</tbody>
</table>

Both the teacher and expert respondents strongly agreed that the objectives were clearly stated in outcomes-based form (4.61), well-planned, formulated and organized (4.48), specific, measurable and attainable (4.52), relevant (4.82), and takes into account the needs of the students (4.63). Overall, the respondents strongly agreed that the objectives of the module (4.63) were highly satisfactory.

2.2 Content

The contents of the developed Instructional Module in Animation were validated and evaluated by the experts and teachers respondents. Table 3 shows the overall rating of the module in term of content.
The respondents strongly agreed that the content is relevant to the objective (4.82), simple and understandable (4.73), comprehensive (4.77), has illustrative examples and tasks suited to level of students (4.61), and topics were given equal emphasis (4.57). Overall, the respondents strongly agreed that the content of the module (4.70) were highly satisfactory.

### 2.3 Format and Language

The format and language of the developed Instructional Module in Animation were validated and evaluated by the experts and teachers respondents. Table 4 shows the overall rating of the module in term of format and language.

### Table 4. Module Validation based on Format and Language

<table>
<thead>
<tr>
<th>Format and Language</th>
<th>Teachers</th>
<th>Experts</th>
<th>Weighted Mean</th>
<th>Verbal Description</th>
<th>Qualitative Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The format/layout is well-organized, which makes the lessons more interesting.</td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>2. The language used is easy to understand.</td>
<td>4.55</td>
<td>5.00</td>
<td>4.77</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>3. The language used is clear, concise, and motivating.</td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>4. The illustration used are well-defined</td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>5. The instructions in the instructional modules are concise and easy to follow.</td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>Overall Weighted Mean</td>
<td>4.47</td>
<td>5.00</td>
<td>4.74</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
</tbody>
</table>

The respondents strongly agreed that the format and language are organized (4.73), understandable (4.77), clear, concise and motivating (4.73), illustration are well defined (4.73) concise and easy to follow (4.57). Overall, the respondents strongly agreed that the format and language of the module (4.74) were highly satisfactory.
2.4 Presentation

The presentation of the developed Instructional Module in Animation were validated and evaluated by the experts and teachers respondents. Table 5 shows the overall rating of the module in term of presentation.

<table>
<thead>
<tr>
<th>1. The topics are presented in a logical and sequential order.</th>
<th>Teachers</th>
<th>Experts</th>
<th>Weighted Mean</th>
<th>Verbal Description</th>
<th>Qualitative Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.64</td>
<td>5.00</td>
<td>4.82</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>2. The lessons of the modules are presented in a unique and original form.</td>
<td>4.45</td>
<td>4.50</td>
<td>4.48</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>3. The learning activities are presented clearly.</td>
<td>4.55</td>
<td>5.00</td>
<td>4.77</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>4. The presentation of each lesson is attractive and interesting to the students.</td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>5. Adequate examples are given to each topic.</td>
<td>4.45</td>
<td>5.00</td>
<td>4.75</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
</tbody>
</table>

Overall Weighted Mean: 4.51 Teachers, 4.90 Experts, 4.70 Overall

The respondents strongly agreed that the presentation is logical (4.82), unique and original in form (4.48), activities are clearly presented, (4.77), attractive and interesting (4.73) has adequate examples (4.73). Overall, the respondents strongly agreed that the presentation of the module (4.70) was highly satisfactory.

2.5 Usefulness

The usefulness of the developed Instructional Module in Animation were validated and evaluated by the experts and teachers respondents. Table 6 shows the overall rating of the module in term of usefulness.

<table>
<thead>
<tr>
<th>1. The instructional module will motivate the students to study Animation.</th>
<th>Teachers</th>
<th>Experts</th>
<th>Weighted Mean</th>
<th>Verbal Description</th>
<th>Qualitative Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>2. The instructional module will help the students master the topics.</td>
<td>4.55</td>
<td>5.00</td>
<td>4.77</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>3. The instructional module will allow the students to use their time more efficiently.</td>
<td>4.55</td>
<td>5.00</td>
<td>4.77</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>4. The instructional module will develop the animation skills of students.</td>
<td>4.73</td>
<td>5.00</td>
<td>4.86</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>5. The instructional module will serve as a supplementary material that can cater to the needs of the students.</td>
<td>4.91</td>
<td>5.00</td>
<td>4.95</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
</tbody>
</table>

Overall Weighted Mean: 4.64 Teachers, 5.00 Experts, 4.82 Overall
The respondents strongly agreed that the module is motivational (4.73), help students to master animation (4.77), help students manage their time efficiently (4.77), will help students develop animation skills (4.86) will serve as a supplementary material that cater to students need (4.95). Overall, the respondents strongly agreed that the items about usefulness of the module (4.82) were highly satisfactory.

3. Is there a significant difference in the evaluation of experts and teacher-respondents?

The expert and teacher respondents evaluate the developed Instructional Module in Animation. Table 7 shows the overall acceptability of the module.

<table>
<thead>
<tr>
<th>Over-all Acceptability</th>
<th>Teachers</th>
<th>Experts</th>
<th>Weighted Mean</th>
<th>Verbal Description</th>
<th>Qualitative Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td>4.45</td>
<td>5.00</td>
<td>4.73</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>Content</td>
<td>4.60</td>
<td>4.80</td>
<td>4.70</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>Format and Language</td>
<td>4.47</td>
<td>5.00</td>
<td>4.74</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>Presentation</td>
<td>4.51</td>
<td>4.90</td>
<td>4.70</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>Usefulness</td>
<td>4.64</td>
<td>5.00</td>
<td>4.82</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
<tr>
<td>Overall Weighted Mean</td>
<td>4.53</td>
<td>4.94</td>
<td>4.74</td>
<td>Strongly Agree</td>
<td>Highly Satisfactory</td>
</tr>
</tbody>
</table>

The respondents strongly agreed that objectives (4.73), content (4.70), format and language (4.74), presentation (4.70) and usefulness (4.82) were highly satisfactory with a total weighted mean of 4.74.

Table 8 shows the test of difference between the evaluation of teacher and expert respondents.

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Teachers</th>
<th>Experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.56</td>
<td>4.88</td>
</tr>
<tr>
<td>Variance</td>
<td>0.0147</td>
<td>0.0475</td>
</tr>
<tr>
<td>t Stat</td>
<td>-6.49**</td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.0000</td>
<td></td>
</tr>
</tbody>
</table>

Data shows P value of 0.0000 which indicated a significant difference in the evaluation of the teachers and experts. The experts have higher evaluation of the module than the teachers.
CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the study, the following conclusions are drawn:
1. The module developed has its integral basis.
2. Most of the respondents were teachers from Public High School.
3. The objectives of the module were highly satisfactory.
4. The contents of the module were highly satisfactory.
5. The format and language of the module were highly satisfactory.
6. The presentation of topics in the module was highly satisfactory.
7. The usefulness of the module was highly satisfactory.
8. The module’s acceptability was highly satisfactory.
9. There is a significant difference between the evaluation of teacher and expert respondents.

Based on the results of the study, and the conclusions drawn, these recommendations are offered:

1. Periodically check updates from the curriculum guide of Department of Education and Training Regulations of TESDA to stay relevant.
2. To look for more expert-respondents that came from the animation industry and adds more teacher experts from the private education sector.
3. Conduct other research methods and device other validation tools to further validate the module.
4. Supplement the module by adding content that tackles other competencies in Animation.
5. The developed module can be used by the senior high school students in Nueva Ecija.

REFERENCES

Flores, Allan C. “Classroom: The Learning Center of the Child”. Philippine Journal