



## **LOCALIZED INSTRUCTIONAL TOOL IN SLIPPER MAKING: A MODULE**

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### **ABSTRACT**

*The purpose of this study is to develop and validate the slipper making module as a localized instructional tool in the subject area of Technology and Livelihood Education. This study seeks to determine the effects of the developed slipper making module on the students' interest; and to the students' performance assessment. Weighted mean, standard deviation, and analysis of variance were the statistical tools used in this study.*

*The respondents of the study were the ten (10) TLE teachers and twenty-five (25) Grade 8 students under online distance learning from Liliw National High School, Liliw, Laguna including the five (5) Head Teachers in TLE from the Third District of Laguna. The distribution of questionnaire and collection of data to the respondents were gathered through the use of google form. The experimental method was used in this study.*

*Based on the findings, the following conclusions were drawn; the developed localized instructional tool in slipper making has a significant effect on students' interest in terms of situational interest, individual interest, and well-developed individual interest. Thus, the null hypothesis is rejected. The developed localized instructional tool in slipper making has a significant effect on the students' performance assessment in terms of designs and styles and general appearance; and there is no significant effect in terms of craftsmanship and time management. As a result, the null hypothesis is partially accepted.*

*Therefore, it is recommended that the developed slipper making module may be used particularly by the TLE teachers as supplementary learning materials in teaching Handicraft Production. TLE teachers are encouraged to attend seminars, workshops and training programs to acquire new knowledge and updated background information on developing instructional learning; and may develop additional instructional learning materials based on the needs and interests of the students assimilated into other courses offered in Technology and Livelihood Education. The school officials may promote the localized instructional tool in slipper making to the external stakeholders as active participants who are involved in the process of development and implementation of the curriculum. Future researchers can further validate the slipper making module to measure and assess the effectiveness of the developed localized instructional tool.*

### **I. INTRODUCTION**

The Philippine Geomatics Symposium - PhilGEOS, (2019), discovered that the Philippines is blessed with wealthy natural resources dispersed throughout its 7,641 islands. After a while, Filipinos acquired knowledge and skills in managing natural resources as a means of livelihood. This management of resources has proliferated and is still continuously progressing as an outgrowth of the richness of our land. Handicrafts is among the venue of resource cultivation in our land. Handicraft plays a vital role in promoting art, culture, tradition, and ethnicity through the use of indigenous materials of a particular region.

According to Dash (2011), handicrafts are the unique symbol of a particular community or culture through indigenous craftsmanship and material. Today, many Filipinos are taking part in handicraft production wherein values of perseverance and industry are developed vis-à-vis the utilization of both natural and human resources. The trend has prospered from the macro-community towards the municipalities.



Liliw, one of the highland towns in the province of Laguna. Its residents have long been utilizing its natural resources and manpower in gaining both economic and tourist advantage. Aside from agriculture and services, it has delved on entering and enriching its footwear businesses as a venue for economic growth and support to its people. As decades pass, the footwear industry in this municipality has progressed and it is now known as the “Tsinelas Capital of the Philippines”. It is known to provide affordable and high-quality handmade slippers including other footwear products like leather shoes and sandals. These are localized products that are proudly made by creative and skilled craftsmen of Liliw, Laguna.

In the K to 12 curricula, Technology and Livelihood Education integrate the mastery of knowledge and information, entrepreneurial concepts, work values, and skills for lifelong learning. DepEd adheres to the standards and principles of the K to 12 Basic Education Program (BEP) that empowers and allows schools, divisions, and regions to localize, indigenize and enhance the same based on their various instructional materials and social contexts.

As stated by Undersecretary Dina Ocampo (2011), “For you (teachers) to localize and contextualize the curriculum, you have to think of where you are so that you can make the curriculum relevant to you.” This means that teachers must utilize different materials and strategies to make the lesson flexible, relevant, meaningful, and adaptive to students’ level of understanding and instructional need. The localization of instructional module in handicraft production helps the students to link new content from their own local experiences. Also, it enlightens the students to value the importance of craftsmanship and patronizing footwear industry in their community.

In our current situation, the global Covid—19 pandemic outbreak brought a worldwide disruption in educational system. The sudden paradigm shift in education led to the innovation and implementation of alternative learning strategies as an urgent response to deliver and ensure quality education to every Filipino learners. Since Department of Education believes that education must continue regardless of the suspension of face-to-face learning, it proposed and adopted distance learning modalities as a new method for a more flexible learning opportunity. In Liliw National High School, modular distance learning (MDL) and online distance learning (ODL) modalities are being used for this present school year. Self-Learning Modules (SLMs) were developed for individualized instruction in open learning process. Learners who opted for modular distance learning received printed copies of learning materials while digitalized format were posted in google classroom and other learning portals for online distance learning. The learners may download the given instructional materials, attend virtual classes, and submit assignments through online.

When educational institutions adapt and embrace the new normal, the situations are uncertain. There are challenges and difficulties in providing the necessity for the learners and teachers in distance learning. One of the common problems is the insufficient self-learning modules particularly in Technology and Livelihood Education.

Due to this reason, the researcher came out with a proposed localized instructional tool in teaching handicraft production focuses on slipper-making aligned with the exploratory courses in Technology and Livelihood Education offered for Grade 7 and Grade 8 students. It emphasizes basic learning competencies intended to develop knowledge, values, skills, and attitudes as preparation for specialized courses.

## II. RELATED LITERATURE

Ambayon (2020), defined learning modules as supplementary instructional materials that can be integrated with the teaching-learning process suitable for distance learning. It contains valuable lessons, different enrichment activities, and measurable assessments aligned with the course objectives available in printed or in digital format. The utilization of learning modules allows the learners to go through the material at their own pace.

Torre Franca (2017), defined learning module objectives as precise competencies that the students should acquire for each lesson. In this stage, the researcher set a clearly stated objectives that are relevant to the topics of each lesson of the modules to figure out and consider the needs of the students in the specific course. Learning objectives serve as a guide to determine and select appropriate lesson content, learning activities, and assessment to achieve a more comprehensive learning progress. Module objectives can be viewed as the backbone of instruction upon to completion of a course.

Sequeira (2012) stated that instructional modules are designed where the learner is free to choose what to learn, how to learn, when to learn and where to learn. It is designed with a segment of instructions and collections of information that students will obtain, explore, and absorb as they proceed in a course. Modules typically include



learning objectives, an introduction, instructional content, directions, learning activities, and test questions with feedback answers.

As stated by Abdulla (2018), assessment is embedded in the learning process that provides reliable information in checking the progress and achievement of the learners. It highlights the opportunities to develop students' potential to evaluate themselves, to make perceptions about their own performance, and to improve upon it. When the set of assessments is aligned with the instructional objectives and content standards, teachers can provide students with information about which specific concepts and skills they need to learn. Furthermore, teachers can use the result of the assessment to help the students to develop proficiency with the learning goals.

### III. STATEMENT OF THE PROBLEM

The study aimed to develop and validate localized instructional module in Technology and Livelihood Education under Handicraft Production. The study evaluated the "Localized Instructional Tool in Slipper Making as Module". Specifically, it answered the following questions:

1. What is the extent of appropriateness of the developed Slipper Making Module in terms of the following components of the module:
  - 1.1 objectives;
  - 1.2 contents;
  - 1.3 activities; and
  - 1.4 assessments?
2. What is the level of acceptability of the module as rated by the group of evaluators in terms of:
  - 2.1 adaptability;
  - 2.2 aesthetic value;
  - 2.3 appropriateness;
  - 2.4 content validity; and
  - 2.5 usability?
3. What is the level of students' interest in terms of:
  - 3.1 situational interest;
  - 3.2 individual interest; and
  - 3.3 well-developed individual interest?
4. What is the level of comparison between descriptive measures of assessments in terms of:
  - 4.1 designs and styles;
  - 4.2 craftsmanship;
  - 4.3 general appearance; and
  - 4.4 time management?
5. Do developed localized Slipper Making Module has significant effect on students' interest?
6. Do developed localized Slipper Making Module has significant effect on students' performance assessment?

### III. METHODOLOGY

The study used the experimental method of research. The respondents of the study were the ten (10) TLE teachers and twenty-five (25) Grade 8 students under online distance learning from Liliw National High School, Liliw, Laguna including the five (5) Head Teachers in TLE from the Third District of Laguna. The researcher used purposive sampling technique to determine the sample size selection of the respondents for the study.

The formulated questionnaire by the researcher was utilized in this study to meet the researchers' needs and provide necessary data to answer the research problems. The researcher distributed the self-made questionnaires to the respondents with the use of google forms that made the distribution and collection of data much easier compared to the traditional one. Then the data obtained were tallied, tabulated, analyzed and interpreted. Suggestions and comments for improvement were integrated in the final instruments. Weighted mean, standard deviation, and analysis of variance were the statistical tools used in this study.



#### IV. RESULT AND DISCUSSION

The presentation of the findings followed the sequence in relation to the statement of the problems namely 1) extent of appropriateness of the developed Slipper Making module in terms of the following components such as objectives, contents, activities, and assessment 2) acceptability level of the module with respect to adaptability, aesthetic value, appropriateness, content validity, and usability 3) students' level of interest in terms of situational interest, individual interest, and well-developed individual interest 4) level of comparison between descriptive measures of assessments in terms of designs and styles, craftsmanship, general appearance, and time management 5) a significant effect localized Slipper Making module on the students' interest 6) a significant effect localized Slipper Making module on the results of performance assessment of the respondents.

#### Extent of Appropriateness of the Developed Slipper Making Module

In this study, the Developed Slipper Making Module was described in terms of objectives, content, activities and assessment. Presented in the table below was the extent of appropriateness of the Developed Slipper Making Module determined by the weighted mean and standard deviation.

**Table 1. Extent of Appropriateness of the Developed Slipper Making Module in terms of Objectives**

The objectives are...	Mean	SD	V.I.
consistent and relevant to the course goal.	4.93	0.25	Strongly Agree
precisely describe the expected learning outcomes.	4.93	0.25	Strongly Agree
specific and well-define.	4.93	0.25	Strongly Agree
consist of three learning areas which are knowledge, skills, and attitude	4.93	0.25	Strongly Agree
are stated in student-friendly language.	4.87	0.34	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.92: 0.27</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
4	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

The above table reveals that the extent of appropriateness of the Developed Slipper Making Module in terms of objectives was *very high* supported by the grand (M=4.92, SD=0.27). This means that the objectives of the module were presented clearly and understood by the students.

It can be seen that the respondents *strongly agree* that *the objectives were consistent and relevant to the course goal, precisely describe the expected learning outcomes, specific and well-define and were consist of three learning areas which are knowledge, skills, and attitude* which all gained the highest (M=4.93, SD=0.25). This implied that the objectives of the module would lead to acquisition of the course goal. On the other hand, the respondents also *strongly agree* that *objectives are stated in student-friendly language* with the lowest (M=4.87, SD=0.34). This meant that students were able to comprehend the objectives as well as the content of the module in general.



It was supported by Torre Franca (2017), that learning module objectives as precise competencies that the students should acquire for each lesson. In this stage, the researcher set a clearly stated objectives that are relevant to the topics of each lesson of the modules to figure out and consider the needs of the students in the specific course. Learning objectives serve as a guide to determine and select appropriate lesson content, learning activities, and assessment to achieve a more comprehensive learning progress. Module objectives can be viewed as the backbone of instruction upon to completion of a course.

**Table 2. Extent of Appropriateness of the Developed Slipper Making Module in terms of Content**

The objectives are...	Mean	SD	V.I.
designed to intensify the knowledge and entrepreneurial skills of the students.	4.93	0.25	Strongly Agree
relevant to the student's level of understanding.	4.87	0.34	Strongly Agree
lead to incorporate local information and materials from the student's local condition.	5.00	0.00	Strongly Agree
suitable to achieve the essential learning competencies in handicraft production.	4.87	0.50	Strongly Agree
intended to emphasize the richness and diversity of the student's local culture.	5.00	0.00	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.93: 0.30</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 2 reveals that the extent of appropriateness of the Developed Slipper Making Module in terms of content was *very high* supported by the grand (M=4.93, SD=0.30). This means that the content of the module were relevant to the needs of the students that provide meaningful learning opportunities.

As reflected in the table above, the respondents *strongly agree* that *the contents were led to incorporate local information and materials from the student's local condition and intended to emphasize the richness and diversity of the student's local culture* with the highest (M=5.00, SD=0.00). This implied that the content of the module would ensure the success of students in achieving the essential learning competencies. On the other hand, the respondents also *strongly agree* that *contents are relevant to the student's level of understanding and suitable to achieve the essential learning competencies in handicraft production* with the lowest (M=4.87, SD=0.50). This meant that students were able to appreciate the content of the localized learning module based on their own degree of understanding.

According to Vergara (2017), the content of instructional materials is composed of lessons directly relevant to the defined objectives. The review and selection of content is the process of highlighting the key concepts suited to the students' level of understanding. Thus, lesson sequencing is the teacher's ability to anticipate a continuum of learning to meet the needs of the students according to the grade level standards. Proper sequencing of content ensures the consistency and effectiveness of an instructional module.

**Table 3. Extent of Appropriateness of the Developed Slipper Making Module in terms of Activities**

The activities in the module...	Mean	SD	V.I.
encourage authentic and collaborative learning experiences.	4.93	0.25	Strongly Agree
strengthen the learning competencies of 21 <sup>st</sup> century learners.	4.80	0.40	Strongly Agree
give the students the opportunities to discover their full potential.	4.93	0.25	Strongly Agree
cater the needs and interests of the students in the set learning competencies.	5.00	0.00	Strongly Agree
develop the student's sense of responsibility for their own learning.	4.93	0.26	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.92: 0.27</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 3 reveals that the extent of appropriateness of the Developed Slipper Making Module in terms of activities was *very high* supported by the grand ( $M=4.92$ ,  $SD=0.27$ ). This means that the activities of the module were applicable to engage students in a collaborative learning.

As evidenced by the results of evaluation, the respondents *strongly agree* that *the activities cater the needs and interests of the students in the set learning competencies* with the highest ( $M=5.00$ ,  $SD=0.00$ ). This implied that the activities of the module allow students for independent learning. On the other hand, the respondents also *strongly agree* that *activities strengthen the learning competencies of 21<sup>st</sup> century learners* with the lowest ( $M=4.80$ ,  $SD=0.40$ ). This meant that students were able to engage in learning activities that are relevant to real-life situations to acquire enjoyable and meaningful learning experience.

The process of organizing learning activities in a module must be based on curriculum aims bringing together the needs, ideas, interests, and characteristics of the learners. The learning process requires engaging learning activities that are valuable for the learners in developing knowledge, empowering skills, and integrating values. Every learning activity in a module should be purposeful, practical, and attainable. Activities which involve learner interaction with content can be meaningful to ensure an active, authentic, constructive, and collaborative learning experience (Morante, 2018).

**Table 4. Extent of Appropriateness of the Developed Slipper Making Module in terms of Assessment**

The assessment in the module...	Mean	SD	V.I.
provides a clear and specific instruction.	5.00	0.00	Strongly Agree
are applicable to achieve the learning objectives in the offered course.	4.93	0.25	Strongly Agree
value the importance of individual difference among students.	4.80	0.54	Strongly Agree
engage students with different learning styles.	4.87	0.50	Strongly



			Agree
are evident, accurate, and consistent in evaluating student performance.	4.93	0.25	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.91: 0.37</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 4 reveals that the extent of appropriateness of the Developed Slipper Making Module in terms of assessment was *very high* supported by the grand (M=4.91, SD=0.37). This means that the assessments of the module were appropriate in determining the progress of students’ performance and interest within the subject matter.

As seen in Table 4, the respondents *strongly agree* that *the assessment provides a clear and specific instruction* with the highest (M=5.00, SD=0.00). This implied that the assessment of the module caters the needs and interest of diverse learners. On the other hand, the respondents also *strongly agree* that *assessment value the importance of individual difference among students* with the lowest (M=4.80, SD=0.54). This meant that students were able to recognize thoroughly the process in accomplishing their performance assessment.

As stated by Abdulla (2018), assessment is embedded in the learning process that provides reliable information in checking the progress and achievement of the learners. It highlights the opportunities to develop students’ potential to evaluate themselves, to make perceptions about their own performance, and to improve upon it.

**Table 5. Level of Acceptability of the Developed Slipper Making Module in terms of Adaptability**

The module...	Mean	SD	V.I.
is versatile that can be modified across the curriculum.	4.87	0.44	Strongly Agree
provides a variety of opportunities for autonomous learning.	4.80	0.40	Strongly Agree
can be amended in order to fit other purposes.	4.87	0.34	Strongly Agree
caters diversity of learners.	4.87	0.34	Strongly Agree
comprises practical activities suitable for exploratory courses.	4.87	0.34	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.83: 0.38</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low



The above table reveals that the level of acceptability of the Developed Slipper Making Module in terms of adaptability was *very high* supported by the grand (M=4.83, SD=0.38). This means that the localized instructional tool is adaptable and can be revised in order to cater diversity of learners and to fit some other purposes.

It can be seen that the respondents *strongly agree* that *the adaptability were versatile that can be modified across the curriculum, can be amended in order to fit other purposes, caters diversity of learners, and comprises practical activities suitable for exploratory courses* which all gained the highest (M=4.87, SD=0.34). This implied that in terms of the adaptability of the module, it can be used for a variety of purposes and often cost-effective for increasing the students' level of understanding new academic concepts. On the other hand, the respondents also *strongly agree* that *adaptability provides a variety of opportunities for autonomous learning* with the lowest (M=4.80, SD=0.40). This meant that students were able to experience independent learning.

According to Ho, Chung and Lee (2020), adaptability in instructional material means modular guidelines cater to individual learning differences by allowing students to actively participate in determining what they need to learn. Their learning should be tailored to their capacity, motivation, and interest, not to the ability, motivation, or interest of other students. When the target, topics, and activities are all important, this is best encouraged.

**Table 6. Level of Acceptability of the Developed Slipper Making Module in terms of Aesthetic value**

The module...	Mean	SD	V.I.
contains captivating pictures appropriate to the topic.	4.87	0.34	Strongly Agree
uses satisfying value of font style, size, and colour that optimize readability and accessibility.	4.93	0.25	Strongly Agree
is generally attractive and appealing to the eyes of the readers.	4.87	0.34	Strongly Agree
incorporates illustrations and icons which contribute in structuring and organizing of new knowledge in a simple way.	4.93	0.25	Strongly Agree
is well-organized and properly laid out.	4.93	0.25	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.91: 0.29</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 6 reveals that the level of acceptability of the Developed Slipper Making Module in terms of aesthetic value was *very high* supported by the grand (M=4.91, SD=0.29). This means that the aesthetic values were evidently visualized in the overall appearance of the localized module.

As reflected in the table above, the respondents *strongly agree* that *the aesthetic value were uses satisfying value of font style, size, and colour that optimize readability and accessibility, incorporates illustrations and icons which contribute in structuring and organizing of new knowledge in a simple way, and well-organized and properly laid out* which all gained the highest (M=4.93, SD=0.25). This implied that the developed module presented different appealing features that made it more attractive to the users. On the other hand, the respondents also



*strongly agree* that *aesthetic value contains captivating pictures appropriate to the topic and generally attractive and appealing to the eyes of the readers* with the lowest ( $M=4.87$ ,  $SD=0.34$ ). This meant that students were able to connect easily to the subject matter and develop higher levels of visual literacy.

According to Reyna (2013), aesthetic values have a profound impact on how users grasp information and learn, determine reliability and usability and assign value for authentic learning experiences. The application of effective visual designs is essential to appreciate the elements and principles of design in creating and designing instructional learning materials. The elements of design are line, color, texture, shape, form, and space.

**Table 7. Level of Acceptability of the Developed Slipper Making Module in terms of Appropriateness**

The module...	Mean	SD	V.I.
Associates lessons which are culturally relevant in real-world context.	5.00	0.00	Strongly Agree
Provides interesting learning activities based on the target learning objectives and outcomes in each lesson.	4.93	0.25	Strongly Agree
Contains topics that are suitable for handicraft production.	4.93	0.25	Strongly Agree
Evaluates the level of knowledge, skills, and interest of the learners.	4.93	0.25	Strongly Agree
Presents information prior to the current local condition.	4.93	0.25	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.96: 0.22</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 7 reveals that the level of acceptability of the Developed Slipper Making Module in terms of appropriateness was *very high* supported by the grand ( $M=4.95$ ,  $SD=0.22$ ). This means that the developed module maintains the appropriateness and relatedness of the following components; objectives, content, activities, and assessment align with the curriculum content under handicraft production.

As evidenced by the results of evaluation, the respondents *strongly agree* that *the appropriateness were associates lessons which are culturally relevant in real-world context* with the highest ( $M=5.00$ ,  $SD=0.00$ ). This implied that the developed module introduces new topics that integrate local culture, which is undoubtedly appropriate to boost students' awareness and interest to be prepared in a diverse workplace. On the other hand, the respondents also *strongly agree* that *appropriateness provides interesting learning activities based on the target learning objectives and outcomes in each lesson, contains topics that are suitable for handicraft production, evaluates the level of knowledge, skills, and interest of the learners, and presents information prior to the current local condition* which all gained the lowest ( $M=4.87$ ,  $SD=0.34$ ). This meant that students were able to obtain and empower their learning competencies in handicraft production using the developed slipper-making module.

It has been supported by Funa (2019), that educators at all levels utilize a variety of instructional materials such as textbooks, presentations and handouts to enhance the quality of their lessons. The quality of those materials directly impacts the quality of teaching and improve students' knowledge, abilities, and skills, to monitor their assimilation of information, and to contribute to their overall development. Materials must be appropriate on the



subject matter and learners' level of understanding. It should be aligned with the curriculum standards and showcase current, valid, and reliable examples that makes learning more permanent.

**Table 8. Level of Acceptability of the Developed Slipper Making Module in terms of Content Validity**

The module...	Mean	SD	V.I.
contains valid pictures and illustrations.	4.93	0.25	Strongly Agree
provides facts congruent with the set objectives.	5.00	0.00	Strongly Agree
used appropriate words fitted to student's level of understanding.	4.93	0.25	Strongly Agree
includes a clear and simple presentation.	5.00	0.00	Strongly Agree
provides topics that highlight the importance of craftsmanship.	5.00	0.00	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.97: 0.16</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 8 reveals that the level of acceptability of the Developed Slipper Making Module in terms of content validity was *very high* supported by the grand (M=4.97, SD=0.16). This means that the content validity in the module was clearly presented according to the consistency of all components.

As seen in Table 8, the respondents *strongly agree* that *the content validity provides facts congruent with the set objectives, includes a clear and simple presentation, and provides topics that highlight the importance of craftsmanship* which all gained with the highest (M=5.00, SD=0.00). This implied that the content validity of the module would ensure that the students will acquire comprehensive pieces of information that are applicable in learning practical skills. On the other hand, the respondents also *strongly agree* that *content validity contains valid pictures and illustrations and used appropriate words fitted to student's level of understanding* with the lowest (M=4.93, SD=0.25). This meant that students were able to grasp information quickly using authentic images and student-friendly language.

According to Catuday (2019), validating instructional modules is crucial to ensure quality before widespread implementation. Content validity refers to the degree to which an assessment instrument is pertinent to the targeted composition it is designed to measure. This is the degree to which an instrument logically appears to measure an intended variable to the extent to which the instructional material being evaluated fulfills the purpose of its use. It also refers to the correctness and exactness of the information provided in the instructional tool being evaluated in terms of facts, concepts grammar, illustrations, format, and language. With the aim of better education, it is vital that instructional material undergo validation to ensure quality and effectiveness.

**Table 9. Level of Acceptability of the Developed Slipper Making Module in terms of Usability**

The module...	Mean	SD	V.I.
can be used as supplementary materials in teaching exploratory course for grade 8 learners.	5.00	0.00	Strongly Agree
illustrates real life learning experience.	4.93	0.25	Strongly Agree
consists of achievable learning objectives and measurable learning outcomes.	5.00	0.00	Strongly Agree
accommodates diverse learners.	4.93	0.25	Strongly Agree
provides the needs and interests of the learners.	4.93	0.25	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.96: 0.20</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 9 reveals that the level of acceptability of the Developed Slipper Making Module in terms of usability was *very high* supported by the grand (M=4.96, SD=0.20). This means that the developed module will be usable as learning materials in the teaching and learning process.

It can be seen that the respondents *strongly agree* that *the usability were can be used as supplementary materials in teaching exploratory course for grade 8 learners and consists of achievable learning objectives and measurable learning outcomes* which gained the highest (M=5.00, SD=0.00). This implied that the module will be recommended as additional instructional materials in teaching handicraft production in the future. On the other hand, the respondents also *strongly agree* that *usability illustrates real life learning experience, accommodates diverse learners, and provides the needs and interests of the learners* which all gained with the lowest (M=4.93, SD=0.25). This meant that students were able to achieve valuable learning experiences and obtain a wide range of knowledge, skills, and values that will serve as indispensable tools to become productive and successful in the future.

Learning materials must promote a culture of usability, ongoing growth, and learn in order to meet today's learning needs. It should make content easily available at any time, on any platform, for any reason—whether it's for performance support, compliance training, or continuing professional growth (Ramadhani, Syamsul, and Rofiqul, 2019).

**Table 10. Level of Students' Interest on the Developed Slipper Making Module in terms of Situational Interest**

Statement	Mean	SD	V.I.
1. I can easily understand the lessons in this module after the discussion of my TLE teacher.	4.52	0.57	Strongly Agree
2. I memorize some key concepts and ideas as mentioned by my teacher.	4.24	0.65	Strongly Agree
3. I follow the instructions carefully stated by my teacher in doing my learning activities and performance task.	4.48	0.50	Strongly Agree
4. I participate well during the discussion in our class.	4.32	0.55	Strongly Agree
5. I always finish my output based on the given time of submission of my teacher.	4.16	0.67	Agree
<b>Overall Mean: SD</b>	<b>4.34: 0.61</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Presented in Table 10 is the level of students' interest on the Developed Slipper Making Module in terms of *situational interest*. It showed that most of the respondents *strongly agree* with item number 1, *I found the content of this module personally meaningful*, (M=4.52, SD=0.57) which is the *highest level of students' interest in terms of situational interest*. On the other hand, the respondents *agree* with item number 5, *I am interested to the lesson because it is closely related in our local culture*, (M=4.16, SD=0.67), which is the *lowest level of students' interest in terms of situational interest*.

The analyzed data revealed the level of students' interest in terms of *situational interest*, (WM=4.34, SD=0.61), interpreted as *very high*.

Quinlan (2019), discussed that situational interest that emerges unexpectedly as a result of contextual factors such as task directions or an engaging text is known as situational interest. We go through the history of interest analysis and summarize some of the most recent empirical findings. Offering meaningful options to students, choosing well-organized texts that stimulate interest, and having the context information required to fully understand a subject are three ways to increase interest.

**Table 11. Level of Students' Interest on the Developed Slipper Making Module in terms of Individual Interest**

Statement	Mean	SD	V.I.
1. I found the content of this module personally meaningful.	4.56	0.57	Strongly Agree
2. I enjoy attending in my TLE class to learn new knowledge.	4.64	0.48	Strongly Agree
3. I actively participate in our discussion to share my own understanding to others.	4.44	0.57	Strongly Agree
4. I am always excited to do my outputs in this	4.48	0.64	Strongly



subject because it enhances my creativity skills.			Agree
5. I am interested to the lesson because it is closely related in our local culture.	4.56	0.64	Strongly Agree
<b>Overall Mean: SD</b>	<b>4.54: 0.59</b>		
<b>Verbal Interpretation</b>	<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Presented in Table 11 is the level of students’ interest on the Developed Slipper Making Module in terms of *individual interest*. It showed that most of the respondents *strongly agree* with item number 2, *I enjoy attending in my TLE class to learn new knowledge*, (M=4.64, SD=0.48), which is the *highest level of students’ interest in terms of individual interest*, also, item number 3, *I actively participate in our discussion to share my own understanding to others*, (M=4.44, SD=0.57), which is the *lowest level of students’ interest in terms of individual interest*.

The analyzed data revealed the level of students’ interest in terms of *individual interest*, (WM=4.54, SD=0.59), interpreted as *very high*.

According to the study of Ito, et. Al (2018), a student does not want to cultivate a strong interest in a topic in which he or she previously had no awareness or perceived value. A well-developed interest is not the same as a collection of beliefs about utility or meaning. In reality, a student with a strong interest in mathematics may or may not realize that he or she has started to think and query in ways that are close to those of a mathematician.

**Table 12. Level of Students’ Interest on the Developed Slipper Making Module in terms of Well-developed Individual Interest**

Statement	Mean	SD	V.I.
1. I am eager to learn more lessons in this subject because I found it profitable and valuable.	3.96	0.34	Agree
2. I am always enthusiastic to discover and explore my knowledge and skills.	3.88	0.65	Agree
3. I am willing to develop my skills in doing authentic performance task in this course.	4.00	0.63	Agree
4. I feel confident and comfortable during class discussion.	3.76	0.59	Agree
5. I intend to plan ahead and manage my time well in this subject when it comes to project making in order to create and produce outstanding output.	3.80	0.40	Agree
<b>Overall Mean: SD</b>	<b>3.88: 0.55</b>		
<b>Verbal Interpretation</b>	<b>High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low



1            1.0 – 1.79            Strongly Disagree            Very Low

Presented in Table 12 is the level of students’ interest on the Developed Slipper Making Module in terms of *well-developed individual interest*. It showed that most of the respondents *agree* with item number 3, *I am willing to develop my skills in doing authentic performance task in this course*, (M=4.00, SD=0.63), which is the *highest level of students’ interest in terms of well-developed individual interest*, also, item number 4, *I feel confident and comfortable during class discussion*, (M=3.76, SD=0.59), which is the *lowest level of students’ interest in terms of well-developed individual interest*.

The analyzed data revealed the level of students’ interest in terms of *well-developed individual interest*, (WM=3.88, SD=0.55), interpreted as *high*.

Black (2017), concluded that interest is powerful support for deeper learning and serves as a guide for academic success. Students with well-developed individual interests independently engage with content and possibly over extended periods of time. Students generate curiosity and take personal responsibility in finding their ways in solving their own problems. At this phase, genuinely take ownership of their learning and empower their learning competencies.

**Table 13. Level of comparison between descriptive measures of Assessments in terms of Designs and Styles**

STATEMENT	Assessment 1			Assessment 2		
	Mean	SD	Remarks	Mean	SD	Remarks
The learner... developed unique personal style.	4.28	0.45	Strongly Agree	4.92	0.27	Strongly Agree
applied the principles and elements of design.	4.00	0.49	Agree	4.36	0.48	Strongly Agree
valued the appropriateness of available raw materials.	4.60	0.49	Strongly Agree	5.00	0.00	Strongly Agree
created an appealing aesthetic styles.	4.52	0.50	Strongly Agree	4.68	0.47	Strongly Agree
<b>Overall Mean/SD</b>	<b>4.35</b>	<b>0.54</b>	<b>Strongly Agree</b>	<b>4.74</b>	<b>0.44</b>	<b>Strongly Agree</b>
<b>Interpretation</b>	<b>Very High</b>			<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table above shows the comparison between the descriptive measures of Assessment 1 and Assessment 2. Specifically, for the variable regarding *personal unique style* there was 0.64 difference between the mean responses with Assessment 2 having a much higher score. In terms of *elements and principle design*, there was 0.36 difference between the mean response of the two assessments with Assessment 2 again having higher score. For the *appropriateness of available raw materials*, there was an observed 0.40 difference between the mean response of the two assessments and again Assessment 2 appeared to have higher mean score. Lastly, for the *appealing aesthetic styles* there was a 0.16 difference between the mean score of the two assessments. In general, all the intrinsic variables under Designs and Styles agreed that Assessment 2 was better than Assessment 1.

According to Liu (2015), designing and styling are important in life because it’s an incredibly powerful force that fosters creativity. The application of design in education empowers students to reach their full potential in



creativity, collaboration, and self-efficacy. A good design and style can make people trust you more, alter customer perceptions, make you memorable, get your message across, make your product work to the fullest, and remarkable.

**Table 14. Level of comparison between descriptive measures of Assessments in terms of Craftsmanship**

STATEMENT	Assessment 1			Assessment 2		
	Mean	SD	Remarks	Mean	SD	Remarks
The learner... used tools and materials properly.	5.00	0.00	Strongly Agree	5.00	0.00	Strongly Agree
created quality finished output.	4.32	0.47	Strongly Agree	4.52	0.50	Strongly Agree
showed evidence of understanding the concepts and instructions.	4.76	0.43	Strongly Agree	5.00	0.00	Strongly Agree
performed enthusiastically until it was done.	4.96	0.20	Strongly Agree	4.96	0.20	Strongly Agree
<b>Overall Mean/SD</b>	<b>4.76</b>	<b>0.43</b>	<b>Strongly Agree</b>	<b>4.87</b>	<b>0.34</b>	<b>Strongly Agree</b>
<b>Interpretation</b>	<b>Very High</b>			<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
4	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 14 shows the comparison between the descriptive measures of Assessment 1 and Assessment 2. Specifically, for the variable regarding *used tools and materials properly* Assessment 1 and Assessment 2 got the same mean response. In terms of *created quality finished output*, there was 0.2 difference between the mean response of the two assessments with Assessment 2 again having higher score. For the *evidence of understanding the concepts and instructions*, there was an observed 0.24 difference between the mean response of the two assessments and again Assessment 2 appeared to have higher mean score. Lastly, for the *performed enthusiastically until it was done* the two assessments got the same mean response. In general, all the intrinsic variables under Craftsmanship agreed that Assessment 2 was better than Assessment 1.

Foster (2019), stated that craftsmanship empowers creative expression. Crafting can develop from beginning-level “arts and crafts” activities that learners may experience enjoyment from specialized workshop exercises, hobbies, and recreational activities. It requires particular sets of skills, proper manipulation of tools and materials, precision, and desire. Anyone with imagination can engage in a craft. It can lead to new and exciting ventures, entrepreneurship, and even vocations. Hands-on learning activities are stepping stones to interests that can inspire learning about a field, such as architecture (appreciating design), engineering (discovering how things work), or photography (understanding composition, light, and color).

**Table 15. Level of comparison between descriptive measures of Assessments in terms of General Appearance**

STATEMENT	Assessment 1			Assessment 2		
	Mean	SD	Remarks	Mean	SD	Remarks
The learner... achieved the neatness and attractiveness of the finished output.	4.36	0.48	Strongly Agree	4.88	0.32	Strongly Agree
placed designs properly with no stain or dirt.	4.08	0.48	Agree	4.12	0.32	Agree
fixed firmly the materials used that ensure sturdiness.	4.44	0.50	Strongly Agree	4.68	0.47	Strongly Agree
manifested creativity and resourcefulness.	4.60	0.49	Strongly Agree	4.84	0.37	Strongly Agree
<b>Overall Mean/SD</b>	<b>4.37</b>	<b>0.52</b>	<b>Strongly Agree</b>	<b>4.63</b>	<b>0.48</b>	<b>Strongly Agree</b>
<b>Interpretation</b>	<b>Very High</b>			<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 15 shows the comparison between the descriptive measures of Assessment 1 and Assessment 2. Specifically, for the variable regarding *the neatness and attractiveness of the finished output* there was 0.52 difference between the mean responses with Assessment 2 having a much higher score. In terms of *placed designs properly with no stain or dirt*, there was 0.04 difference between the mean response of the two assessments with Assessment 2 again having higher score. For the *fixed firmly the materials used that ensure sturdiness*, there was an observed 0.24 difference between the mean response of the two assessments and again Assessment 2 appeared to have higher mean score. Lastly, for the *manifested creativity and resourcefulness* there was a 0.24 difference between the mean score of the two assessments. In general, all the intrinsic variables under General Appearance agreed that Assessment 2 was better than Assessment 1.

One factors to consider in creating and producing a product is the presentation of its general appearance. No designer sets forth a goal of creating a non-attractive product. Realistically, there are often practical justifications for deprioritizing a product's visual appearance. Products are produced with an intentionally neutral stance, hoping to appeal to a wide audience. A product needs to feel like it's getting better through upgrading its visuals are the most tangible way to get that across. Beauty is not just only an add-on, it is an accurate expression of its quality (Leung, 2020).

**Table 16. Level of comparison between descriptive measures of Assessments in terms of Time Management**

STATEMENT	Assessment 1			Assessment 2		
	Mean	SD	Remarks	Mean	SD	Remarks
The learner... followed the set date on the written project plan.	4.76	0.43	Strongly Agree	4.96	0.20	Strongly Agree
prepared the needed tools and materials ahead of time.	5.00	0.00	Strongly Agree	5.00	0.00	Strongly Agree
managed time according to the set	4.96	0.20	Strongly	5.00	0.00	Strongly Agree



goals.			Agree			
used time wisely to get the output done on time.	4.88	0.32	Strongly Agree	5.00	0.00	Strongly Agree
<b>Overall Mean/SD</b>	<b>4.90</b>	<b>0.30</b>	<b>Strongly Agree</b>	<b>4.99</b>	<b>0.10</b>	<b>Strongly Agree</b>
<b>Interpretation</b>	<b>Very High</b>			<b>Very High</b>		

Legend:

Scale	Range	Remarks	Interpretation
5	4.20 – 5.00	Strongly Agree	Very High
2	3.40 – 4.19	Agree	High
3	2.60 – 3.39	Moderately Agree	Average
2	1.80 – 2.59	Disagree	Low
1	1.0 – 1.79	Strongly Disagree	Very Low

Table 16 shows the comparison between the descriptive measures of Assessment 1 and Assessment 2. Specifically, for the variable regarding *followed the set date on the written project plan* there was 0.2 difference between the mean responses with Assessment 2 having a much higher score. In terms of *prepared the needed tools and materials ahead of time*, the two assessments got the same mean response. For the *managed time according to the set goals*, there was an observed 0.04 difference between the mean response of the two assessments and again Assessment 2 appeared to have higher mean score. Lastly, for the *used time wisely to get the output done on time* there was a 0.12 difference between the mean score of the two assessments. In general, all the intrinsic variables under Time Management agreed that Assessment 2 was better than Assessment 1.

Auld (2020), expounded that time management is the ability to utilize time efficiently. Students learn more effectively when they learn to manage time in the right way. As it is more quantifiable for them, they allocate study hours and keep them effectively. This helps in effectively developing their learning skills.

**Effect of Developed localized Slipper Making Module on Students’ Interest**

Minitab 14 was used in computing the data gathered and treated them statistically using Analysis of Variance. The computed p-values were compared to the level of significance at 0.05 to determine the effect of pupils’ challenges and status of modular learning to academic behavior.

**Table 17. Effect of Developed localized Slipper Making Module on Students’ Interest as to Situational Interest, Individual Interest, and Well-Developed Individual Interest**

Slipper Making Module	Students’ Interest	F-value	p-value	Analysis
Objectives	Situational Interest	29.96	0.000	Significant
Content		31.44	0.000	Significant
Activities		31.90	0.000	Significant
Assessment		25.02	0.000	Significant
Objectives	Individual Interest	9.58	0.004	Significant
Content		10.28	0.003	Significant
Activities		10.02	0.003	Significant
Assessment		8.31	0.006	Significant
Objectives	Well-Developed Individual Interest	87.89	0.000	Significant
Content		90.38	0.000	Significant
Activities		92.98	0.000	Significant
Assessment		78.40	0.000	Significant

\*significant at .05 level of significance



Table 17 shows the multiple comparison of the slipper making module and the student's interest. For the case of situational interest, the objectives, content, activities, and assessment were all significantly different from each other with corresponding p-values lower than the designated level of significance (0.05). In the case of individual interest, the same has been observed across categories in the slipper making module. All the p-values were less than the designated alpha of 0.05 which mean that individual interest vary across different categories of slipper making module significantly. Lastly, in the case of well-developed individual interest across different categories under slipper making module, similar results have been observed. All of these results conclude to the realization that the three different types of student's interests differ significantly in terms of the objectives, content, activities, and assessments of the module. This means that teachers should adapt the contents of these parts of the modules to spark the different interests of the students.

As a result, the developed localized instructional module in slipper making has a significant effect on the students' interest in terms of situational interest, individual interest, and well-developed individual interest. Hence, the null hypothesis is rejected.

**Table 18. Effect of Developed localized Slipper Making Module on Students' Performance Assessment as to Designs and Styles, Craftsmanship, General Appearance, and Time Management**

Slipper Making Module	Criteria for Performance Assessment	F-value	p-value	Analysis
Objectives	Designs and Styles	21.37	0.000	Significant
Content		23.03	0.000	Significant
Activities		23.85	0.000	Significant
Assessment		16.89	0.000	Significant
Objectives	Craftsmanship	3.18	0.083	Not Significant
Content		4.09	0.050	Not Significant
Activities		3.99	0.053	Not Significant
Assessment		1.79	0.188	Not Significant
Objectives	General Appearance	28.40	0.000	Significant
Content		30.40	0.000	Significant
Activities		31.92	0.000	Significant
Assessment		22.44	0.000	Significant
Objectives	Time Management	0.28	0.602	Not Significant
Content		0.06	0.801	Not Significant
Activities		0.39	0.538	Not Significant
Assessment		0.43	0.515	Not Significant

*\*significant at .05 level of significance*

Table 18 shows the results of the multiple comparisons test for the performance assessments of the students and the slipper module categories. Both Designs and Styles and General Appearance vary significantly across slipper module categories with all p-values having lower than 0.05. However, for the Craftsmanship and Time Management the converse has been observed. Both performances registered p-values that were higher than the designated level of significance (0.05). This means that there was no sufficient evidence to conclude that Craftsmanship and Time Management differ significantly across different categories of slipper making module. In the simplest sense, performance assessments for these two types across the objectives, content, activities, and assessment of the module showed similar variations in distribution.

The results showed that developed localized instructional module in slipper making from the set variables in terms of designs and styles and general appearance has a significant effect on the performance assessments of the learners; and there is no significant effect in terms of craftsmanship and time management. Consequently, the null hypothesis is partially accepted.



## V. CONCLUSION

Based on the findings above, the study has drawn the following conclusions:

1. The developed localized instructional tool in slipper making has a significant effect on students' interest in terms of situational interest, individual interest, and well-developed individual interest. Thus, the null hypothesis is rejected.
2. The developed localized instructional tool in slipper making has a significant effect on the students' performance assessment in terms of designs and styles and general appearance; and there is no significant effect in terms of craftsmanship and time management. Therefore, the null hypothesis is partially accepted.

## VI. RECOMMENDATION

Based on the conclusions formulated from the findings, the following recommendations are hereby formulated:

1. The developed slipper making module may be used particularly by the TLE teachers as supplementary learning materials in teaching Handicraft Production for the students who are taking exploratory courses.
2. The TLE teachers are encouraged to attend seminars, workshops, and training programs to acquire new knowledge and updated background information on developing instructional learning materials.
3. The TLE teachers may develop additional instructional learning materials based on the needs and interests of the students assimilated into other courses offered in Technology and Livelihood Education.
4. The TLE teachers are entitled to modify and reconstruct the developed slipper-making module to fulfil the demands of education in the future.
5. Future researchers can further validate the slipper making module to measure and assess the effectiveness of the developed localized instructional tool.

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