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**ASSESSMENT FOR LEARNING IN THE ALTERNATIVE LEARNING SYSTEM-  
EDUCATION AND SKILLS TRAINING (ALS-EST)**

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**ABSTRACT**

This study investigates the formats utilized in assessing students learning enrolled in the ALS-EST program. It utilized a single case study design. Data for this study were collected and analyzed based on the six-step techniques suggested by Yin (2014). Results of the analyses made revealed that the portfolio, module-based, and performance-based are the three main formats use in assessing students learning enrolled in the program. Generally, the usage of these formats addresses learners' diversity and conforms to the performance standards outlined in the new ALS 2.0 Curriculum.

**Key Words:** Assessment Formats, Education And Skills Training, Performance Standard.

**1. INTRODUCTION**

The recent institutionalization of the Alternative Learning System 2.0 (ALS 2.0) Curriculum has paved the way for some reforms in the delivery of instruction in various programs in the ALS including the Education and Skills Training (EST). One of these reforms is the conduct of the assessment. Unarguably, assessment is an integral part of the teaching and learning episodes. Several reasons make assessment important in cognition and instruction. As explained in DO No. 8, s. 2015, these include, first, assessment gives teachers ideas about how their learners are learning, which, in turn, can be anchored with to refashion instructional delivery commensurate and responsive to their needs. Second, assessment can elicit rich information pertinent to students' academic standing and progress that can be relayed to their parents and guardians. Additionally, assessment is able as well to monitor students' progress vis-à-vis learning standards outlined in the curriculum and on the development of 21st-century skills paving the way to promote self-reflection and personal accountability about their own learning. Finally, the assessment may be anchored as a framework for profiling learners' performance on the learning competencies and standards of the curriculum.

Also in DO No.8, s. 2015, teachers are encouraged to utilize multidimensional assessments to address learners' diversity. Classroom assessment, in particular, is defined in this DO as a continuous process of identifying, gathering, organizing, and interpreting, qualitative and quantitative data on students' learnings and performance.

The adoption of the ALS 2.0 Curriculum indeed possesses a challenge to the programs implementers, especially as regards assessment. This academic endeavor then strives to investigate how assessment is carried out in the ALS specifically in its program called EST.

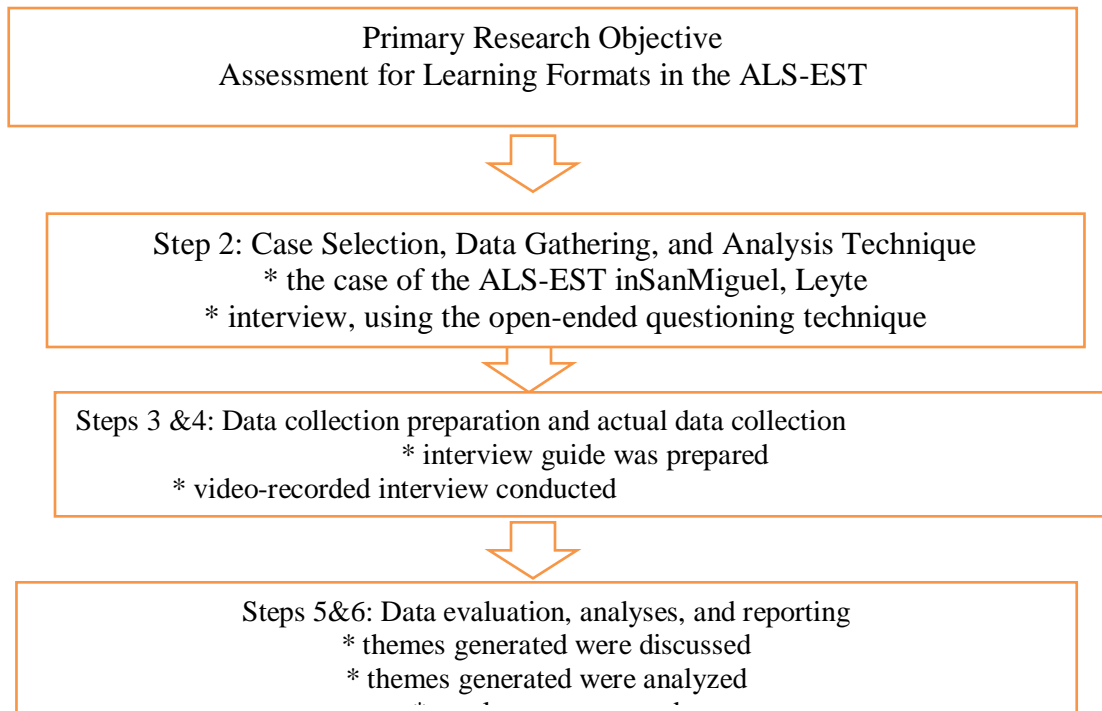
**2. METHODS**

**Sampling**

As this is a case study, the purposive sampling technique was then utilized. The EST program implementer assigned to teach the academic dimension of the EST at the ALS Center in the town of San Miguel in Leyte was chosen as the sole respondent. This EST implementer obtained an education degree in both elementary and secondary. He had been in the ALS for over eight years now. He has units in a master’s program and is currently enjoying an academic rank of a Master Teacher. According to (Babbie,1990), non-probability sampling methods such as the purposive sampling technique aim to “construct a sample that can generate the most useful insights that can be gained by the researcher into that study’s particular focus”. Additionally, (Fowler, 1993), emphasized that in criterion sampling, a type of purposive sampling technique, the researcher is compelled to pre-identify criteria, then, filter all cases that meet those criteria. Moreover, (Fink,1995) emphasized that in using the purposive sampling technique, the researcher intended to choose the size and content of the sample measures and construct for purposes of maximizing learning in the conduct of the study. Further, she stressed that this technique allows the researcher to choose: the respondents, times, venues, events, or interactions deemed important to carry out the purpose of the study. The pre-identified respondents, that is, the EST program implementer mentioned above has met the criteria set forth by the researcher.

**Data Collection procedure and analyzes**

Data in this study were collected and analyzed based on the six-step techniques suggested by Yin (2014).



**Figure 1:** Data collection procedure and analyses as suggested by Yin (2014)

### 3.RESULTS AND DISCUSSIONS

The respondent was asked this question How is assessment for learning carried out in the ALS-EST? Elucidate your claim. This question was asked to obtain data about the various assessment for learning formats utilized in the program. Herewith are some of the interview statements given by the respondent:

” Damun duro nga assessments akon ginhihimmo ha akon mga learners’ ha EST. Nasunod ako han DepEd Memo 8 ambot anu ba adto na tuig 2015 ada o 16 deri la ako sigurado. Basta akon gin bubuhat pirmi kami mayda portfolio assessment. Kinahanglan man gud namon ini kay mayda namon Parents’ Day kun diin gin papasabot namon mga kag anak amon learners kun anu an mga “progress” han ira mga anak”. Ini nga portfolio gin kokolekta namon an mga mag upay na gin himo na projects han mga estudyante ngan amon ini gin display during that day” [There are several assessments that I utilize for my EST learners. I follow the DepEd Memo 8 which I think was released in 2015 or 16, I am so sure though. But, what I usually do is portfolio assessment. This is very important because we always have Parents' Day wherein we inform our parents of the learning progress of their children in school. What I usually do for this portfolio is to collect the best outputs of the learners that they submitted as projects and display them during that important day] (Interview Statement 1).

“Maaram ka Sir, required kami na mag kamay ada sinisiring na portfolio kumo usa na assessment format kay an mga bata pirmi man hira gin aaruan namon hin project. Kaurugan deri ngani ako baga nakukuntento hit ira gin papasa ha akon na ira output gin babalik ko para ma improve. Kada Parents’ Day gin prepresentar ini namon ha amon ha ira mga kag anak, Nalilipay gud hind uro mga kag anak kay tungond na nakikita nira an improvement han ira mga anak” [You know what Sir, we are required to conduct portfolio assessment because we usually ask our learners for projects. Usually, if I am not contented with their submitted projects, I give them back to them for improvement purposes. During Parents’ Day I really can feel that their parents are so happy with their projects in display] (Interview Statement 2).

”I am very happy to inform you Sir that I use a number of assessment tools for my EST learners. First, of all, let me tell you that, I have very talented and skilled students. I am proud to say that even if people think that those in the ALS are not as good as those in the formal system. Usually, from day 1 of my encounter with them, I already orient them to keep all the outputs that I ask from them because they will form part of their portfolio. Also, their portfolio will be part of their grades and that they will use them whenever they take the A&E test. Also Sir, I do formative assessment. For some of my learners I encourage them to independently answer the assessment tasks. There are also instances in which I supervise them in the process of answering the tasks. Also, I encourage them to answer with their peers. I am happy that they are able to so these tasks. You know Sir, I believe that teacher presence really matters” (Interview Statement 3).

Evidently, from the narratives above, the portfolio is one of the formats use in assessing students learning in the EST. In the ALS, a portfolio is viewed as a compilation of the learners' outputs in

all the activities they have participated as well as their outputs in the various assessments given to them by their respective program implementers. There are two types of portfolios collected by the program implementers from their learners. These include the working portfolio and presentation portfolio. The former is a pure collection of all outputs made by the learners. These include test results, projects such as posters, handicrafts, written outputs such as poems, reflection papers, theme papers, reaction papers, among others. As the name suggests, these outputs are still subjected for improvement; hence, non-graded. The latter, on the other hand, is also a compilation of the learners' outputs but is labeled as "the best". By being such, these outputs had already gone through refinement based on the agreed rubrics. Additionally, this type of portfolio is the one that is being showcased by all learners enrolled in the Accreditation and Equivalency (A&E) program both elementary and junior high school streams in eventualities that they decide to take the A&E test for accreditation purposes. The testees' portfolio is assigned with 20% general weighted average on their overall performance in the test. The remaining 80% is taken from their performance in the written dimension of the examination (Valeriano, R. Personal Interview, October 23, 2019).

The portfolio in the EST is also utilized during the "Portfolio Day". This activity is considered as a culminating activity of many signs of progress in learning accumulated within a quarter. This activity is usually scheduled during the "Family Day" or the quarterly distribution of the report card of the learners. Its main goal is to showcase the various stakeholders their achievements. The parents and guardians, DepEd officials in the Division, teachers, Local Government Unit- Municipal Social Welfare and Development Office, barangay officials, ALS alumni, and the community, in general, are invited to witness the event. The showcasing of their portfolio likewise serves as a motivating activity on the part of the learners as it boosts their morale and at the same time and opportunity to draw more support including financial support from the stakeholders. In this way, partnership and involvement of various stakeholders become tighter that is likely to strengthen the implementation of various ALS programs such as that of the EST (Valeriano, R. Personal Interview, October 23, 2019).

The perspective of the ALS program implementers as regards a portfolio gives us very rich and comprehensive insights relative to its utilization as a tool and a scheme by which students' learnings are assessed. With the discussions above as the main anchor, it can be said that program implementers: 1) did acknowledge the development nature of the assessment process involved and emphasized the importance of the active involvement of the students in portraying what they know and can do; and 2) did recognize the purpose of the student reflection on the learning process involved in the work accomplished and the integration of assessment of teaching and learning.

The portfolio in the ALS is well within the ambit and context of portfolio assessment. As used in this context, Arter and Spandel (1992:36) in (Klenowski, 2002:3) defined a portfolio as a purposeful collection of student work that tells the story of the student's efforts, progress, or achievement in (a) given area (s). This collection must include student participation in the selection of portfolio content; the guidelines for selection; the criteria for judging merit; and evidence of student self-reflection.

Meanwhile, the types of portfolios collected in the ALS, that is the working and presentation portfolio, can be equated to what Miller, Linn, & Gronlund (2009) call showcase and documentation portfolios. As explained, showcase portfolios commonly include learners-selected entries. This type usually should contain student-selected entries. The main goal of this portfolio type is for students to learn to identify work that best demonstrates what they know and can do with a specific purpose and audience in mind. The documentation portfolio, on the other hand, is intended to provide evidence about breadth as well as the depth of learning. As such, this has to be inclusive and need not focus only on areas of special strength for a learner. Given these, it is categorical that the portfolios collected in the ALS apart from falling from within the ambit of the categories as suggested by these assessment experts also served the very purpose by which they should be utilized.

Additionally, capitalizing on the purpose of using the portfolio as a tool for assessing students' learning, it is likewise beyond question that it indeed serves several purposes. Arter, Spandel, and Culham (1995) listed two global purposes for creating portfolios of student work: student assessment and instruction. They further suggested that these may not be mutually exclusive and relegated the idea that effective assessment is an integral dimension of effective teaching. Analyzing how the portfolio is used in the ALS as discussed above, it is evident that it is indeed used for these purposes. Meaning, the ALS teachers, instruction is first delivered before learners are asked to produce a portfolio. Thus, it becomes an indispensable component of the teaching and learning rigors. Additionally, Miller, Linn, & Gronlund (2009), suggested that when the emphasis of the portfolio is on assessment, teachers must be able to delineate whether it serves for formative or summative purposes. They explained that portfolios collected over a semester or a school year can be particularly effective for purposes of the formative evaluation of student progress. Meanwhile, when intended for summative or certification purposes, the portfolio is usually paired off with other evidence. In situations requiring high-stakes decisions, the portfolio is embedded within a more comprehensive learning and assessment system.

In the case of ALS, portfolios, as used for assessment by the programs implementers, serve both. This is justified by the fact that ALS teachers direct the learners to compile all the artifacts they have produced from the many activities conducted every after lesson recital and from the extra-curricular activities they have participated in. From this, the learners are allowed to make improvements to their works to serve other purposes such as when taking the A&E test in which their "best" portfolio is given a 20% general weighted average grade from their overall performance in the examination. The A&E test is a form of a high-stake assessment since it is conducted outside the classroom setting.

Apart from the uses of the portfolio as cited above, it is likewise utilized for certification and selection purposes. According to Klenowski (2002), the certification and selection function of assessment provides the learners with a statement of achievement for entry to a profession or entry to higher education. When used for this purpose, the author explained, portfolios must have the contents, or types of evidence for inclusion, to be specified by an awarding body or education authority. In the ALS, portfolios are prepared as embedded evidence of learning to obtain a certification of program completion. A program completed as certified is then referred to as a

ticket to qualifying for enrolment or admission to a different program or a higher grade level. For example, those mainstreamed in the A&E- Elementary stream may be mainstreamed to the junior high school after having completed the program satisfactorily as evident in their portfolios along with the result the learner obtains from the A&E examination taken. The certification is usually conferred to the learners by DepEd Central Office. In the case of those enrolled in the EST program, program completers are usually conferred by Division Superintendent in coordination with the Division ALS supervisor and respective program implementers.

Finally, in the ALS, portfolios are also used as a showcase and for documentation. According to Miller, Linn, & Gronlund (2009) when a portfolio is used to showcase it should contain student-selected entries. This does not mean of course that learners be denied of the benefit of the reactions of other learners and that of teachers' advice in the selection and evaluation process on its entries; but the core goal of which is for the students to learn to identify work that best exemplifies what they know and can do with a specific purpose and audience in mind. Meanwhile, when a portfolio is intended for documentation, it should provide evidence about breadth as well as depth of the entirety of the students' learning. As such, it has to be inclusive to areas of special strength for a learner. Usually, portfolios collected by the ALS teachers serve both purposes. As has been discussed earlier, portfolios are being showcased to various stakeholders to inform them of what they have been doing in the classroom and to prove their innate talents. This also serves as a learning document they present to their respective program implementer and their parents or guardians.

The use of portfolio by the ALS implementers as a mechanism of gauging students' learning is pedagogically a sound practice knowing that assessment is indeed plays a crucial role of a successful teaching and learning process. Klenowski (2002) reported that research findings are in unison in saying that its usage promotes the development of important skills specifically on reflection, self-evaluation and critical analysis as well as provide a structure and processes for documenting and reflecting on teaching and related learning practices. Miller, Linn, & Gronlund (2009) agreed to this attestation and said that portfolio foster student skills in evaluating their own work. Self-evaluation is a critical skill in developing interdependent learning ability and one that is often emphasized and reinforced by asking students to include some form of self-evaluation and thoughtful reflection on each entry of their portfolios. Apart from this, portfolio, they said, can also provide parents with concrete examples of the learners' progress or what they have accomplished. Similarly, the portfolio can also provide the focus for discussions among teachers, students, parents, and other important academic stakeholders. Given this, it is noteworthy that these important roles of the portfolio are already realized in the ALS. Thus, making their assessment practice highly commendable. This practice, as mentioned earlier resulted in partnership or linkage with other stakeholders such the LGUs which could, in turn, further impact the role of the ALS in community development.

The ALS program implementers though need to look into some of the aspects of the portfolio vis-à-vis its current usage to ensure optimum success as desired. Two factors need to be revisited: structure and components. One of which is its structure. According to Shermis and Di Vesta (2011), a portfolio is a form of authentic assessment. Being such, it, therefore, has to

contain: 1) artifacts or samples of previous works; 2) reproductions of earlier works such as pictures of personal contacts related to work; for example, photographs of an exhibitor audience, copies of the work as used by others, or guides to the exhibit; and 3) attestation or collection of documents supporting praiseworthy accomplishments such as letters of commendations regarding an exhibition of his or her work. Additionally, portfolios may also be used for providing feedback on one's teaching. They provide products that the teacher can inspect and can implement to introduce a change of the existing classroom set up.

The second factor, on the other hand, is components. According to Danielson and Abrutyun (1997), a portfolio has two major components, the process, and the product. The authors suggested that maximizing the learning benefit for a portfolio necessitates a concrete understanding of the relationship between the developmental process and the product. The product is the actual collection of work which is a result of actualizing the process of development while the development process is the core of successful portfolio use. This process is said to be novel to the learners and time demanding on the part of the teachers, both eventually may find it worth the time and effort. Furthermore, the authors explained that there are four steps involved in the portfolio development process. These are collection, selection, reflection, and projection. The first step is relegated to the collection of multiple pieces of the learners' works. In the second step, selection, learners are allowed to look for their exceptional works that are reflective of that of the agreed criteria or that of the course curriculum that should be anchored to the learning objectives of the curriculum. These need to be precise and explicit to ensure partiality and success. The third step, the reflection phase, is deemed a distinct stage in which the learners are allowed to express their perspective about each item included in their portfolio which in turn paves the way for them to be aware of themselves as learners. The final step, projection, is defined as future goal setting intended to provide the learners a chance to evaluate and make a judgment of their works holistically.

Meanwhile, the interview statements below suggest of another format used in assessing students learning in the EST.

” Pimri gud ako Sir nagamit mga assessments na aada ha modules na gin hahatag namon mga students because the modules serve as our main reference for teaching. Kaurugan an aada ha module mga multiple choice, kuan, true or false ngan mayda ghap matching type” [ I always use the assessments that are in the modules that we give to our learners because the modules serve as our main reference for teaching. Most of the time the multiple choice, true or false and also matching type] (Interview Statement 4).

” Magamit gud ako han mga assessments na aada ha modules Sir because we are also training our learners for their A&E test in which mayda didto mga multiple choice test, matching type, and danay mayda mayda true or false pero kaurugan ada Sir Multiple Choice” [ I am forced to use the assessments that are in the modules Sir because we are also training our learners for their A&E test wherein there are the multiple-choice test, matching type, and sometimes true or false but most of the time Sir it's the multiple choice] (Interview Statement 4).

” An gin hatag haamon na modules han ALS Leyte Division amo an sinisiring na Mindanao Youth Development Modules. We are mandated to use them. The module is already complete with the so called seven learning strands. Apart from the detailed information about the lesson contents, these modules also contain assessments modalities including objective tests and subjective tests. Multiple Choice, True-False, Fill-in-the-blank, and Matching test na kinahanglan hin short answer ngan essay” [The modules that were given to us by the Leyte Division are the so-called Mindanao Youth Development Modules. We are mandated to use them. The module is already complete with the so-called seven learning strands. Apart from the detailed information about the lesson contents, these modules also contain assessment modalities including objective tests and subjective tests. Multiple Choice, True-False, Fill-in-the-blank, and Matching test na kinahanglan hin short answer ngan essay] (Interview Statement 5).

The narratives above all point to a fact that, in the EST, the use of module-based as another format for assessing students learning. One of the formats contained in the module is the multiple-choice. According to Shermis and De Vista (2011) a multiple-choice test format is widely used and applied objective test type. It consists of a problem, also called a stem and a list of possible solutions or choices. When used properly, its usage can extend to not just measuring facts acquisition but also be able to trace both instructional successes and those that necessitate remediation. Meanwhile, Mandernach (2003), said that when the assessment intends to determine student knowledge about the attributes associated with sets of ideas, terms, concepts, and events, then, the matching test is fit for usage.

Another format embedded in the module is the true-false test. Shermis and De Vista (2011) also explained that a true-false test is also a type of objective test format which consists of a statement to which test-takers need to discern whether such is true or false. As in other types of objective test formats, when a true-false test is carefully crafted, it can provide a picture of the learners' ability to discern a correct fact, use in an association, cause-effect relation, and principle applications in a range of situations. Finally, another format is the essay. McTighe (2001) claimed that an essay plays a pivotal role in the assessment phases as it provides a balanced assessment in satisfying the need for the realization of performance objectives.

The objective and subjective test types are some of the assessment tools suggested by the DepEd for use in assessing students' learning, especially when developing the cognitive process dimension. This dimension as suggested by Anderson and Krathwohl and adapted by the agency includes remembering, understanding, applying, analyzing, evaluating and creating (DepEd Order No. 8, s. 2015). In the same memorandum, it was explained that the purpose of the written work component of the assessment is to ensure that students can express skills and concepts and strengthen the test-taking skill. Recommended formats include long quizzes/tests, essays, written reports, and similar genres. The EST implementer realized this institutional mandate as they claimed that...

... “I am forced to use the assessments that are in the modules Sir because we are also training our learners for their A&E test wherein there are multiple choice test, matching type,



and sometimes true or false but most of the time Sir it's the multiple choice" (Interview Statement 6).

Finally, these interview statements imply the use of performance-based as another format for assessing students learning:

" You know what Sir, here in EST, my learners are multi-talented and skilled. I together with my co-implementers would usually ask them to make these handicrafts. Also, we require them to perform during the different culminating activities like during the Reading Month in November. They are required to a recite poem, interpret a dance, song renditions, spelling contests, reading aloud, and even poster making. I provide them with the materials" (Interview Statement 7)

." I do assessment outside the box. Usually performance-based Sir. (Interview Statement 12).

Informal Education is a component of the ALS that complements the non-formal education. It aims to create opportunities for self-development under the learners' interest paving the way towards a timely and relevant acquisition of skills. Additionally, this is also considered as life-wide and life-long education. This means that many skills are deemed irrelevant at a certain point of our lives but resurfaced to be highly needed at present time. Similarly, people expands also their areas of interests as well as change their priorities in life, and, in turn, change their learning needs. This is where InFed comes into the picture.

In the ALS, InFed is delivered through a learning facilitator who plays the role of a coach or role model skilled enough to be able to influence or transfer the same to his or her learners. There are three fundamental roles of the ALS implementers for facilitating InFed. First, identifying learners' needs. For this role, ALS programs implementers are expected to gather information on the whereabouts of his or her learners through the conduct of interviews, observations, and be able to look what is termed in the ALS as "environmental triggers" such as social issues, health warnings, among others that can ultimately generate learning needs. Second, finding training providers. ALS programs implementers are expected to tie-up with the industries in their respective communities and ensure matching of the learners' skills and needs. Finally, the third role is managing the InFed program. This role means that ALS programs implementers are expected to be able to organize and manage the InFed programs by addressing their immediate concerns and needs especially those relating to logistics (Cañete, 2016).

In the EST, InFed is materialized through the conduct of various extra-curricular activities such as the Sports Festival, skills training, product developments that usually benefit the learners. Activities like for the former are Tree Planting, ROVERS Scouting or the college type scouting, handicraft making, mock job interviews, among others are some conducted for InFed (Valeriano, R. Personal Interview, October 23, 2019).

Shermis and Di Vesta (2011) explained that performance assessment is a subclass of alternative assessment. Being such, it is regarded as an exercise by which learners demonstrate specific skills and competencies by agreed standards and proficiency or excellence. Also, Miller, Linn,

and Gronlund (2009) listed several advantages when using performance tasks. These are: 1) encourage the development of complex understandings and skills; 2) measure complex learning outcomes that cannot be measured by other means; 3) provide a means for assessing process and product as well as the products that result from performing a task, and 4) implement approaches that are implemented by modern learning theories.

A study on the use of performance-based assessment in schools conducted by Rosaroso and Rosaroso (2015) reported a significant effect in assessing students' learning. Its usage, they said, made the learners more motivated to learn in various instructional activities specifically when lessons are integrated with performance-based tasks. Additionally, learners also became more self-regulated as they work individually and in groups. Given the findings, they claimed that its utilization enabled teachers to learn and locate learners' strengths and weaknesses, and in turn, monitor their growth and progress. In the same study, teacher's adherence to the use of performance-based assessment, however, is not concerns-free. As reported in the findings of the study conducted by these researchers, teachers find performance-based assessment to be: 1) time-consuming; 2) costly; 3) difficult to create a rubric due in part to tasks complexities; 4) entails narrowing of the curriculum; 5) creates backlogs; 6) laborious, and 7) lead to uncertainty in adopting a change in the assessment approach.

#### **4. CONCLUSIONS**

Results of the findings revealed that there are three basic formats utilized in the ALS-EST in assessing for students learning. These are the portfolio-based, module-based, and performance-based assessments. The use of these assessment formats strongly suggests the fact that assessment is carried out in a multidimensional manner. This implies then that learners' diversity is addressed. Additionally, this practice also suggests that differentiation which is achieved through the adherence of multiple assessment formats is observed specifically on assessment. Given these, it can be said that these practices are in consonance with what is called for in the current implementation of the ALS 2.0 curriculum.

#### **5. RECOMMENDATIONS**

Since the study involves just a single case, that is, the case of the EST program in the town of San Miguel in Leyte province, it is thus imperative that a similar academic undertaking involving other ALS centers offering the same program be conducted. In this way, a bigger picture as regards actualization of assessment for learning may be generated and a more conclusive perspective relative to assessment be generated. Nevertheless, results from the findings from this study, maybe anchored with by other EST programs implementers especially the newly hired ALS teachers assigned to teach in the EST program. Similarly, the usage of these assessment formats may likewise serve as an assessment framework in other ALS programs such as the Accreditation and Equivalency (A&E) and Basic Literacy Program (BLP).

## REFERENCES

- Arter, J., & McTighe, J. (2001). *Scoring rubrics in the classroom*. Thousand Oaks, CA: Corwin Press.
- Arter, J., Spandel, V., & Culham, R. (1995). *Portfolios for assessments and instruction*. ERIC Digest. Retrieved from: [http://ericae.net/db/edo/ED388890.\\_htm](http://ericae.net/db/edo/ED388890._htm).
- Babbie, E., (1990). *Survey Research Methods (2nd Edition)*. Belmont, California: Wadsworth Publishing Company.
- Cañete, A. (2016). *Elements of Alternative Learning System (ALS) Informal Education (InFed)*. Retrieved from [teachersessay.com](http://teachersessay.com)
- Danielson, C. & Abrutyn, L. (1997). *An introduction to using portfolios in the classroom*. Virginia: Association for Supervision and Curriculum Development.
- DO No. 8, s. 2015 - [deped.gov.ph](http://deped.gov.ph). (January 2020). *Policy Guidelines on Classroom Assessment for the K to 12 Basic Education Program*. Retrieved from [https://www.deped.gov.ph/wpcontent/uploads/2019/06/DO\\_s2019\\_013.pdf](https://www.deped.gov.ph/wpcontent/uploads/2019/06/DO_s2019_013.pdf)
- Edig, M.M., & Edig, O. (2017). *Portfolio assessment in field study courses: A student teacher's perspective*. *International Journal of Applied Research* 2017; 3(4): 398-400.
- Fink, A. (1995). *How to Sample in Surveys (Vol. 6.)*. London: Sage Publications, Inc.
- Fowler, F., Jr (1993). *Survey Research Methods (2nd ed. Vol. 1)*. London: Sage Publications, 1993.
- Klenowski, V. (2002). *Developing Portfolios for Learning and Assessment. Processes and Principles*. RoutledgeFalmer, New York, USA.
- Lucas, R. G. (2007). *A Study on Portfolio Assessment as an Effective Student Self-Evaluation Scheme*. *The Asia-Pacific Education Researcher*, 16(1) 24-32. Retrieved from <http://ejournals.ph/form/cite.php?id=3834>
- Mandernach, B.J. (2003). *Writing matching items*. Park University Faculty Development Quick Tips. Retrieved, January 8, 2020, from [www.park.edu/cetl/quicktips//matching.html#top](http://www.park.edu/cetl/quicktips//matching.html#top).
- Miller, D.M., Linn, R., & Gronlund, N. (2009). *Measurement and Assessment in Teaching*. Pearson Education, Inc. USA.
- Rosaroso, R., Rosaroso, N. (2015). *Performance-based Assessment in Selected Higher Education Institutions in Cebu City, Philippines*. *Asia Pacific Journal of Multidisciplinary Research* 4 (2) 72-77.
- Shermis, M., & Di Vesta, F. (2011). *Classroom Assessment in Action*. Rowman & Littlefield Publishers Inc. Lanham, Maryland, USA.
- Tarun, I. M. (2011). *Attitude of the Education Students toward Electronic Portfolio Assessment as a Substitute to Traditional Tests*. *ISU-Cabagan Journal of Research*, 20(2), 54-62 Retrieved from <http://ejournals.ph/form/cite.php?id=7603>
- Valeriano, R. (October 23, 2019). *Personal interview*
- Yin, R. K. (2014). *Case study research: Design and methods*. Los Angeles: Sage