

Assessment Literacy of Public Elementary School Teachers in the Indigenous Communities in Northern Philippines

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Abstract Assessment is an important factor that can directly influence the quality of education. Hence, in order for an assessment to reach its full potential, it is necessary for teachers to have an adequate level of assessment literacy. Anent to this, it is observed that teachers are quite knowledgeable about classroom assessment but their assessment practices are not appropriate and not as extensive. Literature on assessment literacy is limited to professional development of the teacher and its impact on their assessment literacy but very few included teaching experience and school type as variables affecting assessment literacy and practice especially for the indigenous communities. The main concern of this study was to determine the assessment literacy of the public elementary school teachers of indigenous communities in Bontoc, Northern Philippines. This quantitative research involved all the in-service public elementary school teachers. Findings showed that assessment literacy of the public elementary school teachers is poor. Aside from that, the public elementary school teachers displayed that they always practice assessment in relation to purpose, design, and communication. Moreover, demographic variables, school type and teaching experience, do not influence teachers' assessment literacy. And lastly, it is shown that assessment literacy is related to assessment practices. Hence, assessment proved not to be limited to individual's performance but to the totality of the individual including

the teacher as the assessor. Thus, seminars on assessment should be conducted and postgraduate studies be encouraged

Keywords Assessment Literacy, Assessment Practice, In-service Teachers, Quality Education

1. Introduction

Quality education, the major concern of educators in our country nowadays, indeed depends on five major components namely teachers, learners, instructional materials, assessment, and context [1]. Of these, one important component that can make a difference is the teacher. According to Wiliam (as cited in [2]), the advancement of learners in learning depends on the quality of teachers, because teachers are the people who make the decisions about instruction to check whether the students have learned as planned.

Another important factor that can directly influence the quality of education is assessment. Reference [3] quotes that, since classroom assessment is a part of learning process, "good teaching is impossible in the absence of good assessment" and because "the quality of instruction in any... classroom turns on the quality of the assessments

used there". However, as written in most references, assessment of students' learning is one of the most critical responsibilities of classroom teachers, because employing assessment influences everything that teachers do [4]. Hence, in order for an assessment to reach its full potential for the achievement of quality education, Popham (as cited in [3]) reiterated that it is necessary for teachers to have an adequate level of assessment literacy.

Assessment had been stressed to support instruction and make it effective. It also helps to make learning more meaningful through feedback and reporting which maximizes student learning. Literacy on the other hand is not only about the ability to read, write, speak and listen well but it also includes change. In other words, literacy means knowledge gained from certain experience such as reading, speaking, writing and listening. In relation to assessment, literacy on assessment is a social process, not a technical activity where all student texts are assessed by knowledgeable humans [5]. However, while assessment provides effective instruction and maximizes student learning, there is no guarantee that it is so until classroom teachers are adept in using assessment [6].

In addition, the cultural knowledge and perspectives of indigenous students which are important to their learning and development are often ignored. McCarty (as cited in [7]) pointed out that classroom assessment can fail indigenous students when teachers do not have a sophisticated understanding of the students' culture-based approaches to learning. Hence, the success of assessment depends on the knowledge and skills of the teacher on student assessment ([8], [9], & [10]).

Moreover, Assessment Literacy is a term which was coined for the first time by [8], [11] and [12]. He notes that educators with assessment literacy know what they assess, why they assess, how to assess, what the possible problems with assessment are, and how to prevent them from occurring. They are also familiar with the possible negative consequences of poor and inaccurate assessment. Hence, in order to enable teachers to ascertain and enhance student learning, they ought to be competent in the area of student assessment [10].

In the Philippines, the Department of Education (DepEd) mandates teachers across the country to assess learners through various processes and measures appropriately in congruence with the learning competencies defined in the K-12 Curriculum. Different assessments as well, shall be used appropriately for diverse learners who come from different contexts such as cultural background and life experiences [13]. Shulman (as cited in [14]) concluded that most of the paper and pencil tests used for assessment were inconsistent and often irrelevant to the realities of teaching. Reference [15] talks about the principles of assessment and mentioned that "the type of test should always match the instructional objectives or learning outcomes of the subject posed during the delivery of the instruction."

Villamero [2] argues that in spite of the fact that major

policies like the K to 12 Basic Education Program are in place, the Philippine education system has been faced with major challenges especially on assessment. As [9], [16] - [18] admitted that inadequate knowledge in assessment can cripple the quality of education and everyday practice of assessment in classrooms, elsewhere in the world, is beset with problems and shortcomings

A number of factors lead to the problems on assessment within the Philippine education system. According to [19], rigid curriculum and assessment, classroom shortages, and unfavorable learning environment in general are three of the many causes of students dropping out from school. She adds that teachers especially in government schools are left with no other option but to "teach to the test" especially that written achievement tests determine the quality of performance of the schools and teachers.

Under the National Competency Based Teaching Standards (NCBTS) in which the Filipino teachers' competencies are specified, one of the domains is Planning, Assessing, and Reporting. This dimension focuses on the use of assessment data to plan and revise teaching-learning plans; this aims to put the integration of assessment procedures in the plan and implementation of teaching-learning activities, and reporting of the learners' actual achievement and behavior. However, NCBTS assessment domain has been found not comprehensive since it does not provide specific assessment competencies that teachers need to possess in order to successfully carryout assessment-related activities [20]. As [21] stressed, the specific assessment strands of NCBTS "do not capture the ideals of assessment literacy."

Scarino (as cited in [2]) and [16] on the need for teachers to develop assessment literacy in ways that enable them to explore and evaluate their own preconceptions, to understand the interpretive nature of the phenomenon of assessment and to become increasingly aware of their own dynamic framework of knowledge, understanding, practices and values, which shape their conceptualizations, interpretations, judgments and decisions in assessment and their students' learning. Through these processes, they will gradually develop self-awareness as assessors, an integral part of their assessment literacy.

Moreover, studies show that indigenous student lag behind in terms of achievement, social and economic status ([22] & [23]). Besides that, teachers lack assessment literacy [24] which is in consonance with the National Council on Teacher Quality (2013) that only few adequately trained teachers know how to assess learning and use student performance data to adjust instruction [25]. Hence, teachers in indigenous settings need extended professional development to learn about successful strategies and to explore and experiment with methods appropriate to their own settings. Such professional development is much needed to achieve meaningful outcomes [26].

With the perceived problems presented above regarding

teachers in relation to assessment, efforts directly assessing these teachers' assessment knowledge and skills have not been conducted in Mountain Province and equally survey about assessment literacy of teachers nationwide is less widespread. Mountain Province is a landlocked and remote province in Northern Philippines. This is where the indigenous tribes of the Applais, Balangaos, Bontoks, Gaddangs and Kankanaeys reside. Determining the assessment literacy of these communities is worth noting because there are no studies conducted in terms of assessment literacy and assessment practices of the indigenous communities of the Northern Philippines. As excerpts from the interviews with some principals, they shared their perceptions in terms of assessment as they knew it. Accordingly, there are voluminous problems with regards to assessment which are as follows: a) in terms of selecting assessment tools, teachers evaluate their learners with tools that do not match with the lesson objectives, b) in terms of test construction, guidelines in constructing items are not being followed and that some teachers are not constructing their rubrics in rating performance of learners; and, c) in terms of scoring, some teachers practice bias scoring due to many reasons such as personal grudge of teachers to pupils' parents, absence of rubrics, and they also give points to non-achievement factors like effort and attitude.

Grounding in these details and with an aim of offering basis to support and improve teachers' assessment capabilities, this study has been taken into consideration, aiming to contribute to the growing literature on assessment literacy by minding the gap of the assessment literacy of the in-service public elementary school teachers' assessment literacy of the indigenous communities in Northern Philippines. Specifically, it sought to answer the following questions:

1. What is the level of assessment literacy of the in-service public elementary teachers?
 - 1.1. Are there significant differences on the level of assessment literacy according to school category, academic qualification, and years of teaching experience?
2. What is the extent of use of the assessment practices of the in-service public elementary school teachers?
 - 2.1. Are there significant differences on the extent of assessment practices in terms of school category, academic qualification and years of teaching?
3. How does teacher assessment literacy interact with assessment practices?
 - 3.1. What is the influence of school category, academic qualification, and years of teaching experience on teachers' assessment literacy and practices?
 - 3.2. What is the influence of teachers' assessment literacy on their assessment practices?

2. Materials and Methods

2.1. Research Design

This study employed quantitative research design. According to [27], using quantitative design provides frequencies and reliability accuracies. Thus, the specific numbers collected from the instrument used in this study served as data for analysis. Under the design, descriptive analysis was conducted. Through the method, it was believed that authentic findings and conclusions were deduced and appropriate recommendations were offered.

2.2. Sampling Technique

To guarantee that teachers who participated in the study represented all the relevant variables, purposive sampling technique was employed. As per [28] defined, it is intentional selection of informants based on their ability to elucidate a specific theme, concept or phenomenon. Thus, all the in-service public elementary school teachers from 20 public elementary schools within Bontoc District were supplicated to participate in the study consisting of 101 respondents. All the in-service teacher-participants of the study belong to the different ethnic tribes of Mountain Province, Philippines who are considered indigenous peoples. These are Applais, Balangaos, Bontoks, Gaddangs and Kankanaeys.

2.3. Instruments and Data Analysis

A survey questionnaire lifted from [29] and [6] with slight modifications served as the main gathering tool in this study. The first section collects personal information. Participants are asked for information regarding the category of school, academic qualification and years of experience in teaching.

The second section is the Classroom Assessment Literacy Inventory (CALI) lifted from [29] with modifications. The CALI was designed to find the level of assessment literacy of teachers. The survey asks teachers to examine the given five scenarios and answer seven questions at the end of each scenario. Each of the seven questions within a single scenario is aligned to one of the seven standards.

For Standard 1, it supposes that teachers are skilled in choosing assessment methods appropriate for instructional decisions. Questions that measure this ability are items 1, 8, 15, 22, and 29. Standard 2 describes teacher's skills in developing assessment methods appropriate for instructional decisions. Question item number 2, 9, 16, 23, and 30 measure the ability to develop appropriate assessment methods. Teacher's ability to administer, score, and interpret the results of both externally produced and teacher-produced assessment methods are defined in Standard 3 and the questions that measure this standard are 3, 10, 17, 24, and 31.

Standard 4 requires teachers to be skillful in using assessment results when making decisions about individual

students, planning teaching, developing curriculum, and school improvement. Question item number 4, 11, 18, 25, and 32 address the level of competence in Standard 4. Standard 5 says teachers should be skilled in developing valid pupil grading procedures that use pupil assessments. Question item number 5, 12, 19, 26, and 33 address Standard 5. Standard 6 addresses the ability of teachers to communicate assessment results to students, parents, other lay audiences, and other educators. The questions measuring this ability are number 6, 13, 20, 27, and 34. Standard 7 suggests teachers to be skilled in recognizing unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information. The questions measuring this standard are 7, 14, 21, 28, and 35.

The final section of the survey questionnaire is the revised Assessment Practices Inventory (API) lifted from [6] with modifications. The API used in this study was categorized into three. Items 1 to 9 refer to the first category which is the assessment purpose. Items 10 to 16 represent the second category which is assessment design and the final 17 to 21 items are coupled to the third category which is the assessment communication.

The abovementioned tools were given to the participants and were asked to answer the questionnaire checklists for an hour. After that, the researchers collected their responses and interviewed some of the teachers together with their principals. Their responses were recorded and analyzed.

On the other hand, for the descriptive analysis of the quantitative data, frequency, percentage, weighted mean, and the standard deviation were used to determine teachers' level of assessment literacy and extent of use of assessment practices.

To guide the researchers in determining and interpreting the level of assessment literacy of the in-service public elementary school teachers and to quantify the perceptions of the respondents in terms of the extent of use of the assessment practices a five point Likert' scale was used. Moreover, F-test and T-test were employed in determining significant differences in terms of school type and educational attainment, respectively and Chi-Square test was used for relationship.

3. Results

3.1. Profiles of the Teacher Respondents

Of the 101 public elementary school teachers surveyed in the Department of Education – Bontoc District, 71.29% of them are teaching in small schools, 17.82% of them are teaching in medium schools and 10.89% of them teach in big school. 40.21% of them are Bachelor's Degree graduates and 59.79% have obtained M.A. units or finished Master's Degree. For length of service of these teachers in the Department of Education, 21.65% of them have only 1 – 5 years teaching experience; 22.68% have 6 to 10 years of teaching experience which is similar to percentage of those who have 11 to 15 years of teaching experience; 15.46% of them have 16 to 20 years of teaching experience and 17.53% have 21 or more years of teaching experience.

3.2. Assessment Literacy Level of the In-service Public Elementary School Teachers

Table 1. Level of Assessment Literacy of the In-Service Public Elementary School Teachers in Bontoc District

Standards	Mean Score	Mean Percentage Score	DE	SD
Standard 1	2.23	44.75%	P	18.58
Standard 2	1.46	29.11%	P	18.44
Standard 3	1.22	24.36%	P	18.46
Standard 4	1.97	39.41%	P	21.06
Standard 5	1.24	24.75%	P	18.79
Standard 6	1.25	24.95%	P	21.62
Standard 7	1.36	27.13%	P	18.24
Overall Mean	10.72	30.64%	P	8.63

Table 1 shows the level of assessment literacy of the in-service public elementary school teachers. It can be gleaned that the overall mean score acquired by the in-service public elementary school teachers is 10.72 with a mean percentage score of 30.64%. This means that their assessment literacy level is low.

Table 2. Comparison on the Assessment Literacy of the In-Service Public Elementary School Teachers Grouped According to Their Profile

Indicators	Mean Score	Mean Percentage Score	DE	SD	f-value	p-value
Standards/ Type of School						
Small School	10.70	30.56	P	9.06	1.032	.360
Medium School	10.17	29.05	P	7.73		
Big School	11.82	33.77	P	6.74		
Standards/ Educational Qualification						
Bachelor's Degree	10.50	30.00	P	7.63	1.063	.305
Master's Degree/ with units	11.15	31.87	P	10.21		
Standards/ Years of Experience						
1 – 5 years	11.24	32.11	P	9.52	0.543	.704
6 – 10 years	10.30	29.44	P	8.33		
11 – 15 years	11.19	31.97	P	7.91		
16 – 20 years	10.20	29.14	P	8.17		
21 years and above	10.41	29.75	P	9.21		

In terms of school type, statistical analysis using f-test reveals that the f-value is 1.032 ($p= .360$) which implies a non-significant result. This suggests that there are no significant differences in the assessment literacy levels of the teachers grouped according to type of school where they belong. This further illustrates that the teachers from the different schools regardless if it is big or small, do not differ in assessment literacy level.

Moreover, t-test reveals that the t-value is 1.063 ($p=.305$) which implies a non-significant result in terms of educational qualification. Hence, there are no significant differences in the assessment literacy levels of the teachers when grouped according to their educational qualifications.

In terms of years of experience, statistical analysis using f-test reveals that the f-value is 0.543 ($p=.704$) which

suggests that there is no significant difference in the assessment literacy level of the public elementary teachers grouped according to their years of teaching experience.

3.3. Assessment Practices of the In-service Public Elementary School Teachers

Table 3 shows that the overall mean is 4.37 with a standard deviation of 0.753. This means that the elementary teachers always consider assessment purpose, assessment design, and assessment communication in practicing assessment. In terms of the three factors which are purpose, design, and communication, specific results showed that the teachers' highest mean score is 4.45 (assessment purpose) which is also almost equal to 4.44 (assessment design).

Table 3. Extent of Use of the Assessment Practices of the In-Service Public Elementary School Teachers

Indicators	Mean	DE	SD
Assessment Purposes			
1. To check the attainment of lesson objectives.	4.78	A	0.442
2. To establish student learning.	4.64	A	0.562
3. To increase student learning.	4.27	A	1.252
4. To develop students' higher order thinking skills.	4.53	A	0.941
5. To construct test that measures attribute/ behavior as stated in my teaching objectives	4.45	A	0.907
6. To plan instruction.	4.58	A	0.858
7. To determine the pace of my instruction.	4.34	A	0.960
8. To determine the strategies that suit my student learning needs.	4.62	A	0.696
9. To provide feedback to my students.	4.63	A	0.777
<i>Weighted Mean</i>	4.45	A	0.780
Assessment Design			
1. Prepares table of specifications as guide in constructing test.	4.81	A	0.528
2. Uses clear directions when giving assessment like tests and projects.	4.74	A	0.648
3. Uses answer key when marking objective tests like multiple choice, true-false and matching types.	4.57	A	0.810
4. Uses rubrics when marking other assessment types such as essay test, projects and student demonstration.	4.38	A	0.804
5. Uses reference table or standard procedure in transmuting scores into grades.	4.51	A	0.941
6. Uses established procedure in deriving grades from different assessment methods.	4.33	A	0.937
7. Interprets assessment results according to the established scale.	4.38	A	0.752
<i>Weighted Mean</i>	4.44	A	0.798
Assessment Communication			
1. Explains to students and their parents how grades are derived.	4.65	A	0.594
2. Explains to students and their parents the meaning of assessment results.	4.39	A	0.726
3. Explains to students and their parents the meaning of the national/regional examination results (e.g. average score, percentile rank, etc.).	4.11	F	1.039
4. Writes comments on student test papers.	3.83	F	1.079
5. Writes comments on student report card.	4.16	F	1.338
<i>Weighted Mean</i>	4.14	F	0.874
Overall Mean	4.37	A	0.753

Table 4. Comparison on the Extent of Assessment Practices of the In-Service Public Elementary School Teachers Grouped According to Their Profile

Indicators	Mean	DE	SD	f-value	p-value
Purpose/ School Type					
Small	4.40	A	0.661	1.039	.358
Medium	4.16	F	1.172		
Big	4.53	A	0.336		
Purpose/ Educational Qualification					
Master's Degree/ with units	4.43	A	0.454	0.902	.345
Bachelor's Degree	4.27	A	1.075		
Purpose/ Years of Experience					
1 – 5 years	4.30	A	0.477		
6 – 10 years	4.38	A	0.466	0.287	.886
11 – 15 years	4.61	A	0.326		
16 – 20 years	4.31	A	1.273		
21 years and above	4.37	A	1.247		

It can be gleaned from the table that the f-value under indicator “purpose/school” is 1.039 with a $p > .05$. The t-value for “purpose/ educational qualification” is 0.902 with $p > .05$. And lastly, “purpose/years of experience” has an f-value of 0.287 with $p > .05$. These imply that the teachers grouped according to their school type, educational qualification and years of experience are not significant which means that they have the same level of assessment practices.

3.4. Interaction among Assessment Literacy, Assessment Practices and the Demographic Variables

Table 5. Relationship of Assessment Literacy and the Profile of the Public Elementary School Teachers

Indicators	Pearson Chi-Square value	p-value
Standards * School type	36.890	.180
Standards * Academic Qualification	31.106 $CV = 0.518$.009
Standards * Years of Experience	67.159	.245

Statistical analysis using Chi-Square test reveals that there is no significant relationship between assessment literacy and the school type where the respondents are working as seen in the Chi-Square value of 36.890 ($p = .180$). Aside from that, it also reveals a non-significant result on the assessment literacy and years of experience as seen in the Chi-Square value of 67.159 ($p = .245$). However, assessment literacy and academic qualification shows a significant result with Chi-Square value of 31.106 ($CV = 0.518$, $p < 0.05$). This means that assessment literacy is positively influenced by academic qualification as this can be interpreted that teachers with higher academic qualifications tend to get higher assessment literacy level.

Table 6. Relationship of Assessment Practices and the Profile of the Public Elementary School Teachers

Indicators	Pearson Chi-Square value	p-value
Assessment Practice* School type	5.157	.524
Assessment Practice * Educational Attainment	6.678	.083
Assessment Practice * Years of Experience	15.443	.218

Statistical analysis using Chi-Square test reveals a non-significant result. It can be gleaned that school type, educational attainment and years of experience has nothing to do with the assessment practice of the respondents as seen in their Chi-Square values of 5.157 ($p = .524$), 6.678 ($p = .083$) and 15.443 ($p = .218$), respectively.

Table 7. Relationship between Assessment Literacy and Assessment Practices of the Public Elementary School Teachers

Indicator	Pearson Chi-Square value	p-value
Assessment Literacy *	535.063	
Assessment Practices	$CV = 0.594$.004

Statistical analysis using Chi-Square test reveals that there is a significant relationship between assessment literacy and assessment practice as Chi-Square value is 535.063 ($CV = 0.594$, $p = .004$).

4. Discussions

4.1. Assessment Literacy

The assessment literacy of the in-service public elementary school teachers is considered poor. To support this, informal personal interviews were made to some of the teacher respondents. Interview questions focused on classroom assessment concepts and practices based on the given standards. One question asked to the teacher respondents was on how they assess the performance of their pupils. According to the teachers interviewed, they download assessment tools from the internet and make some modification to these tools before using. They also employ those tools like rubrics that are already printed in the books. Some teachers even disclosed that they borrow assessment tools like examination papers prepared by their colleagues. A question was also asked whether these assessment methods they were using are valid and reliable. The respondents commonly answered that their assessment methods were valid and reliable. However, when they were questioned when is a tool valid and reliable, most of them responded that a tool is valid and reliable if it is aligned to the learning competency. Of these teachers' responses, it

appeared that their view on validity and reliability were the same. A teacher even admitted that she does not know validity and reliability.

The teachers were queried as well on how they administer, score, and interpret assessment results. Based on their answers, it seemed that only one common answer was brought out and that was to give clear instructions prior to quiz or test proper at the same time. In contrast, Gabuyo [15] suggests more than 20 guidelines in administering before, during and after test and that the response of the teachers is just one among these. Nonetheless, some teachers confessed that they just distribute exam papers and let pupils answer the test since instructions are already in the test papers. In scoring, the teachers maintained that they count the number of correct responses acquired by the pupils from the tool. They also declared that they give additional points to non-achievement factors like attendance and behavior of pupils for some good reasons. Their responses negated the findings of [30] – [34] that teachers should weigh assessment components according to instructional emphasis and base grades on achievement-related factors only and non-achievement factors such as effort, ability, attitude, and motivation should not be incorporated into subject-matter grades because they are hard to define and measure. Teachers also employ rubrics from internets or textbooks in scoring some of pupils' performance tasks. Then again, when the teachers were asked if they can develop their own rubric, one teacher admitted that he does not know how to construct rubric. Another respondent self-proclaimed that they lack knowledge in developing assessment methods particularly on test item construction and he even mentioned that they placed seminars on constructing test items under their IPDP (Individual Professional Development Plan). In interpreting assessment results, the respondents shared that they only based their interpretation on the given scales by the Department of Education such as a quarterly grade of 75% - 79%, which can be interpreted as fairly satisfactory.

Moreover, one of the notable responses of the respondents touches their awareness particularly on communicating assessment results and recognizing inappropriate assessment methods (Standards 6 and 7, respectively) when they were asked about these. As some of them shared that they regularly communicate results to pupils, they, however, did this inappropriately. According to some of them, they publicized achievement grades to their pupils with an aim of motivating those less achievers to exert more effort in their classes. Though the purpose of these teachers was good, their action was illegal and unethical. Airasian suggests that when using assessment results, teachers should protect students' confidentiality (as cited in [31]). Also, public announcing of grades may lead to the opposite result to what the teachers believed. Kids may use the public announcement as a means of scapegoating, teasing and other forms of bullying.

Thus, the result of this study concurs with the findings of [1], [27], [29], [35] - [38] and local studies such as the studies of [39] and [6] that teachers lack literacy on classroom assessment.

In terms of the standard, findings of this study reveal that teachers' strength is on Standard 1 which is parallel with the result drawn from the study of [6] but differed with weakness. The present study is lowest in Standard 3 while the earlier study is lowest in Standard 2. Other inconsistencies of results are also found in other researches. For example, in the study of [35], in-service teacher respondents were strongest in Standard 3 and weakest in Standard 6. The study of [27] also displayed that in-service teachers performed highest in Standard 3 but weakest on Standard 5. In the Philippines, the study of [39], which includes graduate students, revealed that of the seven standards, the highest of respondents is Standard 2 and the lowest is Standard 6.

The in-service public elementary school teachers' level of assessment literacy according to school category vary from one school type to another with teachers from big school obtaining the highest general mean score of 11.82 (33.77%) out of 35 items followed by teachers from small schools with an overall mean score of 10.70 (30.56%) and teachers from medium school with a mean score of 10.17 (29.05%) as a whole but showed no significant difference. This implies that they lack assessment literacy. When the respondents are grouped according to educational qualification, it is shown that there are no significant differences in the assessment literacy. However, this finding is contrasted to what is expected to teachers with Master's degree that they, to a certain point, should possess higher literacy level. Postgraduate studies offer more advance pedagogical courses that could expose and help enhance teachers' familiarity with educational concepts and processes. Nevertheless, a teacher respondent shared that though he is a Master's degree holder, classroom assessment was never discoursed in their courses. Yet, this result is similar to the finding of the study of [38] and [32]. These studies revealed that there were no significant differences in assessment literacy level of teachers according to their academic qualification. This implies that teachers who have obtained postgraduate degree/s or earned M.A. units do not significantly differ with bachelor's degree holder teachers as to their knowledge and competence on classroom assessment. However, the result of the present study is contrary to [29] who exposed that there was a statistically significant difference between the educational levels of attainment and the assessment literacy level. Similarly, [6] in his research appeared that there was significant difference between bachelor's degree and postgraduate. In their studies, it was found out that as educational attainment increases, the level of assessment literacy level increases as well.

However, when the teachers are grouped according to their years of teaching experience, the result showed no

significant difference. This present result is not expected as teachers with more years in the service were expected to be more knowledgeable in areas of assessment as the result of their experience and learning while in teaching profession. This present finding deviates from [6] who revealed that in terms of years of teaching experience, younger teachers particularly those with 1 – 5 and 6 -10 teaching experience possessed higher knowledge on assessment. As he concluded, teachers who were young in the service have fresher knowledge on assessment making them obtain higher scores from the test. This is also backed by [29] who showed that there were significant differences in level of assessment literacy between the teachers with 0 - 3 years of teaching service group and the 4-10 and the 11-20 years of teaching service group. In his study, teachers with 4 – 10 and 11 – 20 years in the service scored significantly higher for their assessment literacy level than those with 0 – 3 years of teaching experience. As he cited, teaching experience improves assessment literacy level.

4.2. Assessment Practice

The in-service public elementary school teachers in the indigenous communities in Northern Philippines “always” practice assessment in their classroom. Specifically, in using assessment and in doing assessment-related activities, teachers’ main consideration is the purpose of doing it like checking the attainment of lesson objectives and increasing student learning. In addition, they always consider the assessment design when engaging assessment. This too suggests that teachers always follow the procedures in choosing and applying assessment methods and or tools to get meaningful results from the pupils. Some examples of the procedures are the preparation of table of specifications as guide in constructing test and giving clear directions when giving assessment like tests and projects. Moreover, they indicated that they also considered assessment communication when undertaking assessment. Unlike assessment purpose and design which they always consider, this time the teachers’ practice in communicating assessment results is frequent as depicted from the table. This demonstrates that they frequently communicate assessment results to students and parents or other stakeholders. Some of the ways on how teachers communicate assessment outcomes give feedback/comments and explain about grades.

However, the result on assessment practices that they always consider purpose and design of assessment showed inconsistency with their poor literacy as revealed in the earlier discussion. The specific standards of assessment literacy touch the concepts in considering purpose and in designing assessment method. It was mentioned in the earlier discussion that teachers indeed, practice assessment but they also admitted that their knowledge in areas of classroom assessment is inadequate. Thus, this denotes that the teachers were employing assessment but are doing it

inappropriately. Further, results of assessment practices revealed that they just frequently communicate assessment results and poor assessment literacy level particularly for Standard 6 (communicating assessment results) which showed certain degree of consistency. During the interview, respondents disclosed that they explain to pupils and to their parents how grades are being computed. Teachers mention that they regularly communicate the results of their assessment to them. However, when it comes to results of national test such as national achievement test, one of the respondents admitted that they neglect to communicate these to pupils and parents. On the other hand, some teacher respondents cited that they give and write feedbacks to student’s papers before but they suddenly stopped doing this due to additional paper and technical works required by the Department of Education. In addition, the respondents also pointed out that they were writing comments on students’ cards before because the report card requires it and space is available and is provided on it for that purpose. But at present, the teachers admitted that they do not write comments on student’s card because of the changes of its format prescribed by the Department of Education. The report cards being used at the present time do not require teachers to write comments.

The present study concurs with [6] who investigated the extent of assessment practice of teachers in Tawi-Tawi, Philippines and found that teachers frequently and constantly practice assessment giving consideration to purpose, design, and communication. Both studies showed that teachers always consider the purpose of assessment, the design of the assessment method or tool, and communication of assessment results whenever they perform assessment-related activities.

However, when subjected to statistical analyses, results showed no significant differences which imply that assessment practice of the respondents when grouped according to school type, educational qualification and years of experience are on the same level. But [40] revealed that past researches and her study had shown that teacher’s characteristics such as educational level can be related to the teacher’s beliefs about classroom assessment practices. She revealed that teachers who attained higher educational level were more skilled to practice assessment as compared to those with lower educational level attained. Nevertheless, the present study supports the findings of [6] that there was no significant difference of the mean scores for assessment practices of teachers grouped according to their years of teaching experiences.

4.3. Relationship of Assessment Literacy, Profile of the Respondents and Assessment Practice

In terms of relationship between the respondents’ profile and assessment literacy, only the academic qualification has a positive relationship with the assessment literacy. This result is expected as teachers who earned master’s

degree or units were more exposed to more advanced educational concepts as result of their discussion to their postgraduate courses compared to those who have not undergone any postgraduate studies. As [6] claimed, teachers with more academic qualification are deemed more competent due to their frequent exposure and more familiarity with teaching concepts and processes.

Findings of this study somehow disclosed consistencies and inconsistencies with other researches with [6] wherein overall assessment literacy has significant relationship with academic qualification. However, result of the present study that overall assessment literacy has no significant relationship with years of teaching experience showed inconsistency with the outcomes of the study of [38] and [6]. Their studies on the other hand, came up with a result that assessment literacy is positively influenced by years of teaching experience.

Furthermore, findings showed that school type, educational attainment and years of teaching experience of the public elementary school teachers have nothing to do with their assessment practices. On the contrary, the research conducted by [6] disclosed that teachers' educational attainment and years of teaching experience have positive influence on assessment practices. His study revealed that the higher the academic qualification and length of teaching experience of teachers, the more they do assessment activities for appropriate purpose, the more they practice appropriate assessment design and the more they communicated assessment results appropriately to students and other stakeholders.

Moreover, the recent findings showed that assessment literacy is related to assessment practice. This result is in contrast with the discussion made by [41] on beliefs and practices. As she cited, "conceptions, like other types of teachers' beliefs, significantly influence their decisions and professional activity". According to [6], one possible explanation is that, perhaps, teachers just practiced the scenarios depicted in the survey items without using assessment to base their decisions to employ those practices. In addition, it can be noted that items under the teaching practices questionnaire were in the form of Likert-type scale in which teachers were requested to indicate the frequency of their teaching practice on the specific questions presented to them. As such, it could be that teachers just reported 'always practice' on most of the situations depicted in the items without actually doing them in the class. Also, teachers' responses on teaching practices could be in the form of their perceptions or beliefs, which cannot always be expected to agree with their knowledge on assessment.

5. Conclusions

Based on the results and findings, the following conclusions were drawn:

The assessment literacy level of the public elementary

school teachers in the indigenous communities in Northern Philippines is low. This implies that they lack concepts of classroom assessment. Hence, it is really recommended that there should be series of seminars and trainings on classroom assessment to be conducted to the elementary teachers.

The public elementary school teachers generally indicated that they always practice assessment with respect to purpose, design, and communication. In other words, when doing assessment-related activities, they at all times consider the purpose of doing it, the procedures in choosing and applying the relevant assessment methods and/ tools, and the proper communication of assessment results. Thus, assessment results should not be limited to individual's performance but focus on the totality of the individual; and this must be communicated properly.

The demographic variables which are school type and years of teaching experience do not influence teachers' assessment literacy of the elementary teachers but academic qualification impacts the teachers' literacy on assessment. Likewise, the assessment practices of elementary teachers are not influenced by the school type, academic qualification, and the years of teaching experiences. Moreover, assessment literacy of the teachers interacts with their assessment practices. Hence, teachers are encouraged to enroll in postgraduate studies.

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