

Performance-based Assessment in Selected Higher Education Institutions in Cebu City, Philippines

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Abstract –The study described how performance-based assessment was used in selected higher education classrooms in Cebu City, Philippines. Purposive sampling was used in the selection of six students from one sectarian and one non-sectarian institutions of higher learning. A qualitative content analysis was used in analyzing the key informants' verbatim accounts, gestures and other factors. Motivation to learn, self-regulation and willingness to work in group were the emerging categories/themes identified in the study.

Keywords – performance-based assessment, purposive sampling, qualitative content analysis, verbatim accounts

INTRODUCTION

Assessment is part and parcel of any instructional process. Whatever the teacher plans and delivers, assessment of student outcomes follows. These trifocal functions of instruction are very much interrelated and evident in the learning workplace which can be observed either in a local or foreign classroom.

In layman's term, assessment is the collection of information about students' learning, the gathering of evidence of what students know and can do. Further, Popham defined assessment as a process of determining students' performance to test whether learning has taken place in the classroom[1]. It involves a broader scope and unlimited label for the measurement techniques a classroom teacher utilizes. Moreover, Airasian and Russell affirmed that such label helps teachers be informed and made aware of that assessment of student learning is not confined to paper-and-pencil tests alone [2].

Teachers view assessment as a comparison of student's performance from a given criteria. Students, on the other hand, perceive assessment as a room for improvement and an avenue for further learning. Once assessment is done, feedback on performance should be provided to identify strengths and weaknesses thus, monitoring students' learning.

Assessment can be categorized as traditional and alternative. Traditional assessment is commonly called paper and pencil tests, developed by a subject

teacher or any licensed testing agency. McMillan, on the other hand, stressed that alternative assessment is based on different philosophy and goals to provide a stronger link between instruction and assessment making learning more significant [3]. It includes paper presentations, debate, defense for investigatory projects and other oral discourses. It serves as a substitute to traditional assessment.

With the introduction of these two types of assessment in the academe, educators and other advocates of learning have been clamoring on what type of assessment is effective to use in the classroom. Foreign studies revealed the relevance of alternative over traditional assessment. Others even opted to have alternative assessment as their form of assessing student learning.

From the local perspective, the use of both types of assessment remains a controversial issue in any academic discussion and debate. Most Filipino classrooms prefer to use both since one cannot be separated from the other for reason that students need to take college admission tests as well as licensure examinations in various fields of discipline after graduation. This is evident in content courses while skill-related subjects adopt alternative assessment as their form of assessing student learning and performance.

This study focused on the use of alternative assessment specifically performance-based. According to Wren, performance-based assessment

involves students' performance of a given task [4] and a form of assessment where students respond to the given task, either in oral or written form to produce a product or performance [1].

Further, Airasian and Russell reiterated that performance-based assessment is skill demonstration where products such as research projects, essays, artworks, and/or performance including oral presentations, debate and poems are integrated to real-life situations [2]. Such performance requires students to showcase their complex skills, an avenue for metacognition enhancement. For products as outcomes, authenticity is evident since original works of students are fully demonstrated. In addition, Palm pointed out that performance-based assessment is viewed as having better possibilities to measure complex skills and communication, which are considered important competencies in today's classroom [5]. As such, performance based assessment, is considered as one of the best assessment techniques in measuring the development of 21st century students' skills than traditional assessment.

Stiggins [6] in particular, shared that performance-based assessment involves direct observation of a student engaged in a process or observing a product the student makes and judging its quality according to a set of criteria. Moreover, Linn and Gronlund [7] contended that performance-based assessment provides a basis for teachers to evaluate both the effectiveness of the process and/or product. Students' involvement in the assessment of their learning provides an avenue for empowerment where they take ownership of their learning.

Performance-based assessment is a task assessment which elicits an original or authentic response constructed by the student. Quiter [8] explained that the assessment process is observed and judged both by the students and teacher using a skill-focused rubric. With performance-based assessment, the teacher and the students should have agreed the scoring rubrics to use to meet their intended expectations.

The development of performance-based assessment as posited by Moskal involves a general process that has been described by a number of authors[9]. These processes include defining the purpose, choosing the activity, and developing the scoring criteria.

Defining the purpose involves identification of concepts, knowledge, and/or skills that will be enhanced. As observed, teachers need to be guided with some concepts as they identify the possible learning objectives to consider. These include the cognitive, social, affective and metacognitive skills that students need to develop.

For the cognitive skills, students need to enhance both their oral and written communication skills. Further, their ability to solve mathematical problems and probe scientific concepts integrated with their daily lives are also considered in cognitive skills development.

Working independently as self-regulated learners and interacting with peers are some of the dimensions of students' social development. In addition, the development of leadership skills, sensitivity with others needs and social awareness is considered. In terms of affective skills, all aspects concerning students' values, attitudes, and behavior are emphasized. This also includes appreciation of individual differences, promotion of peace and unity among men and others.

For metacognitive skills development, students' abilities to reflect, evaluate, critique and monitor their progress are considered. Their engagements in all of these higher-order thinking tasks are assessed and evaluated.

Another point to consider when engaging in performance-based assessment is for teachers to look into the types of problems they want their students to solve. Conducting researches, working with experiments and other projects are some tasks requiring metacognitive skills enhancement where students' engagement is evident. Further, application of concepts and principles should also be considered. This includes students' understanding of cause and effect relationships and application of principles in daily life.

The next step in performance-based assessment implementation in the classroom is to select the performance activity. Brualdi [10] emphasized that teachers should first consider several factors such as availability of resources, time management and needed data to evaluate student's performance.

Further, Moskal [9] identified some recommendations on the use of performance-based assessment in the classroom. These include assessments that reflect real-life situation activities and at the same time provide students with valuable

learning experiences. Another concern focuses on the clarity of assessment goals and objectives and their alignment with measurable outputs. Fairness and objectivity of assessment should also be accounted for [9].

The development of scoring criteria or rubrics is the last task to consider in the development of assessment activity. Rubrics are evaluation tools used to evaluate students' performance or product. Wiggins and McTighe [11] defined rubric as a scoring guide consisting of a fixed measurement and descriptions of the dimensions for each criterion. Before using a rubric, it must be definite in terms of producing an outcome or a performance.

Moskal [9] identified the kinds of rubrics for evaluating performance-based assessment, namely; analytic and holistic. The first divides a performance into separate categories and each is evaluated using a separate scale while the latter is used as a single scale to evaluate the larger process.

The benefits of performance-based assessments are well documented based on several researches. However, there are pitfalls arising on the use of performance-based assessment in the classroom. Stecher [12] underscored that the complexity of performance tasks measuring students' thinking demands for a rubric which is difficult to develop. Thus, the standardization of scoring procedures used in performance-based assessment poses another reason for some teachers' non-utilization. In addition, Webb, Schlackman and Sugrueat tested that performance on complex tasks differ in terms of subject area, making students' performance interpretations complicated [13]. Performance tasks differ in content and procedures. Because of these reasons, difficulty in evaluating student performance on a particular task and setting is encountered.

More recently, Booher-Jennings disclosed the sensationalized issue on "educational triage," where teachers use resources on students near the cut-off point for proficiency purposes at the expense of other students [14]. Even if these studies were focused on multiple-choice testing, it was predicted that the same results would be attained with performance-based assessments if the goal is to look into some parts of the curriculum or to some students' performances. Thus, the curriculum-narrowing problem will be worst making teachers to focus on task-specific activities rather than extensive skills enhancement [12].

Another thing to consider for non-utilization of performance-based assessment in the classroom is its labor intensiveness. Planning, organizing and working with the tasks, looking for the availability of materials and resources coupled with outcome presentations entail and demand more time.

Further, the cost of administering and scoring of large-scale performance-based assessment is another reason. The costs incurred for large-scale performance-based assessment are three to five times higher than traditional tests. Since these are costly, in terms of cost and time, initial task presentation is a problem.

With these arising problems, Topol, Olson and Roeber [15], suggested that the development and implementation of performance assessments should be part of a larger assessment system utilizing costs quite similar to traditional or conventional tests. Such move could be done through strategic use of technology, teacher scoring, and economies of scale achieved by countries working in a consortium. Further, researchers are still working with experiments on which tools are fitted to tasks development which is cost-friendly such as the use of "shells" of Solano-Flores et al., to generate multiple versions of a task [16] and Spector's dynamic evaluation of enhanced problem-solving (DEEP) to name a few [17]. As Lane posited, these approaches that have been developed by researchers and test publishers, would help reduce in the development and scoring costs of assessment tasks [18]. Further, Stecher emphasized the use of computerized scoring procedures to reduce the scoring costs for performance tasks development [11]. Such suggestion was validated by Klein that the accuracy of computerized scoring would be a replacement for human scoring as what teachers are currently practicing [19].

Despite the limitations on the use of performance-based assessment in the classroom, its advocates still continue its implementation. Its utilization coupled with recent developments still flourish in every academic engagement.

OBJECTIVES OF THE STUDY

This study described the selected higher education students' engagements on performance-based activities. The factors contributing to the students' academic engagements on performance-based tasks were also identified in the study.

MATERIALS AND METHODS

This study utilized a qualitative content analysis where an interpretation of the content of text data was used. According to Patton [20], qualitative content analysis involves data reduction and sense-making for the identification of emerging meanings and patterns. Purposeful sampling was used where six students from two selected sectarian and non-sectarian higher education institutions in Cebu City were identified. A researcher-made interview guide was used as basis in the conduct of interviews from the identified key informants. Observations were conducted by the faculty researchers during performance-based activities' engagements in class. Aside from observations, Focus Group Discussions were also facilitated to gather in-depth analysis of the collected data. Triangulation was used where the three methods of data collection validated the selected key informants' utterances, gestures, body movements and others.

According to Babbie [21], triangulation is the process of using various methods of data collection sources to test the same findings and for Neuman, it involves the use of different data collection techniques to analyze the same phenomenon to increase data reliability [22].

RESULTS AND DISCUSSION

The responses uttered by the selected key informants on the use of performance-based assessment in the classroom were clustered into three categories, namely; motivation to learn, self-regulation and willingness to work in groups.

A. Motivation to Learn

Motivation as posited by Schunk, Pintrich and Meece [23] involves goal attainment. It is the teacher's ultimate goal to understand how these processes are applied in the classroom.

Three key informants said:

With the integration of performance-based activities in our lessons, I was very much motivated to learn with all persistence to work with my assigned tasks (KI-2& 3).

I learned how to plan and organize performance-based activities with the guidance of our professor. That was my goal. (KI-1).

In a classroom where engagement is performance based, students are highly motivated to learn. Motivation to learn involves the development of goal-

oriented behaviors that stimulate the students to participate actively in the classroom. For Nevid, motivation is equated with student's learning and achievement reaching to its optimum level [24]. Students are highly motivated to learn the lesson if they believe that their engagements in performance-based activities will help them to learn more.

Further, two key informant shared:

I become decisive where I assess my progress and monitor my work (KI-4 & 6).

I was able to solve my problems since I really wanted to work with the assigned performance tasks (KI-5).

Motivation involves both physical and mental activities. As key informant students unveiled their progress and involvement in performance-based activities, they disclosed that becoming a decisive person made them feel aware of the status of their learning. Problem solving skill was also developed in one of the key informants since working with the assigned tasks is his obligation as a student aside from being motivated to learn.

B. Self-regulation

Self-regulation is the ability to keep oneself in proper composure despite the presence of distracting behaviors and impulses. According to Goleman, a self-regulated person has a predisposition towards reflection and thoughtfulness [25]. He values integrity and has the ability to resist to impulsive impulses. Moreover, a self-regulated person is adept to acceptance of uncertainty and change [25]. This is one of the best skills the key informants shared.

As one key informant narrated:

I was able to see the good side of my classmates. We always keep the communication open and act in accordance with our values (KI-6).

This utterance indicates the development of self-regulation in one of the key informants. The good traits of her classmates made her realize that engagement in performance-based tasks does not only require compliance but discovering someone's best practices and good traits.

Another key informant disclosed:

I become sensitive with the needs of others. I learned how to appreciate them regardless of their shortcomings (KI-2).

This verbatim account reveals the flexibility and adaptability of the key informant to his social environment. Learning how to accept the person despite of some incompatibilities made him more a self-regulated individual. Cook J. & G. underscored that self-regulation is the ability to monitor and control ones' behavior, emotions, or thoughts, adjusting them with the calls of the situation [26].

C. Willingness to Work in Groups

As observed, the student key informants' motivation to work in groups was evident. Although the atmosphere is informal, they still continued to work and engage in performance-based activities in groups.

As one key informant stressed:

I really gave my best working with my group. We planned, organized and created the performance based on the expectations of our teacher (KI-4).

The key informants gave their best shots in terms of engagements with performance-based tasks. Since their products in the form of performances were authentic, they really affirmed the ownership of their outputs. They were made to disclose that their works are original, entirely different from others.

Another two key informants revealed:

As we work together, we really aimed to attain our goal-producing a performance which is fitted to the constructed rubric (KI-2).

We are committed to work together as one, despite all the odds that we encountered (KI-3 & 6).

The key informants work for one goal-to produce a performance output designed to meet the agreed rubric. The teacher's expectations are also considered to avoid ambiguity of the output.

Further, the key informants are able to keep going when problems arise. As self-regulated students, they remain calm when problems arise and cheer up again when they are in trouble.

CONCLUSION AND RECOMMENDATION

The use of performance-based assessment in selected Philippine classrooms brought significant effects in assessing students' learning. Results

revealed that students were highly motivated to learn in classroom engagements specifically when lessons are integrated with performance-based tasks. Students became self-regulated as they work individually and in groups. Their willingness to work in group was highly observed since most of them were all goal-oriented. Their sensitivity on the needs of others was one of the best manifestations they exhibited.

With these findings, the utilization of performance-based assessment provided opportunities for teachers to learn, identify students' strengths and weaknesses, thus monitor their growth and progress. On the contrary, constraints evolved on the use of performance-based assessment. Some teachers find it time-consuming, costly, rubric construction becomes difficult due to complexity of tasks, curriculum narrowing, encountered backlogs, too laborious and more often than not, their reluctance to change and improve their traditional teaching methods and strategies.

With the emergence of these limitations, it is recommended that performance-based assessment be utilized in all local and foreign classrooms to check and improve its implementation. Worldwide campaign on the use of performance-based assessment and other forms of alternative assessment be conducted across countries. Tools fitted to tasks development which are cost-friendly, generation of multiple versions of a task and other experiments be utilized to resolve the existing problems some teachers are encountering. Lastly, a continuous evaluation on the use of performance-based assessment be conducted for effective teaching and learning, as this will serve as an instrument for meeting all the challenges in the future.

REFERENCES

- [1] Popham, J. W. (2008). *Classroom assessment: What teachers need to know*. Boston: Pearson Education, Inc.
- [2] Airasian P. W. & Russell, M. K. (2008). *Classroom assessment: Concepts and applications*. Boston: McGraw-Hill Higher Education.
- [3] McMillan, J. H. (2001). *Essential assessment concepts for teachers and administrators*. Corwin Press, Inc. A Sage Publication Co., Thousand Oaks, California. Retrieved October 1, 2015 from books.google.com > Education > Administration > General
- [4] Wren, D. G. (March 4, 2009). Performance Assessment: A Key Component of a Balanced Assessment System. *Research Brief No. 2*. Report from the Department of Research, Evaluation and

- Assessment. Virginia Beach City Public Schools. Retrieved August 8, 2015 from www.vbschools.com/accountability/.../ResearchBriefPerfAssmtFinal.pdf
- [5] Palm, T. (2008). Performance Assessment and Authentic Assessment: A Conceptual Analysis of the Literature. *Practical Assessment, Research & Evaluation*, 13(4), 1-11. Retrieved June 5, 2015, from <http://pareonline.net/pdf/v13n4.pdf>
- [6] Stiggins, R. J. (2008). *An introduction to student-involved assessment for learning*. (5thed.). Upper Saddle River, Nj: Prentice-Hall/Merrill. Retrieved August 20, 2015 from www.prenhall.com/stiggins/
- [7] Linn, R. L. & Gronlund, N. E. (2000). *Measurement and Assessment in Teaching*. Upper Saddle River, New Jersey: Merrill, an imprint of Prentice Hall.
- [8] Quiter, M. (2007). Performance Assessment. Presentation based on the optional reading by Popham. An Overview of Chapter 8, Popham, W. J. (2002). *Classroom Assessment: What Teachers Need to Know*. 4th ed. Boston: Allyn and Bacon.
- [9] Moskal, B. M. (2003). Recommendations for developing classroom performance assessments and scoring rubrics. *Practical Assessment, Research & Evaluation*, 8 (14). Retrieved July 13, 2015, from <http://PAREonline.net/getvn.asp?v=&n=14>.
- [10] Brualdi, A. (2000). Implementing performance assessment in the classroom. *ERIC Document Reproduction Service No. ED423312*. Retrieved October 24, 2015 from <http://ericae.net/pare/getvn.asp?v=6&n=2>.
- [11] Wiggins, G. & McTighe, J. (2005). *Understanding by Design (2nded)*. Alexandria, VA: Association for Supervision and Curriculum Development. Retrieved September 5, 2015 from www.ascd.org/ASCD/pdf/siteASCD/.../UbD_WhitePaper0312.pdf
- [12] Stecher, B. (2010). *Performance assessment in an era of standards-based educational accountability*. Stanford, CA: Stanford University, Stanford Center for Opportunity Policy in Education.
- [13] Webb, N. M., Schlackman, J., & Sugrue, B. (2000). The dependability and interchangeability of assessment methods in science. *Applied Measurement in Education*, 13 (3), 277-301.
- [14] Booher-Jennings, J. (2005). Below the bubble: "Educational triage" and the Texas accountability system. *American Educational Research Journal*, 42 (2), 231-268.
- [15] Topol, B., Olson, J., & Roeber, E. (2010). The cost of new higher quality assessments: A comprehensive analysis of the potential costs for future state assessments. Stanford, CA: Stanford University, Stanford Center for Opportunity Policy in Education.
- [16] Solano-Flores, G., Jovanovic, J., Shavelson, R. J., & Bachman, M. (2001). On the development and evaluation of a shell for generating science performance assessments. *International Journal of Science Education*, 21 (3), p. 293.
- [17] Spector, J. M. (2006). A methodology for assessing learning in complex and ill-structured task domains. *Innovations in Education and Technology International*, 43 (2), pp. 109-120.
- [18] Lane, S., Parke, C. S., & Stone, C. A. (2002). The impact of a state performance-based assessment and accountability program on mathematics instruction and student learning: Evidence from survey data and school performance. *Educational Assessment*, 8 (4), pp. 279-315.
- [19] Klein, S. (2008). Characteristics of hand and machine-assigned scores to college students' answers to open-ended tasks. *Institute of Mathematical Statistics Collections, Probability and Statistics: Essays in Honor of David A. Freeman*, 2, pp.76-89.
- [20] Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage, p. 453.
- [21] Babbie, E. (2004). *The practice of social research*. London: Thomson Wadsworth.
- [22] Neuman, L. W. (2003). *Social research methods: Qualitative and quantitative approaches*. Boston: Allyn& Bacon.
- [23] Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008). *Motivation in education: Theory, research, and applications*. Upper Saddle River, NJ: Pearson.
- [24] Nevid, J. S. (2013) *Motivation: The Psychological Factors That Guide Us*. Retrieved October 8, 2015 from psychology.about.com > ... > Psychology Glossary: M Index
- [25] Goleman, D. (July 26, 2015). Self-Regulation: A Star Leader's Secret Weapon. Retrieved October 10, 2015 from www.danielgoleman.info/daniel-goleman-self-regulation-a-star-leaders-s...
- [26] Cook, J. L. & Cook, G. (2009). *Self-regulation*. Allyn& Bacon, an imprint of Pearson Education Inc.

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