A STUDY ON UTILIZATION OF ASSESSMENT RESULTS TO IMPROVE THE QUALITY OF LEARNING

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ABSTRACT

The study examines the utilization of the results of the National Examination (UN) assessment to improve the quality of learning. The study focused on the good practice of utilizing the results of the assessment, the determinant factors that influence the utilization of the results of the valuation, and the strategy of utilizing the results of the valuation. The study was an evaluative study using an objective oriented evaluation approach. Data collection was carried out through questionnaires, interviews, and focus group discussions, with data sources consisting of national exam subjects, school principals, school supervisors, and the Regional Education and Culture Office. Data were analyzed descriptively analytically. Research findings were identified that showed good practices in utilizing assessment results, namely: remedial learning, enrichment of learning, mentoring student learning, mapping of achievement of basic competencies, collaboration of teachers through the Subject Teachers’ Consultation (MGMP), strengthening of mentoring and coaching by school supervisors, and in house training on the use of assessment results for teachers. The influential determinants include: the problem of the availability of systems and information technology networks and the internet in schools is inadequate, Most schools do not have policies and plans for the use of assessment results, the ability and professionalism of teachers both data literacy and technology literacy, which are inadequate. The strategy to strengthen the utilization of the assessment results identified is to increase the accessibility of teachers to obtain assessment data, to strengthen information technology systems and networks, to increase cooperation in the accessibility of data between schools, regional education offices, Education Assessment Centers, teacher collaboration through MGMP, Principal collaboration, and strengthen school policies and planning in the use of assessment results. It is recommended that the optimization of information technology systems and networks, operational regulations for the use of assessment results, and improvement of the supervisory function of Principals and School supervisors.

KEYWORDS

Good practice, teacher professionalism, data accessibility, policy and planning, collaboration.

1. INTRODUCTION

The study was conducted based on the fact of results of the National Examination assessment of SMP/MTs, SMA/MA, and SMK, which in the last three years showed unsatisfactory results. The average scores for all national examination subjects are still low, as illustrated in table 1.

Table 1. The average score of the national exam results in the last three years

| School            | 2017   | 2018   | 2019   |
|-------------------|--------|--------|--------|
| SMP/MTS           | 54.25  | 51.10  | 51.76  |
| SMA/MA BAHASA     | 50.10  | 50.80  | 51.63  |
| SMA/MA IPA        | 52.87  | 51.00  | 52.30  |
| SMA/MA IPS        | 47.93  | 45.69  | 46.75  |
| SMK               | 53.75  | 45.21  | 46.72  |

Source. Processed from Puspendik Kemdikbud, https://hasilun.puspendik.kemdikbud.go.id
The utilization of student learning assessment results becomes one of the primary variables to improve the quality of learning and learning outcomes. There have been many studies on the assessment results utilization for improving the quality of learning. Ramezan Jahanian (2012) suggests 4 (four) learning assessments' main functions, namely (1) diagnose, (2) syllabus revision, (3) comparison, and (4) needs analysis (Jahanian, 2012). Those four functions imply the importance of utilizing the assessment results for diagnostic purposes, syllabus revisions, comparisons, and needs analysis. Richard Murnane and Nancy Sharkey found the utilization of student learning assessment results was significant to improve learning. It was found that the utilization of assessment results was significant for schools, principals, and teachers to intervene in terms of planning for the development and improvement of the quality of learning (Nancy Sharkey, 2014). Gianina R, Baker, Natasha A. Jankowski, Staci Provezis & Jillian Kinzie (Baker, Jankowski, Provezis, & Kinzie, 2012) found that the advantage of utilizing assessment results was to strengthen strategic planning and decision making for education and learning development in schools. Jillian Kinzie (Kinzie, 2014) argues that the utilization of assessment results in the developed countries is no longer solely for the sake of improving the learning itself, but is utilized for more explicit interests for the development and improvement of institutional capacities, such as for strategic planning, accreditation, program reviews, learning objectives revisions, curriculum revisions, and also for budgeting planning especially budget allocations in strategic learning improvement activities.

The utilization of assessment results in Indonesia has become a national policy. The policy has been reinforced by numerous laws and regulations. In the Regulation of Minister for Education and Culture No. 23 of 2016, emphasized that one of the important elements in the assessment of learning outcomes at all levels and types of education is the utilization of assessment results report. As a follow up to the regulation, the Government via the Educational Assessment Center has made a report of the national examination evaluation results in the form of a time series, with varied data to meet data analysis for learning improvement. The data are equipped with a Guideline of Utilization of Assessment Results, which are annually issued. However, it is observed empirically that the implementation of utilizing the results of assessments has not been significantly carried out by teachers and schools, whereas Badrun Kartowagiran (Badrun Kartowagiran, 2012) found out good practices of utilizing assessment results for the sake of learning improvement. One of the good practices is the teacher analyzes the weaknesses in mastering student competencies and makes improvements through tutors or peers of learning.

The utilization of the assessment results is based on the theoretical framework of assessment functions, which include assessment of learning, assessment for learning, and assessment as learning. Assessment of learning is defined as an activity to assess and measure the achievement of predetermined competencies, Minimum Completeness Criteria/KKM, the absorption, and even the accomplishment of tested material indicators. Assessment for learning emphasizes the role of the teacher in utilizing the assessment results to improve learning. Assessment results become significant input and basis for teachers to assess the effectiveness of learning. Assessment as learning approach provides space and opportunity for students to get involved in the assessment process, self-assessment, and to utilize the assessment results in determining the next learning activity plan. The Ministry of Education and Culture encourages a transformation from assessment of learning to assessment for learning and assessment as learning (Pendidikan et al., 2017)

The studies conducted above have not specifically examined the problems in utilizing assessment results to improve learning. Good practices or best practices applied by teachers have not been identified, whereas they are highly useful for improving learning outcomes. An understanding of determinant factors that influence the utilization of assessment results has not been well-detected. Thus far, many strategies have been applied, but have been ineffective in improving the utilization of assessment results to improve the quality of learning. Therefore, this research will supply more studies and scientific insights on the effectiveness of utilizing assessment results to improve learning, create best practice models in utilizing assessment results, give a contribution to the efforts of evaluation on management policies, the reporting, utilization of assessment results, and provide strategies.
2. RESEARCH METHOD

This study was conducted using an objective-oriented evaluation approach through four stages of research and steps, namely the first stage is identification through the steps of field orientation, identification of data and facts through data collection and data processing. The data sources consisted of teachers, school principals, and school supervisors. Schools as a source of data were mapped by region and by school ranking. On that basis, the selected schools were schools located on the island regencies, mainland regencies, and schools in the city. The data collection instruments were developed and adapted from a data-driven dialogue model. Second, the analysis stage, which was the analysis of the implementation of utilizing the assessment results, determinant factor analysis, analysis of the improvement and strengthening strategy of the utilization of the assessment results, and analysis of the report form and data from the Puspendik assessment results. Third, the analysis stage of the results of the study through a small team and Focus Group Discussion (FGD). The FGD involved teachers, principals, school supervisors, Heads of the Provincial, Regency, and City Education Offices, Subject Teachers’ Consultation (MGMP). The final stage was the stage of preparing the report in the form of conclusions, tools, and recommendations. Data Analysis Techniques used were Fishbone analysis models in determining and compiling and in determining the determinant factors in the utilization of results.

3. RESEARCH RESULTS AND DISCUSSION

The results of this study indicate good practice of utilizing the results of the national examination assessment conducted by teachers, principals, and education units, school supervisors, and regional education offices both in provinces and districts and cities. First, good practices conducted by teachers are focused on activities (1) analysis of KD and IPK indicators that have not been achieved by students, (2) analysis of achievement of KD and IPK, (3) mapping of students who answered correctly, (4) questions or material that have not or are not mastered, (5) analyze the level of taxonomic achievement, especially HOT skill, (6) carry out remedial learning, in the form of re-learning and additional tasks, and (7) carry out enrichment of learning in the form of independent tasks, tutorials.

The involvement of teachers in the utilization of assessment results shows different characteristics. Graph 1 shows that teachers in the City show higher utilization of the assessment results compared to teachers in the mainland and island regencies. Teachers in the cities of Tomohon and Manado show a high rating scale in the utilization of assessment results, compared to teachers in the mainland regencies namely Minahasa, North Minahasa, and also in the Sitaro Islands Regency.

![Chart 1. Implementation of the utilization of assessment results](image-url)
Viewed from the form of learning improvement, the implementation of remedial and enrichment is a kind of utilization of assessment results, are mostly carried out by teachers in schools. The remedial is carried out by the majority of teachers, especially in the cities, which is 65% of teachers in the City of Manado and 57% in the City of Tomohon gave high scores on the utilization of the assessment results, compared to other regencies which score less than 50%. Likewise, most of the teachers in the city highly rated the level of implementation of enrichment activities. Although the schools have implemented remedial learning and enrichment of learning, but they have not had a pattern or standard form for this remedial implementation and learning enrichment.

Second, good practices carried out by education units and school principals are as follows: (1) mapping of material and results of the National Examination in the last 5 years, (2) analysis of achievement of basic Competence (KD) and Competency Achievement Indicators (IPK), (3 ) mapping material that has not been achieved by all subjects of the National Examination, (4) mapping material preparation for the 2020 National Examination, (5) Provision of assessment results analysis format, (6) Provision of documentation of assessment results data in hardcopy form, (7) organizing material through improvement of RPP, (8) distribution of UN results data to teachers, and (9) form a work team to strengthen the utilization of assessment results, and (10) provide rewards for teachers with 85% of good assessment results. The mapping was carried out to assist teachers and schools in identifying teaching materials that had not been mastered. It was carried out in a time series of the results of the UN assessment for the last 5 (five) years. In preparation for the 2020 National Examination, the mapping was carried out by analyzing the frequency trend indicators of the tested material.

Third, good practices implemented by school supervisors are focused on socialization, coordination, and coaching for teachers in the utilization of assessment results. The utilization of assessment results by the School Supervisor was carried out through activities of (1) Coordination of the utilization of the assessment results with the school principal and teachers through MKKS and MGMP, (2) mentoring through in-house training activities to schools and teachers through MKKS and MGMP. Mentoring program by the School Supervisor Coordinator have been carried out in 20 Schools of junior and senior high schools, as well as public and private vocational schools, (3) discussion program in the form of Focus Group Discussions (FGD) in Regencies and Cities involving teachers, schools, school supervisors, and heads of Regional Education and Culture Office in Districts and Cities.

Fourth, good practices in the utilization of good results by the Head of the Provincial, Regency, and City Education and Culture Offices. The findings of this study indicated that the good practices of utilizing the assessment results was also carried out by the Head of the North Sulawesi Provincial Education and Culture Office through the following activities: (1) Coordination meetings with heads of regency and city offices, and MKKS, (2) FGD involving school principals, teachers, supervisors, educational leaders and stakeholders, held in the Education and Culture Office of North Sulawesi Province. This FGD brought in recommendations to the Governor and the House of Representatives (DPR) of North Sulawesi Province, (3) issuance of a policy on the utilization of assessment results in a form of a circular letter to all schools to utilize the results of the assessment, (4) the utilization and strengthening of the role of the MGMP. In this regard, activities of strengthening and establishment of the MGMP in all subjects, including all MGMPs of Regency and the city, have been implemented. The materials presented in the program, namely (a) MGMP organization management, (b) SWOT analysis, (c) MGMP Program Preparation, and (5) Utilization of Assessment Results. MGMP day has been decided to be every week, and the funding provided by local governments. (6) Hearings with the North Sulawesi Provincial House of Representatives and submission of an education budget plan, (7) in-house training program and mentoring through the school supervisor coordinator, and (8) collaboration on research and socialization activities with Manado State University and Puspendik on the utilization of assessment results.

In addition to the findings, this study also indicates the determinant factors that influence the utilization of assessment results. This influence is revealed in the implementation of results.
utilization of various assessments. There are differences in the utilization of assessment data based on (1) the location, region, and geographical condition of the school, (2) school rankings, and (3) data accessibility. Schools located in cities have better utilization rates for assessment results than schools in regencies and archipelagic areas. Schools with high UN assessment results have better utilization rates than schools with low results. Schools that have good data accessibility have a level of utilization of results. The following constraints were identified: Schools in all districts and cities have not yet had a robust and reliable data collection system for assessment results. The assessment results by educators and educator units have not been documented in a data collection system. The variety and types of data from assessment results, both by educators and education units, have not been organized in a data organization based on the category of needs for analysis and or for decision making. The utilization of assessment data was carried out in a variety of ways by each teacher and school. The utilization of assessment results for learning improvement was carried out personally by each teacher. Constraints in the practice of utilizing the results of the research are caused by the first problem, namely the availability of information and assessment results data, both the data of school examinations and the accessibility of national exam results. The aspects, which are considered lacking by teachers, principals, and supervisors, are clarity of assessment results information (58.57%), availability of assessment data (62.85%), the ease of access (69.61%), and availability of ICT networks, especially internet (57.14%). The second problem is the policy on the utilization of assessment results. The highest percentage was 92.86%, where teachers rated the utilization of assessment results policy highly significant. On the other hand, 55.75% of teachers, principals, and supervisors gave less value to the availability and implementation of the utilization of school assessment results policy. The policy is primarily seen from the planning of the school. The weaknesses in policy and program planning are demonstrated in the availability and implementation of the policy documents and planning for the utilization of the assessment results.

Through this study a strategy was identified to strengthen the utilization of assessment results, namely strengthening intervention through standardization of the assessment process in schools, which was rated significant by 94.28% of teachers, strengthening teacher assessment literacy was assessed significant by 94.29%, policy development and school planning were rated significant by 88.57%, the development and strengthening of the professional community was rated significant by 86.29%, network strengthening and data accessibility were valued by 84.29%, the development of literacy and culture data was rated by 91.43%, strengthening of the role and leadership of school principals, valued by 92.85%, the development and improvement of teacher professionalism were rated by 92.86%, and the development of a reward and punishment system, supported by more than 85% of teachers, principals, and supervisors. The range of available data at Puspendik was considered very significant in the efforts of utilizing the assessment results. It was identified the data required were competency mapping data, which contained data on the achievement of competencies comprehensively, and in the form of time series, data on cognitive taxonomic achievement, and the availability of data in the form of graphs, statistics.

The findings regarding good practices as stated above have a theoretical justification, namely good practices of assessment results in the form of remedial, enrichment, mapping competencies that not yet mastered, and self-evaluation for students' self-development have pedagogical foundations that will give feedback that is effective to improve the quality of learning (Gibbs, 2004). The feedback obtained from the assessment results is significant for students, teachers, and student peers. The advantages for students are to motivate and encourage them to improve their weaknesses in the learning process, for teachers are to improve the learning process, and useful for student peers as a source of material in shared learning (William, 2013). The findings showed that the utilization of assessment results was influenced by teacher professionalism, communication, school climate, school policy, which turned out to be problems found in many countries (Kellaghan, Greaney, & Murray, n.d.). Many countries have utilized the assessment results to improve learning and to improve the quality of learning outcomes, the quality of education, and even the quality of institutions. Good practices regarding the utilization of assessment results were not only done by teachers, but also by school principals, school supervisors, and even the Head of
Department. The best practices were carried out through interventions in the form of school policies, training such as in-house training, and even funding. The findings showed that aspects of data availability, dissemination and communication systems were important factors, also reinforced by the results of the research of L. L. Smith and Elizabeth Hawk Zanches that data and information communication was the key to the effectiveness of the utilization of assessment results (Smith, 2015).

4. CONCLUSIONS, SUGGESTIONS, AND RECOMMENDATIONS

Good practice of utilization of assessment results to improve the learning outcomes can be carried out by utilizing the teachers, school principals and education units, school supervisors, regional education and culture offices, and professional organization bodies such as the Subject Teachers’ Consultation, and the Principal's Work Consultation. The focus of good practice can include the scoring of the assessment results, namely the achievement of KD and IPK, mastery of tested material indicators, mastery of mapping material, achievement level of Higher Thinking Order (HOT) taxonomies, mapping subject matter that has not been mastered, trend analysis of material that has not been mastered in the last 35 years, improvement of learning material, development of remedial and enrichment of learning, provision of policies, and programs for the utilization of assessment results. The determinant factors that influence the utilization of assessment results are the availability of data, the availability of policies including planning and guideline, and the availability of networks and information systems. Strategies for strengthening the utilization of assessment results need to be carried out through standardization of the assessment process and the process of utilizing assessment results, strengthening data literacy and assessment for teachers, strengthening the role of both school principals, school supervisors in regencies and cities as well as increasing teacher professionalism, and reward and punishment systems need to be developed.

Based on the conclusions and suggestions, it is recommended that (1) the development of collaboration in the utilization of the assessment results through the MGMP, the implementation of resource sharing between schools in one school zone, both human resources as well as information and communication technology facilities; (2) Strengthening the system and information network data on the assessment results through collaborative network between schools, the Provincial and District/city Education and Culture Office, or the Education Assessment Centers, and the establishment and development of ICT systems and networks in each school; (3) strengthening interventions in the form of efforts that encourage the utilization of assessment results through operational regulations such as policies, planning, and guidelines for the utilization of assessment results for teachers and schools; (4) strengthening the coaching through mentoring both by school supervisors and by lecturers on national exam subjects cooperated with universities, and mentoring of technicians between schools; (5) strengthening the role of the Educational Assessment Centers in the facilitating, empowering, and policy functions.

REFERENCES

Badrun Kartowagiran. (2012). Pemanfaatan Hasil Penilaian. Retrieved from http://staffnew.uny.ac.id/upload/
Baker, G. R., Jankowski, N. A., Provezis, S., & Kinzie, J. (2012). Using Assessment Results : Promising Practices of Institutions That Do It Well.
Gibbs, G. (2004). Using assessment to support student learning. Retrieved from http://www.qub.ie/directorates/AcademicStudentAffairs/CentreforEducationalDevelopment/FilestoreDONOTDELETE/
Jahanian, R. (2012). Educational Evaluation : Functions and Applications in Educational Contexts, 1(2), 253–257.
Kellaghan, T., Greaney, V., & Murray, T. S. (n.d.). Using the Results of a National Assessment of Educational Achievement (Vol. 5).
Kinzie, J. (2014). Using Evidence to Enhance Student Learning : Examples of Good Assessment Practice.
Nancy Sharkey, R. J. M. (2014). Learning from Student Assessment Results. Educational Leadership: Journal of the Department of Supervision and Curriculum Development, N.E.A · November 2003 Volume 61, Number 3, (December).
Pendidikan, K., Kebudayaan, Jenderal, D., Dasar, P., Menengah, Pembinaan, D., & Menengah, S. (2017). Panduan Penilaian oleh Pendidik dan Satuan Pendidikan untuk Sekolah Menengah Pertama. Retrieved from https://yudikustiana.files.wordpress.com/2017/06/panduan-penilaian

Smith, K. L. (2015). Although higher education institutions often engage in assessment practices, use of assessment results to improve student learning is rare (Blaich & Wise, 2011). We surmised that this rarity could be partially explained by unclear communication regarding what, 15–29.

William, D. (2013). Assessment: The Bridge between. Voices from the Middle, 21(2). Retrieved from https://www.ncte.org/library/NCTEFiles/Resources/Journals/VM/