Utilization of National Exam Results in Advancing Educational Ecosystem to Improve the Quality of Education

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Abstract. This study aims to create a strategy to advance the educational ecosystem in utilizing the results of the National Exams to improve the quality of education. The method used is a case study in areas that have attention to the results of the National Exams that is Surabaya, Yogyakarta, and Badung. An educational ecosystem consisting of education offices, Deliberation of Subject Teachers (MGMPs), supervisors, principals, parents, teachers and students, in the city of Surabaya and Yogyakarta has served its role properly. The role of the education office: utilizing The National Exams Results by benchmarking the results of this year and the previous year National Exams in the provincial, city and school level, and comparing the results of the National Exams on grade level. Their work programs as The "Mathematics Home" program which targets students; science teacher training; material strengthening; and Graduate's Competency Standard study and analyze training for UN subject teachers. The role of MGMP: setting up workshops for RPP making for grade VII - grade IX, preparing questions in line with the National Exams questions. The role of supervisors: guiding teachers and principals, and strengthening MGMP. The role of schools: Each school has its own creativity to utilize the results of the National Exams, strategies to improve the quality of education in schools starting from class VII, VIII and continued to grade IX. Teacher’s role: using learning methods tailored to the characteristics of students and assisting the implementation of the programs from the education office. Parents’ role: motivating students and supporting the teaching and learning process. The role of students: learning, being discipline, hardworking, and being peer tutors.

Keywords: Utilization of National Exam Results, Educational Ecosystems, Quality of education
INTRODUCTION

National Exam is an activity to measure the graduates’ competencies in certain subjects nationally by referring to the Competency Standards of Graduates. As in Permendikbud No. 4 of 2018 concerning Assessment of Learning Outcomes by the Education Unit and Learning Outcomes Assessment by the Government, in article 2, paragraph (1) Assessment of learning outcomes by the Education Unit is carried out through USBN and US. (2) Assessment of learning outcomes by the government is carried out through the National Exam. Based on the Permendikbud, the government has an obligation to assess student learning outcomes through the National Exam. Then in article 17 it is stated that the National Exam results are used as a basis for:

a. Mapping the quality of programs and / or education units;
b. Selection considerations enter the next level of education, and
c. Coaching and providing assistance to the education unit in its efforts to improve the quality of education.

According to Syamsir Alam 2018, the National Exam was developed for the purposes of quality mapping, the results of which were used as coaching materials to improve the quality of education (Media Indonesia, Monday 2 July 2018). But in reality this has not been carried out massively by education units or education offices to use the National Exam to improve the quality of teaching and learning processes to improve learning outcomes in the following year.

The implementation of the National Exam is not solely to find out the level of student competence from the results of the learning process that has been followed, more than that the National Exam also provides benefits to several parties related to the National Exam. The benefits of the UN in general, according to Miller, Linn & Gronlund, 2009 (quoted from Budi Mulyati, Badrun Kartowagiran. 2013) “tests and assessments are yardstick of individual progress in classrooms, agent of school reform, filter of educational opportunity, and barometer of the national educational condition”. The results of tests and assessments can be used as one of the indicators of success in education, the National Exam as an external assessment can be used as one of the benchmarks for educational success because the results are most easily seen.

In connection with efforts to improve the quality of education, it is necessary to know how the district / city education agency and the education unit utilize the UN results. The results of the National Exam are a reflection of teacher and school performance. Low scores on certain subjects can be improved by improving the ability of teachers in certain subjects and material so that teachers can make strategies to improve the results of the National Exam in the next school year. This will be more optimal if the education ecosystem is involved in the role of strategies to improve the quality of education through the use of UN results. The development of school initiatives in improving quality is influenced by the availability of educational facilities and infrastructure, the ability of teachers, the motivation of teachers to change, the leadership of principals, the attitude of supervisors and the policies of regional leaders (Sitepu, 2007: 611).

The role of local governments, supervisors, teachers, principals, teacher associations, parents and students should support each other in utilizing the results of the National Exam to improve the quality of education. For this reason, an appropriate strategy is needed to utilize the results of the National Exam by mobilizing the education ecosystem so that the results of improving the quality of education can be comprehensive and optimal.

The purpose of this study was to create a strategy for the utilization of National Exam by moving the education ecosystem by analyzing the implementation of good practices conducted by education stakeholders in the districts and cities following the follow-up.

METHOD

This research approach is qualitative using a case study method to describe the good practices of the utilization of junior high school level UN results by teachers, principals, supervisors, MGMP, education offices and local governments. This research was conducted in 2018 by looking at the comparison of UN results in 2017 and 2018.

Data collection methods were carried out through Focus Group Discussions with participants consisted of teachers, principals, supervisors, MGMP chairpersons and the education office. Discussions with the education office are conducted separately. The study location was chosen by regions that have more attention to improving the quality of education through the use of UN results and holding integrity in implementing the National Exams, namely the City of Yogyakarta, the City of Surabaya and the Regency of Badung. Data were analyzed based on the role of each education stakeholder in the utilization of UN results, starting from the education office, which is comprehensive in the area of government, principals, teachers, supervisors, parents and students. Based on good practices carried out in the three regencies / cities, a strategy to utilize the results of the National Exam that moves the education ecosystem shows a clear role and good cooperation.

One of the three important strategies that can be done to form human beings and the ecosystem of education and culture with a character based on the spirit of mutual cooperation is the strengthening of education and cultural actors; among others by strengthening students, teachers, principals, parents, and leaders of educational institutions in the Ananto education ecosystem (2015).
The results of Gazali Lembah research, Andri Tanda Tellu, Juraid, Asep Mahpudz, and Haeruddin (2018) showed, among others, 1) Factors that influence the achievement of student competence in the National Exam namely the ability of teachers to develop learning tools on quantitative aspects in very good categories. But for qualitative aspects, it is in the sufficient category; 2) An alternative model for solving problems that can be proposed includes: optimizing the role of the MGMP which focuses on increasing the capacity of teachers in planning and implementing learning activities, Lesson Study, workshops on the preparation of learning tools and Bimtek preparing the National Exam test; 3) The problem solving implementation model includes components: joint planning in the education office and revitalization of the role of the MGMP with the support of universities through community service.

Luksha Pavel et al. states: An educational ecosystem can be defined as a dynamically evolving and interconnected network of educational spaces, with individual and institutional providers that offer a variety of learning experiences to individual and collective learners across the learning lifecycle. Educational ecosystems can integrate both live and online spaces and bring together holistic or “integral” opportunities for individual and collective development across a wide spectrum of human endeavor (2017: 32).

The education ecosystem can be defined as a dynamic development and interconnected network of educational spaces, with individual and institutional providers, offering a variety of learning experiences to individuals and collective learners throughout the learning life cycle. Educational ecosystems can integrate living space and online and unite holistically or "integrate" opportunities for individual and collective development broadly in the spectrum of human endeavors. The idea of ecosystems, which began to penetrate education discussions since the early 2000s, still has various meanings behind them. Part of the emphasis is on the balance between the various roles of stakeholders, including teachers and students.

Educational development requires the involvement of all parties as education actors to synergize into an integrated education ecosystem. The realization of the education ecosystem is defined as the synergy of educational elements. The elements of the education ecosystem are: (1) conducive schools; (2) teachers as encouragement; (3) parents who are actively involved; (4) people who are very concerned; (5) industries that play an important role; (6) professional organizations that contribute greatly; (7) government that plays an optimal role (Sugiyar, 2017: 215).

National Exams can be used to map the quality of education. The results obtained reflect the quality with the conditions to be carried out with high integrity.

The National Exam can reflect the quality of education nationally approved by 46 respondents (59%), while respondents who stated no were 32 (41%). The reason for the respondents who stated that the National Exam could reflect the quality of education nationally included: 1) if done honestly it could measure the quality of education nationally; 2) reflects the level of success of the learning process from the whole country; 3) the problem is the same and the standard is the same; 4) reflects the level of success of the learning process from all over the country (Safari, 2015: 107).

The results of the National Exam should be used as a reference by the regional government in the preparation of education maps in the region, especially in relation to teacher competence. Thus, the distribution of teachers is not solely based on the quantity, but also on the quality aspect. Mapping education is an absolute thing. Without mapping, it is difficult to obtain an objective evaluation of the development of education in an area. In fact, the results of the objective evaluation should be the basis for determining the direction of policies and programs of the central government and regional governments (Silverius, Suke, 2010: 201).

RESULT AND DISCUSSION

1. Educational Ecosystem Starts to Utilize National Exam Results

The synergy of each element in the education ecosystem is the education/local government agency, teacher associations such as MGMP, supervisors, principals, teachers, parents and students. Following are the roles of each element of the education ecosystem:

a. The Role of Local Education Office/Local Administrations

Surabaya City, After the announcement of graduation, the education office made use of the National Exam results to be analyzed by comparing the average provincial, district / city and school National Exam scores to the average National Exam scores in the classroom with teachers teaching, called "school report cards". Analysis is done per subject. This is done to find out the position of the school is above or below the provincial and district / city average. The results of the National Exam analyzed in 2017 and 2018 are compared to see the increase or decrease in value.

The City Education Office submits the results of the UN analysis to all junior high schools in the city and schools are asked to analyse: 1) Per subject per class and per subject teacher in each class, 2) problems that lead to the results of the National Exam in education units, 3) Strategy for improving the performance of the National Exam in the next year.

b. Work Programs of Local Education Office/Local Administrations

The Regional Government and the City Education Office make a quality improvement team, consisting of principals, MGMP coaches,
jointly to improve the National Exam results. Programs that are run include:

**Rumah Matematika (House of Math)**

(Coordinate with the Education Office, MGMP, Mathematics teachers and Students). The Mathematics House functions to provide services to students who are not capable and schools that have a low UN score in improving the ability to master Mathematics. Tutors and materials prepared by the MGMP. Tutors are from selected Mathematics teachers from the best junior high schools. The deployment of students was carried out by the Surabaya City Education Office. House of Mathematics was designed in 31 Districts. The school must send 20 students and arrange the scheduling by the house manager of mathematics. Math home schedule from Monday to Friday at 3:00 a.m. - 5:00 p.m. WIB is done at the nearest sub-district office or kelurahan office. Rumah Mathematics results in increasing the average of Surabaya City UN results from 55.17 to 58.99 in 2018.

**Material Strengthening and Training for SKL for subject teachers at the National Exam.** Preferably for schools with low UN scores (in 2017).

**Training for Science Teachers (2017/2018).**

The background of junior high school science teachers is mapped to find out their educational background and majors. For teachers with a Biology education background, they are given Physics subject matter. The teacher of Physics education background is given the strengthening of Biology subject matter.

**Assistance for MGMP activities.** MGMP activities are supported by the Education Office. Each MGMP consists of MGMP coaches who are always ready to provide support such as lunch for teachers. The city of Yogyakarta makes use of the National Exam results by analyzing the national ranking both in total and in subjects. National Exam results are given to schools. The National Exam as one of the main indicators of performance in the education, good government, integrity and results offices is optimal. The Education Office compares the value of input and output value, the school with the largest input value and output value as the best school. This policy is expected to build the optimism of teachers, both teachers who teach in suburban schools, and teachers who teach in favorite schools will be as motivated.

The programs carried out included: 1) **Additional learning funded by the Regional Government**, for subjects at the National Exam, so there were 5 because the Science was broken down into physics and biology, Both private countries had 40 meetings for all subjects, the teacher was given an honorarium by the Regional Budget, through BOSDA. There is a try out 2 times. 2) **Procurement of computers for public schools**, our computer procurement also provides 200 - 300 computers. Private schools are provided with National Exams. This year DIY has been UNBK. 3) **Online Learning Consultation (KBS)**, with a schedule from Monday to Saturday, at 3.30-19.00, guided by selected teachers who take turns picking up for subjects at the National Exam but questions can be submitted for 24 hours in the form of a website address. 4) **Training makes HOTs questions for teachers of the UN subject learning instructor.** The results that have been achieved by the City of Yogyakarta are an increase in the average score of the National Exam from the UNKP to UNBK, which is different from the other provinces where the average score of the National Exam dropped from UNKP to UNBK.

Badung Regency, at the Badung Regency Youth and Sports Education Office for the needs of damaged infrastructure units for education units are all supported by the Regional Government. Including the procurement and maintenance of buildings and other facilities such as damaged air conditioners, ATK and all are financed by the Regional Government. This is because the budget of Badung District Budget is a district that has a large budget to meet the development needs in its region.

Follow-up program from the Education Office on the results of the analysis of the National Exam that has been carried out according to information in the form of routine try out activities 1 time a year. Other programs carried out in the form of activities are; 1) holding training for teachers according to the field of study, 2) strengthening MGMP activities, 3) optimizing the MGMP in the preparation of the UN, USBN questions.

1. In improving school management, the education office also conducts activities in the form of;
2. Optimizing the role of the principal as manager
3. Optimizing the role of school supervisors and improving welfare (incentives) for teachers.
4. From the agency giving 3 employees each school, referring to the Minister of Education and Culture, at least there must be personnel, namely TU, Librarian, OB security guard, BK.
5. Teachers of Mulok have been prepared by teachers by the Department through for grades 1 to 6.
6. Supervisors must be optimal in supervising the implementation of learning in achieving specific process targets.

The Office of Youth and Sports Education of the Badung Regency in providing educational services makes the program fulfill the educational facilities and infrastructure in the form of;
2. Complementing a computer laboratory for UNBK implementation.
3. Building new school units (USB) and new classrooms (RKB)

Related to the implementation of UN results utilization the obstacles experienced according to information from the Badung District Youth and Sports Education Agency are;
1. The frequent change of teachers in private schools
2. The Office has not analyzed the results of the National Exam, because the CD UN material has not been received
3. Dynamic educator mobility

c. MGMPs’ Role

Surabaya
1) Preparation of questions and assessments based on HOTS questions, 2) compiling questions that are close to the UN Question The National Exam questions are revealed in the questions that approach the UN questions. One grid consists of 4 questions. The question was made in 23 packages by the question design team consisting of 23 people accompanied by a team from Unesa. Questions refer to the 2016, 2017 and 2018 UN questions. The team consists of the best teachers. This question is also used for USBN. USBN results are a description of the UN results. From the results of the USBN, the results were analyzed whether they were as expected. Of the 23 packages taken into 5 packages used in the assessment in the teaching and learning process in the classroom by the teacher. After that, the 5 packages were squeezed into one question package that approached the UN question which amounted to 40 questions. 3) Workshop on Making RPP class VII - class IX, 4) Workshop on Making Classroom Action Research, 5) SKL surgery and analysis of the UN Grid.

The implementation of the workshop activities on the MGMP is very significant to improve the ability of Fostered High School teachers to utilize the results of the 2014 National Exam as a basis for planning student guidance programs to face the 2015 National Exam (Mehram, 2016: 51).

Yogyakarta

Based on the results of the IPA National Exam, the MGMP collaborates with the education office that wants to increase the city-level UN average by developing a question bank.

To develop a question bank, the MGMP analyzes the UN results from the CD or shows Puspendik. What indicators are weak for the Yogyakarta level and benchmarking the results of the National Exam at the school level with the level of the City of Yogyakarta, if there is a difference then the material is considered difficult. Less value can be categorized as difficult or not understood by students.

The most difficult material for biology teachers is mechanics, waves, light, sound and electricity. The easiest is motion. So if this material is not taught with the right concept, students will have difficulty dealing with the problem.

Then this activity program was arranged to develop 3 packages, each package 40 questions. The details are very detailed. Some are HOTs. Questions are distributed to schools to be used as training.

Sharing best practices through face to face or through social media, develop learning programs. For Mathematics, how to give Mathematics learning to be fun.

SKL surgery, under the guidance of the agency and supervisor of the MGMP website, besides the MGMP Mathematics makes the questions from the easiest to the most difficult questions in the scope of SKL.

Badung Regency

Activities that have been carried out such as:
2. In 2016 the Badung MGMP IPA held a Learning Teacher activity with 2 (two) methods, namely online combination and face-to-face modes.
3. In 2017 and 2018 the Badung Regency Science MGMP conducted a study / analysis of SKL and the circumcision of the Try Out problem in collaboration with the MKKS.
4. In 2017 the Badung MGMP in collaboration with the Youth Education Office and Badung District Sports Organization held a full face-to-face Learning Teacher activity.
5. Plan education and training (training) writing HOTS questions for science teachers in Badung Regency in collaboration with the Office of Education, Youth and Sports of the Badung Regency in order to face the 2019 National Exam.

Other programs to improve the results of the National Exam from MGMP are:
1. MGMP sends the best teachers to train science teachers in each school whose UN scores are low.
2. MGMP forms a communication forum in the form of W.A group of Science MGMP to discuss various problems faced by teachers in the classroom
3. Activating MGMP in schools and districts
4. Complete school supplies
5. Increase the participation of parents / guardians.

Evaluation / monitoring of the response to the achievement of the National Exam results, namely cooperating with the education office to conduct training for teachers whose national exam scores are low.

Constraints faced by MGMP in the utilization of the National Exam results are:
1. Teacher ability is still low in the IT field
2. The ability of teachers in the preparation of High Order Thinking skills (HOTs) is still low

The Badung Regency MGMP is planning a HOTs writing training course for science teachers in Badung Regency in collaboration with the Youth and Sports Education Office of Badung Regency in order to face the 2019 National Exam.

d. Supervisor Role
Supervisors are included in the quality improvement team, to improve the National Exam results. Subject-based supervisors. Like a Math supervisor.

Yogyakarta Supervisor
Based on the CD of the UN data from the Puspendik, the supervisor analyses where the material with less absorption. From the analysis compared to the SKL grid that was dissected, it can be seen that the material from the indicator is still lacking. Supervisors can provide guidance on the lack of material.

For one of the constraints supervisors now cannot see the National Exam questions to provide micro-assistance to teachers.

Supervisor in Badung
Direct the target school and the teacher to carry out the following:
1. Analysis of estimation of KD with items of National Exam (UN) that are difficult for students to do.
2. Development of Syllabus that has been prepared by the government by integrating KDP, High Level Literacy and Thinking (4C / HOTS).
3. Development of Learning Implementation Plans (RPP) in accordance with the Syllabus.
4. Carry out Remedies and Enrichment based on the analysis of the results of the assessment carried out by each KD.

In improving the results of the National Exam according to the supervisor, the school supervisor conducts guidance at the school by:
1. grouping in schools with the following categories; a) School grouping in accordance with the ranking of achievement of the National Exam results, b) Academic guidance is carried out in collaboration with the teacher (core) field of study, c) Academic coaching is carried out in collaboration with the principal and MGMP in the field of study
2. carrying out the following activities: a) MGMP empowerment b) empowering related institutions (Developer of district / city level UN questions) c) establishment of school quality development school clusters

The supervisor's efforts to maintain the quality of the National Exam results in the target schools, the school supervisor conducts activities, among others
a) Increase the frequency of academic supervision
b) Improve the performance of teachers and principals to always improve learning outcomes (Have MKKS)
c) Empowering stakeholders to create a learning community.

e. School (Principal and Teacher)
Logos Surabaya Christian Middle School:
The principle carried out by this SMP teaches emphasizing conceptual mastery to students. Focus on the concept first and then the question. Students are prepared from grade 7 to get to grade 9. Teach together between character and knowledge. The role of MGMPs and major education offices such as SKL analysis training, training to make questions with teachers from public and private high schools, to make question packages, 32 packages, with quite a variety of variations.

The teacher of SMPN 1 analyzed the National Exam report card from the Education Office. The next step in preparation for grade 9 from the results of the 2017 and 2018 UN comparisons for grade 9 students is an initial mapping to find out the initial competencies of each student. After that students are placed in accordance with their respective competencies to match their characteristics.

For SMPN 51, it still builds the spirit of students to learn with the ability of middle to lower parents. To motivate students, the principal invited parents to discuss class 9 programs. For the class with the lowest grades established a class clinic was taught by teachers who had a high level of patience. Improve so that children with high grades, whose motivation is high are increasingly encouraged.
SMPIT Abubakar Yogyakarta

Table 1. Results of UN 2017 and 2018 SMPIT Abubakar

<table>
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</table>

SMPIT Abubakar National Exam results can increase from 2017 - 2018. The SMP emphasizes the process of achieving the UN score as the main thing. This concept is given to students by the school, so that in the face of the National Exam students can be more comfortable and not tense because basically the National Exam is only one of the exams that must be followed.

The UN preparation program starts in the odd nine-semester class, with NSP (Night Study Program) for students boarding, and tutoring for all students at 3.45–4.45 hours (after class hours are over). The classification is determined based on the grade level of students obtained from the formative test results. The first placement test uses the end-of-year test results in eighth grade, then after 3 or 4 meetings, the teacher has a module, there is a worksheet, there is a test too, is tested again with the next test.

For classes with top-grade students it contains 20 students and the class with the smallest grade students contains 10 students (small class). The material given in the upper grade class to the lower grade is the same, which is distinguished is the teacher's treatment in the learning process. Students in the upper grade class are given practice exercises themselves, but students in the lower grades cannot be treated equally, the material must be explained in advance from per indicator per SKL, each given 3 practice questions must be given an example 1 problem solving, then students try 2 other questions.

SMPN 5 Yogyakarta

Each year the school utilizes the National Exam results by carrying out an analysis to determine the UN value standards that will be achieved the following year. The National Exam results are also used by schools to place teachers who teach in the ninth grade. The school supervises the teacher every day, how the teacher teaches, how the output, how comfortable the students are, all are observed. Preparation of the National Exam in Junior High School 5 has begun since seventh grade students. In addition to the budget from the Education Office for ninth grade tutoring, schools also budgeted for seventh, eighth and ninth grade UN preparatory activities. The form of activities is in the form of additional learning lessons as well. As a cultural heritage school, these tutoring activities are called bina pawitika for grades seven and eight, and gala widiatama for ninth grade. Additional lessons for grades seven and eight are held at 0 o'clock (6.15-07.00), for 4 subjects (Indonesian, Mathematics, English and Natural Sciences). Specifically for science subjects, science is not separated because teachers are limited. Additional learning for the ninth grade is carried out during the day after school for 5 subject subjects (Indonesian, Mathematics, English, Physics and Biology) accompanied by a linear teacher.

Gala widiatama began to take place in September. Before the gala activity, the school conducted a test placement with seventh and eighth grade material. Grouping students in the gala class we place based on the placement test rank, with the intention that the teacher is easier to treat. Gala class 1 and 2 contents 36 students, gala class 3-10 contains 35 students. The determination of the teacher in the gala class is adjusted to the character of the students. Teachers with the ability to approach students who are good have the task of teaching gala classes 9 and 10.

Gala semester 1 class learning focuses on seventh and eighth grade material. Starting in the second semester, the gala class completed the ninth grade material until the beginning of February, after which the treatment was continued with practice questions. Students can move the gala class according to an increase in understanding that has been mastered based on the rehearsal. Rehearsals are performed after 4 gala meetings. From the results of the rehearsal, students ranked bottom 25 for each subject, given a clinical gala treatment. Especially for clinical gala, students are welcome to choose their own teacher.

Mathematics teacher at SMPN 5 The method used by the teacher to stimulate students' motivation in preparing the National Exam is made an agreement. The agreement is to increase KKM class (85) above the KKM school (80). The agreement is that if the student has not reached 85, the value will not be included in the list of values. This method can boost student grades, see table 1.

SMPN1 Kuta Utara, Badung

The results of UN SMP 1 Kuta can increase from 2017 to 2018. The school recognizes that student input also influences the results of the National Exam. When there is no new student acceptance with zoning, SMPN 1 Kuta tests students' academic potential, so that students who enter are selected students. SMPN 1 Kuta utilizes the National Exam results with class IX tutoring programs and applies learning methods to suit the characteristics of students starting from VII based on the teacher's observations at the beginning of learning.
a place of opportunity to train themselves, train their sense of responsibility in carrying out their duties as tutors, and practice patience. 4) strengthen relationships between students so as to strengthen social feelings and a sense of solidarity between students (2017: 126).

### Strategy for Utilizing the Results of the National Exam by Moving Educational Ecosystems

National Exam results are a reflection of the performance of teachers in schools for the achievement of student learning outcomes. Likewise, local government is recognized as one of the main indicators of performance in the education office by prioritizing integrity and good government. The National Exam Results can also be used to map the quality of education in an area or the quality of the learning process at school. Quality maps can be the basis for improvement for teachers, facilities and treatment of students in the upcoming year. The results of the National Exam that are utilized can improve the quality of teachers, the learning process, facilities and ultimately improve the quality of graduates. This means that all elements of quality education are increasing. For this reason, there needs to be cooperation between the elements of education that live in one ecosystem in improving the quality of education.

The elements of the education ecosystem in each region consist of local governments, education offices, supervisors, principals and teachers, teacher associations such as MGMP, parents and students. Moving the education ecosystem in utilizing the results of the National Exam and the follow-up carried out is made in the form of strategies shown in Figure 1.

### Parents and Students

In preparing for the UN, SMPIT Yogyakarta also empowers parents, because schools and parents understand the activities of students following programs held by schools and education offices so that parents are willing to provide motivation, one of which is during a meeting of parents preparing food. So between teacher students and parents work together.

Motivate students, support the means for teaching and learning. The involvement and participation of parents in the implementation of education in schools will create more effective education. Parents build partnership partnerships with education centres, namely cooperation between families, education units, and communities based on principles and their respective roles based on mutual cooperation, equality, mutual trust, mutual respect and willingness to sacrifice to build an educational ecosystem that fosters the character and culture of achievement (Ministry of Education and Culture Directorate General of ECD and Community Education, 2015: 5).

### Peer Tutor:

TTS (peer tutorial) in SMPIT Abubakar is an activity that targets students who have a low score of 3 to 4 people. Usually the children in this grade want to learn more comfortably and openly by mentoring peer tutors. The tutors are taken from students who want to teach and have a score above 9. If the development of the TTS students’ development is less significant, filtered again and included in the super camp class for 4 days, with more specific treatment. Students are not only taught material but also mentally educated with a psychological approach, namely the AMT program (achievement motivation training) to anticipate the density of activities attended by students that have the potential to bring boredom, boredom and can be discouraged when they see the results of a try out, formative tests that do not in line with expectations.

Selected students who want to teach their friends are made peer tutors. Tutors are those chosen as counselors in a group whose age is the same age. Based on the research, the advantages of peer tutors are: 1) very successful especially for some children who have feelings of fear and reluctance to the teacher, both asking and answering. 2) as a student tutor, tutoring work, will strengthen the concept and knowledge better than what has been discussed. 3) for tutors to be

### Table 2. Results of UN 2017 and 2018 SMPN 1 Kuta

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</tbody>
</table>

Based on good practices carried out in 3 research areas and schools in the area found appropriate strategies to utilize the UN results. The National Exam results obtained by the education office after graduation are analyzed by benchmarking the average provincial, city /
regency UN results, schools up to teachers in grade IX or called school report cards and teachers. Examples of cases at SMPN 5 Yogyakarta.

The school, which consists of principals and teachers, analyzes the report cards given by the education office and follows up early. There are also schools that analyze the absorptive capacity of material from the National Exam results more in order to pay more attention to material with low absorptive capacity.

Based on the SKL surgery conducted in the MGMP, schools pay attention to the indicators that must be completed both in grades VII, VIII and IX. The material related to the indicator is directed to complete with the creativity of the teacher. The treatment of students is adjusted to their ability with the help of their peers (peer tutors). In addition to academic learning, schools also hold activities related to character to balance students mentally.

**CONCLUSION**

1. Analysis of National Exam results can be done with benchmarks (comparing UN scores to determine the position of school, city / district, provincial and national UN results ranking) first nationally, provincially, district / city, school up to the teacher.

2. Improving the quality of education through the use of UN results can be done starting from class VII in junior high school by dissecting SKL and exploring basic competencies. The strategy to improve the quality of education by utilizing the results of the National Exam can be done starting from class VII, VIII and continued to class IX.

3. Each school has creativity to utilize the results of the National Exam and various efforts made to improve the National Exam school strategy in utilizing the National Exam results to improve the quality of education is also related to the teacher's ability so that teachers need to be provided with good teaching methods to be understood by students by sharing in the MGMP and through in-house training in schools and other training held by the education and government agencies center.

4. The role of the education office, local government, supervisors, MGMP, schools, teachers, and parents is an integrated education ecosystem that plays a role in improving the quality of education by utilizing the results of the National Exam. The framework to improve the quality of education by utilizing the National Exam results starts from the regional government, the education office which is then carried out by supervisors, MGMP, schools, teachers and committees to realize the planned framework.

5. The provision of report cards for the UN results by the education office is the beginning of the use of UN results by teachers and schools supported by MGMP, supervisors and education offices.

**Table 1. Benchmarks of UN Results of SMPN 5 Yogyakartad**

<table>
<thead>
<tr>
<th>SMP NEGERI 5</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SEKOLAH 2017</td>
<td>89,44</td>
<td>82,45</td>
<td>96,67</td>
<td>90,54</td>
<td>89,83</td>
</tr>
<tr>
<td>SEKOLAH 2018</td>
<td>90,81</td>
<td>85,25</td>
<td>96,36</td>
<td>87,35</td>
<td>89,69</td>
</tr>
<tr>
<td>KOTA</td>
<td>79,86</td>
<td>66,44</td>
<td>64,90</td>
<td>62,34</td>
<td>68,39</td>
</tr>
<tr>
<td>PROVINSI</td>
<td>76,60</td>
<td>58,07</td>
<td>57,19</td>
<td>57,98</td>
<td>62,46</td>
</tr>
</tbody>
</table>

After analyzing benchmarks between schools, cities and provinces, a benchmark of the results of the National Exam between class IX is attached, which includes the name of the teacher who teaches, so that the teacher can find out the average score of the National Exam in the class he teaches. Benchmarks on average UN between classes taught by certain teachers can encourage them to compete in getting good grades.

From the benchmark analysis the National Exam results are followed up by the local government in collaboration with the education office, supervisors, MGMP and schools in the form of work programs.

The follow-up program on the utilization of the National Exam results from the local government is the first to improve the ability of teachers such as science teacher training. Biology teachers with Biology background are trained in Physics material and teachers with Physics background are trained in Biology material. Secondly, it enhances students' abilities through face-to-face methods such as Mathematics home and online such as Student Learning Consultation (KBS).

The education service program is supported by the city / district level MGMP by analyzing UN results from material absorption. Teachers who teach with low absorption are given guidance on how to understand the material. The teacher was asked to make HOTs questions that approached the UN questions collected in the question bank. These questions are used in the classroom learning process.

Supervisors act as resource persons supporting MGMP and fostering technical schools. Supervisors are divided into subjects such as science and mathematics supervisors. The problem with UN questions cannot be obtained to discuss them in detail.
RECOMMENDATION
1. Each regency / city is recommended to carry out a benchmark analysis between the provincial UN results, district / city, school and class to find out which school position is in the rank which immediately after the UN results are announced so that remedial action can be taken immediately. Benchmark analysis can be followed up by the school by using it to improve the National Exam results with various strategies.
2. Increasing the teacher's ability to make HOTS (High Order Thinking skills) questions and giving to students, dissecting SKL and sharing knowledge about how to teach at the MGMP is done through workshops assisted by supervisors as one of the resource persons or from the LPTK.
3. The use of UN results in the classroom by the teacher starting from class VII, students must have mastered the material to the end, if it is not complete it becomes an additional work for teachers and students to complete it outside of study hours. Continued in class VIII and class IX. Treatment for students who cannot take the course thoroughly is provided with services for consultation during hours outside of class hours. Students can choose the teacher they like. Teachers can be assisted by peer tutors, selected students who want to teach their friends.
4. The National Exam is important as one of the main indicators of the performance of the education, school and teacher offices. Character building upholds integrity, honesty, discipline in learning and hard work into a package in carrying out the National Exam.

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REFERENCES