The Influence of Try Out Scores on National Examination Scores

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Abstract. This research is based on the low level of national examination scores attainment in Bahasa Indonesia, English, Mathematics, and Science (IPA) for Junior High School (SMP) students in Semarang City, although try out or recently named National Examination Preparation (Penjajagan Ujian Nasional/PUN) has been done for lessons that are tested nationally. The population of this research is SMP students as many as 571 that consist of SMPN 5, SMPN 13, and SMP YPE Semarang. The sample of this research are 253 students. The purpose of this research is to reveal try out scores influence on national examination scores attainment on lessons such as Bahasa Indonesia, English, Mathematics, and IPA. The data collection is done by collecting try out scores and national examination scores document. The data processing and analysis are done by using linear regression formula. The result from a simple linear regression test shows that indicates there is significant influence between try out scores and national examination scores for Bahasa Indonesia, English, Mathematics, and IPA, with an exception for lesson IPA in SMP YPE Semarang,

Keywords: Influence; try out scores; national examination scores

1 Introduction

Learning activity is a human resources infestation to produce high quality human resources to overcome various development issues faced by a nation. A form of human resources infestation that is formally held by the Government, one of many, is learning activity in the form of schools started from early childhood education, elementary school, high school, and higher level of education or university. To end learning activity in an education level, students are to join final evaluation session, and many people call it as final examination (UN). Although the final examination take criticism that this is a form of government's intervention in education [10]. National examination continues to get criticism from education experts and practitioners with the problem happens in the implementation5. But because it is a new system implementation then there are some constraints [3] face by schools. A wide area or vast territory, computer hardware, internet facilities is a barrier of implementing this model [6].

This final evaluation is held by each education level to measure student's study result attainment at the end of education level. The attainment of final study results for education level generally still asserts on academic achievement. Therefore, it starts to happen that schools offer an additional lesson besides the exact schedules to sharpen student's ability in understanding the material to deal with national examination. Besides extra classes at school, some students

also join other extra studies in study course institutions or private study according to the lessons that will be tested nationally.

Before the real final examination is held, schools or even the Government through National Education Institution (Diknas) hold preparation test to know how well students' understanding about lessons that will be tested nationally. In 2017, National Examination is held by the Government with two models; Computer Based National Examination (UNBK) and Paper and Pencil Based National Examination (UNKP). UNBK or called as Computer Based Test (CBT) is a form of national examination organizing with computer help to access examination questions. Students who join UNBK can access the examination questions through the computer screen.

Besides UNBK, for schools who have not yet owned proper computer facilities are still allowed to hold Paper and Pencil Based National Examination or called as Paper Based Test (PBT) that in fact it has been done by schools before UNBK is organized. UNBK in 2017 is held with semi online, in which central server send examination questions to local/schools server by offline, then the examination results are sent back by the local/schools server to the central server by online.

2 Theoretical Framework

National Examination

Something to consider in doing learning evaluation is: (1) it should be done with plan and systematically, sustained, (2) the data and accurate information are needed to support decision quality that will be taken, (3) it is related to learning purposes that have been declared before. Learning evaluation is a process that is planned systematically and sustainable to collect, describe, interpret, and show information to be used as the reason to take decision. One of regulations to reach National Education standard in Indonesia is National Examination. National Examination is a control instrument for education national standardization. National Examination is aimed at giving description of education issues mapping nationally. For that reason, several lessons that are essential chosen to be tested in National Examination.

National Examination other word call evaluation or measurement [1] is basically an effort to measure study results attainment that is used to end learning process in a certain education level. Assessment process [2] done by teacher's to collecting information related on performance students in learning to make decision making. In 2017, National Examination for SMP and the same level is held on 2nd, 3rd, 4th, and 8th May 2017 that covered four lessons; like Bahasa Indonesia, Mathematics, English and IPA. Education level will much influence someone's thinking perspective and behavior in dealing with and responding to each problem, therefore education is a human resources infestation for long term development. The success of education and learning process cannot be revealed instantly in a short time, instead the measurement is generation.

Human Development Index (IPM) of Indonesia is still left behind in very low position that is in the 113th rank from 188 countries in the world with amount 0.689 (BPS, 2015). When it is seen from education aspect, today's Indonesian workforce structure (2017) from 122.38 million people as many as 17.50 million people are SMP graduates or under it, and as many as 19.80 million people are SMA/SMK level graduates, whereas people who graduate from higher education are counted only 12.24 percent [4]. The Government's effort with nine year-study obligation and twelve year-study obligations has not been achieved fully. There are 4.30 million children who fail to finish nine year-basic education in 2016, 2.90 million children's dropouts

or do not enter schools. The distribution of Kartu Indonesia Pintar (KIP) has not reached those dropouts.

Teacher's role in learning process determines students' study results. In today's digital era teachers are asked to do some breakthrough in doing learning process. The breakthrough meant is that creativity and information technology use through electronic media like internet as learning media. In doing the learning process teachers are not expected to do just a kind of survival like when students follow the lesson as usual, the subject of material has finished, passing grade achieved, high scores in examination, but it should have been more than that the purpose of education must be connected with democracy, anti-corruption, exemplary, honesty, hard work, initiative, showing respect and honor to each other, and good reasoning. Successful teachers are they who involve students in assignments that full of cognitive and social value, and teach them how to do those assignments, tell the mistakes that the students have made so that they know how to deal with them.

Characteristics of Learning

The characteristics of learning in the 21st century by the declaration of 2013 curriculum is: (1) the information availability everywhere and anywhere, (2) computation is done with machine, (3) automation is reaching all human works, (4) communication can be done by everyone without exceptionally, anytime. In accordance, conventional learning model has to be combined with modern learning model, such as: (1) the learning is aimed at stimulating students to find information from various sources, not being told to do, (2) the learning is aimed at ability to formulate problems (asking), not just overcome the problems (answering), (3) the learning is aimed at thinking analytically (take decision), not just limited in thinking mechanically (common), (4) the learning asserts on the importance of cooperation and collaboration in overcoming the problems. According with UNESCO program who to developed teacher competency standards [7] for information and communication technology (ICT) to improve educational systems by used ICT's

One of competences that has to be possessed by teachers is professional competence [9] that covers: (1) teachers' ability in mastering fundamental of education, (2) teachers' ability in mastering and organizing teaching material, (3) teachers' ability in managing class in learning process, (4) teachers' ability in managing learning interaction, (5) teachers' ability in selecting study source, (6) teachers' ability in preparing and using learning media, (7) teachers' ability in doing evaluation and scoring study results, (8) teachers' ability in understanding function and programmed, (9) teachers' ability in understanding principles and scoring results for the sake of learning process development, (10) teachers' ability in organizing school administration.

Related to the teachers' ability number seven that is doing evaluation and scoring for study results, it will relate to teachers' ability in organizing and explaining teaching materials to students. In the context of National Examination, the evaluator is the Government as represented by Education Department. Therefore, teachers have to really adapt the learning material to curriculum that has been declared by the Government. The evaluation is done to know whether the targets of learning activity that has been previously planned achieved or not. National Examination that is done by the Government to learning processes in formal schools is aimed at mapping of learning quality nationally, but it has to be considered since geographical and demographic condition that varied, then the learning quality in each region cannot be regarded the same.

3   Research Methods

The research was done in Semarang city, with work coverage include SMP N 5, SMPN 13 and SMP YPE (*Yayasan Pendidikan Ekonomi*). The research population is students of 9th grade as many of 571 and as the sample makes up 253. The research variable consists of independent variables such as: try out scores of Bahasa Indonesia, English, Mathematics, and IPA lessons; and dependent variables that are scores of National Examination (UN) for those lessons. The data source is documentation of try out and UN scores from students of SMPN 5, SMPN 13 and SMP YPE Semarang. The analysis method is linear regression model, with an assumption that there are linear relations between try out scores and UN scores on Bahasa Indonesia, English, Mathematics and IPA lessons.

$$\hat{Y} = a + bX^{[8]} \; ,$$

$\hat{Y}$ = UN scores, X = tryout scores, a = constant dan b = regression coefficient

3   Results and Discussion

Results of data analysis through linear regression model are shown in table 1, which shows try out scores contribute different influence extent towards UN scores, on each lesson and each school.

Table 1. Coefficient variable from development linear regression

School	Regression Model			
	B. Indonesia	English	Mathematics	IPA
SMPN 5	Y=70,65+0,23X	Y= 57,19 + 0,24X	Y=64,11 + 0,32X	Y= 58,04 + 0,34X
SMPN 13	Y=44,14+0,52X	Y= 24,11 + 0,60X	Y=27,98 + 0,99X	Y= 41,68 + 0,60X
SMP YPE	Y=28,54+0,76X	Y= 17,99 + 0,55X	Y= 1,86 + 1,08X	Y= 23,85 + 0,58X

The constant and coefficient comparison (b) among lessons and schools shows: the highest constant coefficient on regression model on each lesson achieved by SMP N 5 students, and the lowest constant coefficient achieved by SMP YPE students. These results show that without try out students of SMP N 5 basically possess better fundamental ability in dealing with UAN than students of SMP N 13 and SMP YPE. In contrast, coefficient (b) on regression equation in SMP N 5 shows lower results than of other schools. It indicates try out scores in SMP N 5 contributes lower influence than of UAN scores, than students in SMP N 13 and SMP YPE due to better academic ability of SMP N 5 students.

Results of significance and meaning test of try out scores on UN scores by using regression model are shown in table 2. Those results show that price F and price t are significant under 5 percent on all lessons in SMP N 5, SMP N 13 and SMP YPE, except on IPA lesson in SMP YPE Semarang. Therefore, it can be concluded that there are positive linear relations between try out scores and National Examination scores attainment for Bahasa Indonesia, English, Mathematics and IPA lessons, except for IPA lesson in SMP YPE Semarang.

Results of significance test of try out scores variable model on UN scores on IPA lesson in SMP YPE results value t= 1,737 (α= 0,093) and F= 3,016 (α= 0,093), with R-Square 0,094, shows there is influence that is not significant.

Table 2. The brief data of processing results

No	Lesson	R-Square	F	Signif.	t	Signif.	Descrip tion	School
1	B. Indonesia	0.051	9.566	0.002	3.093	0.002	Signif.	SMPN 5
2	English	0.181	21.654	0.000	4.653	0.000	Signif.	Semarang
3	Mathematics	0.054	9.087	0.003	3.014	0.003	Signif.	
4	IPA	0.149	27.729	0.000	5.266	0.000	Signif.	
1	B. Indonesia	0.306	26.451	0.000	5.143	0.000	Signif.	SMPN 13
2	English	0.493	58.306	0.000	7.636	0.000	Signif.	Semarang
3	Mathematics	0.471	53.400	0.000	7.308	0.000	Signif.	
4	IPA	0.268	21.992	0.000	4.690	0.000	Signif.	
1	B. Indonesia	0.327	14.090	0.001	3.754	0.001	Signif.	SMP YPE
2	English	0.181	6.405	0.017	2.531	0.017	Signif.	Semarang
3	Mathematics	0.397	19.105	0.000	4.371	0.000	Signif.	
4	IPA	0.094	3.016	0.093	1.737	0.093	Not. Sig.	

Try out scores contribution on UN scores, the highest one achieved in SMP N 13, this result can be seen from R-square scores in SMP N 13 on all UN lessons that show higher R-square coefficient than of SMP N 5 and SMP YPE. The highest try out score's contribution on UN scores in SMP N 5 is achieved on English lesson (R-Square=0,181) and the lowest contribution is achieved on Bahasa Indonesia lesson (0,051). In SMP N 13 the highest contribution of try out scores on UN scores is achieved on English lesson, and the lowest is achieved on IPA lesson. In SMP YPE Semarang the highest contribution of try out scores on UN scores is achieved on Mathematics (0,397) and the lowest is achieved on IPA lesson (0,094 with $\alpha \geq 0,05$).

Based on the research results, the existence of significant influence of try out scores variable on UN scores shows contribution of try out organizing on UN scores attainment is higher. Through try out series students are given simulation and are made to be accustomed to deal with situation and condition that are created to be like UAN organizing, both through CBT and PBT model, seats, time allocation, so that hopefully students are accustomed with that kind of situation. It will make students more relaxed and are ready when dealing with and doing the real UN.

Try out that is done in several stages becomes the skill practice arena to do UN whether by using CBT or PBT with computer answer sheet. The more exercises are done, the more students' skill and confidence improvement will be acquired in using computer or filling in computer answer sheet and it hopefully can eliminate mistakes that will be probably done in doing UAN. Try out questions are composed based on almost similar to UN questions characteristics. Try out shows many variations of question form that are mostly like UN questions, so that students will know more and make adaptation with various kinds of question. Some series of try out will stimulate students to learn how the way and effort to find quicker and accurate method to answer each type of question, in accordance students have proper preparation and experience to answer various UAN questions that are not different from tryout questions.

For teachers, unsatisfying try out results can be used to map some subjects that need to pay attention at more in the form of subject intensive learning and make study course programmed

that is more focused and intensive as well as mapping students who need more attention to be given more intensive study course. For students who have not achieved expected scores in try out, it will give opportunity and force them to study more seriously. While for students who have successfully achieved satisfying scores, it will give and improve their confidence about their skill in doing UN.

Accordingly, try out organizing must be improved for its quality continuously for it is expected that try out organizing and try out scores organizing may strengthen students' all learning aspects whether it is mental and spiritual reinforcement or cognitive skills that are related to learning subject and intellectual skills understanding in answering UN questions.

4 Conclusion

Try out or National Examination Preparation for lessons that are tested nationally have significant influence on National Examination scores, therefore try out needs to be improved its quality or quantity by composing questions from the easiest one to high level complex questions.

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