THE CONTRIBUTION OF ACADEMIC SERVICE, INFRASTRUCTURE AND ADMINISTRATIVE TOWARDS MOTIVATION LEARN MATTER FIX BRAKE SYSTEM: CASE STUDY IN SMK PEMBANGUNAN NASIONAL OF SUKOHARJO, CENTRAL JAVA, INDONESIA

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ABSTRACT

The objectives of this study are to: 1) know the contribution of academic services to students' motivation, 2) know the contribution of infrastructure services to the students' motivation, 3) know the contribution of administrative services to the students' motivation, and 4) Knowing the simultaneous contribution of service variable academic, service facilities, and administrative services to the students' motivation in SMK Pembangunan National of Sukoharjo. The research is quantitative study. The research was conducted at SMK Pembangunan Nasional of Sukoharjo, school year 2010/2011. The population in this study is a class XI student learners Repair Automotive Brake Systems at Vocational High School of Pembangunan Sukoharjo numbering 120 people. The whole population will take some respondents as a sample study. Operational definitions in research data collection techniques are academic services (X1), infrastructure services (X2), administrative services (X3) and motivation (X4) Data analysis techniques using the test instrument of research, testing hypotheses, test assumptions and donations classical predictors. The conclusion of this research shows that: 1) The test results are partially variable academic services showed a significant effect on students' motivation, (2) The test results are partially variable infrastructure services showed a significant effect on students' motivation, (3) The test results are partially variable administrative services showed a significant effect on students' motivation and (4) Among the influence of academic services, infrastructure services,

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and administrative services to the students' motivation SMK Pembangunan Nasional of Sukoharjo, the effect is greatest variable of academic services. This is indicated from the effective contribution of 28.8%.

Keywords: Academic Services, Infrastructure Services, Administrative Services, Learning Motivation

INTRODUCTION

The Act of National Education Systems of The Republic of Indonesia Number 20 Year 2003 article 4 about principle of providence education disentangle about (1) held in a democratic manner and education system and indiscriminative with upholds human rights, religious values, culturally, the value of and the diversity of a nation; (2) education organized as a whole systemic with a system of open; (3) held as a process education and empowerment of students going on all living; (4), organized by giving keteladanan education build willpower, and develop creativity participants in the process of learning; (5) education held by developing the culture of reading, writing, and count for all citizens; (6) education is provided to empower all components of the public through the active role in the implementation and service quality control of education (Dewan Perwakilan Rakyat, 2008).

The teacher as educator and teachers are required to be able to use a method of teaching and an auxiliary apparatus teaching proper. Achievement school said to be successful if it could cause the presence of a change in comportment participants. In practice adapted to the purposes of national education. The aspect of national education one of which is made the indonesian people intelligent and skillful. It can be measured from school, the success of achievement that is, a feat that is supported in terms of knowledge and a mastery so graduates have a feat that satisfactory. Achievement school will determine the steps and ideals of students who desirable (Bramastuti, 2009).

Based on observations in schools, students are motivated to follow the lessons of automotive brake systems caused by several factors including: automotive brake systems lessons in the curriculum of vocational secondary school (SMK) as a condition for the rise in the value of the listed classes. Anyone want to have value, there are who want skilled, there is also a channel so that his wish to become an expert brake system. Someone do activities because it is

driven by the presence of factors biological, instinct, the need for and possible elements of the other as well as the psychological effects of human cultural development (Sardiman, 2006).

Problems in lessons brake system in high school vocational (SMK) national development is the low level of student learning motivation. It is known from the learning activities of students in lessons running brake system for what it is. That means students are just learning to perform the obligation, and no motivation to study hard so as to improve practical skills. The ability of theoretically based on daily or semester exams results also did not experience a better progress. It is technically required in the brake system, learning facilities in vocational secondary school (SMK) adequate national development. Quality resources for educators, educational or other non infrastructure repair facility means a vocational secondary school (SMK) Pembangunan Nasional of Sukoharjo, a material concern to researched with regard to activities that could more students learning motivation increases.

THE PROBLEM OF STUDY

In general problem of this research is there a service, the contribution of academic infrastructure, and administrative towards motivation learn matter fix brake system (case study in SMK Pembangunan Nasional of Sukoharjo, Central Java, Indonesia).

HYPOTHESIS

1. Is there a service academic contribution to motivation learn students of SMK Pembangunan Nasional of Sukoharjo? ;

2. Is there a service infrastructure of motivation contribution to learn students of SMK Pembangunan Nasional of Sukoharjo?

3. Is there a contribution of administrative services to motivation learn students of SMK Pembangunan Nasional of Sukoharjo?

4. Is there a contribution simultaneously variable academic service, service infrastructure, and administrative services to motivation learn students of SMK Pembangunan Nasional of Sukoharjo? .

THE OBJECTIVE OF STUDY

1. Knowing contribution service academic towards motivation learning students;

2. Knowing contribution service of infrastructures towards motivation learning students;

3. Knowing contribution administrative services towards motivation learning students

4. Knowing contribution simultaneously variable service academic, the infrastructure, and administrative towards motivation learning students.

THE CONTRIBUTIONS OF STUDY

1. The contributions of study benefits theoretical: the research is expected to provide information in development whose theories relating to the concept, academic service the infrastructure, administration, motivation learning, and achievement learn.

2. Practical benefits in research is this: (1) for school, as an input in managing learning at the rate of subjects, (2) for teachers, as an illustration and materials input about learning against motivation learning at matter fix brake in SMK Pembangunan Nasional of Sukoharjo.

LITERATURE REVIEW

Learning is change.Learn from an experience someone, problems someone, then went and studied, developed it and then it became a change (Rosyardi, 2011). Learning from first said learning which means of seeking a cleverness or science. In plain language said learning is understood as going the better by means of systematic (Iskandarwassid and Sunendar, 2008). Learning will affected by various components that make it up. There are several components that affects activities sitem learning process of them are teachers, factor students, instrumentality tools and media that was available, as well as the environment (Sanjaya, 2008): (1) factor teacher; (2) factor students; (3) factor facility; (4) environmental factors.

Brake system is one found in the vehicle. Brake has a very important role by itself, security vehicle passengers and others. Hence, all the vehicles must be fitted with brake system (Sucahyo et al., 1997). Brake designed to reduce speed (slow) and stop a vehicle or allow parking on the decline. Equipment is very important in vehicles and serves as a safety and guarantee driving safe. There are two, motivation which is intrinsic and extrinsic motivation (Sutikno, 2009): (1) The motivation is arising from within your own individuals without any encouragement others, compulsion but on the basis of own accord; (2) extrinsic motivation. This kind of motivation incurred as a result of the individual, the outside influences if, because of solicitation messenger, or compulsion of others so with because of students want to do something or learning.

There are several strategies that can be used by teachers to cultivate students ' learning motivation, as follows: (1) *explaining the purpose of learning to the learners*. At the beginning of teaching and learning should be first a teacher explain the purpose of special Instructional

titles to students. The more clearly the purpose of the greater the motivation in learning anyway; (2) *prize*. Give a gift to students who excel. This will spur their passion for can learn more actively again. In addition, students who are not progressing will be motivated to pursue student achievers; (3) *a rival/competition*. The teacher tried to hold a competition among its students to enhance their learning achievements, trying to fix the results of the achievements that have been attained; (4) *the praise*. It is appropriate that the students are achievers to be given reward or praise. Of course a compliment that is build; (5) *penalty*. Penalties are given to students who do mistakes, (6) *excite impetus to the protege to learn*. His strategy is to give attention to maximum; (7) *learners habit-forming learn good*; (8) *helped difficulty learning protege individually or group*; (9) *using methods that which varies* and (10) *use media good and in accordance with the purpose of learning*.

Tjiptono (1991) concluded that the image quality is not based on good service providers perception/viewpoint, but on consumer perceptions. This caused by consumer who consumes and enjoys services, so they should determine the quality of services. Consumer perceptions towards the quality of services is a judgment through preëminence services (Hasyim 2009).

For that quality can be detected on the question of the form, so that it can be found: (1) the quality of service is a form of an appointment; (2) the achievement of quality is an expectation and reality match the commitment that has been fixed in advance; (3) quality and integrity are inseparable. Implementation of elements of the academic services are then specified in the form of indicators of academic services. Indicators of academic services in view of the core ministries include researchers (core services), the provision of curriculum, recruitment of participants, the recruitment of teachers, preparation of hardware and software, the process of teaching and learning, the evaluation of teaching and learning.

RESEARCH METHOD

Type of Study

The kind of research this thesis is research quantitative. Arikunto (2006) explained that the research quantitative much be required to use figures, starting from collecting the data, interpretation of the data, and the appearance of the result. The study is revealing factors learning consisting of academic service (X1), infrastructure (X2) towards motivation learning (Y) through research the population. In research is wanting known events relative, distribution and influence between variables by using a questionnaire as a means of collecting data.

Location of Research

This research take a location in SMK Pembangunan Nasional of Sukoharjo, which was held on august until October 2011. The reason location is one of vocational school private, which is currently putting yourself as one of vocational school as an alternative options on society.

Population

The population in this research is graders attending school repair brake system automotive in vocational school in Sukoharjo numbering 120 people. Whole populations will be taken some respondents as samples research. Samples sample is a part number of and characteristic held by a population. Withdrawal samples or determination samples or sampling is some specified individual from population determined, as representative of the population (Sutama, 2010).

Samples

Research samples taken by method purposif sampling, namely determination samples by using particular consideration. Consideration used in determining sample is ease in collect data, budget research funds, that is and space of time research. Technical data a traveled in choosing the necessary data in taking a conclusion appraisement.

Operational Definition

1. Service academic (X1): academic is about academies spatially science e.g. teaching (Poerwadarminta, 1984).
2. Service of infrastructures (X2): the things would facilitate and waged conduct of a business would facilitate and waged this business be either objects and money.
3. Administrative services (X3): administration are the drafting keterangan-keterangan systematically and pencatatan-pencatatan in writing all operations necessary with intent acquires a a conspectus keterangan-keterangan about it in whole experience and in conjunction equally another;
4. Motivation learning brake system (Y) which: motivation learning brake system, are the potentials of propulsion that lie inside students for doing the learning brake system to achieve the purpose of learning.In variable this measured with an indicator: (1), intrinsic motivation and (2) extrinsic motivation.

The Technique of Collecting Data

In drafting instrument data, gatherer writer based on a sphere variables that are related. The steps in drafting instrument a gatherer of data as follows: (1) set indicators of any variable research considered important to asked in respondents, (2) make a grating in the form of matrik consisting of columns number, the variables, an indicator/factors, instrument and data sources, number of instruments.

The data has been collected through an activity of gathering data not yet giving the meaning of anything for research purposes. Research could not draw conclusions for the purpose of his research for the data was still is a raw material. Hence, required efforts to decode it. The process of data processing according to Soemitro (2002) includes: 64-65 among other activities as follows: (1) editing (to edit this means that repair); (2) coding; and (3) the tabulation.

RESULTS

Testing normality to method kolmogorof-smirnof, criteria testing used are when sig. Kolmogorof-smirnof of residual was 44.70, data derived from the normal distribution. Results test multikolinieritas obtained value tolerance and VIF, as seen on the table in for the tolerance larger than 0.1 or value of VIF smaller than 10. Thus variable free in research this is not happening multicolinierity. Multiple regression analysis is a requirement that can used so they knew immensity contribution of each the independent variable (service academic, service of infrastructures, and administrative services) against the dependent variable motivation learn. The constant value the regression equation is in table above, there are in column along with value the regression coefficient of variable service academic, service facilities and infrastructures, and variable administration.Interprestasi selanjutnya adalah the regression coefficient each variables.

The equation regresinya is **$Y= 1.343 + 0.114 X1 + 0.131 X2 + 0.207 X3$.** If increased by one score, academic service then motivation learn increased 0,114 score, and when the service of infrastructure of increased by one score, then motivation learn increased 0,131 a score of administrative services as well as if increased by one score and motivation learn increased 0,207 score. The constant value amounting to 1,343 indicate the average values motivation service, if academic study service infrastructure and administrative services zero. Explanation the assumption an equation Y above coefficient largest in the equation is a coefficient of administrative services is as much as 0,207. The regression coefficient that other big is variable service facilities, followed a variable academic service. The magnitude of the regression coefficient is a form of donations that accorded by each variable so that reminded his motivation

learn siswa, meanwhile, in relative terms the contribution of the biggest his influence towards motivation iearn analyzed in donations relatively.

The exactness parameters (estimate) conducted to determine the influence of each variable free (independent variable) towards change of the variables not free (dependent variable). While to find out whether hypothesis cypher (Ho) rejected and alternative hypotheses (Ha) accepted or otherwise, by comparing value t. when value t count and t tables; and hypotheses cypher (Ho) rejected and alternative hypotheses received contrarily if value t count and t table and hypotheses cypher (Ho) received and alternative hypotheses (Ha) rejected. Relativity academic donations (X1) has the leverage with different variables infrastructure of service (X2) and administrative services (X3). His academic service (relatively greater, X1) namely 35,24% compared with infrastructure of services (relative contribution X2) and administrative services (X3). Infrastructure of service (X2) give his relative against motivation learning of 32,06% lower than that of administrative services (X3) was 32,71%.

DISCUSSION

Based on the research above, all independent variable that have leverage favorably to motivation learn. Third side variables the services are academic, the infrastructure, and administration. Research description above shows that service academic be one needs learning especially solve difficulties experienced students. Besides text pictorial services teacher in teaching learning activity also become very important. As the research conducted by Vidyabhavan, Poojappura, Thiruvananthapuram (2006) untitled Repairs and Maintenance of Two Wheelers and Three Wheelers Vocational Higher Secondary. Vidyabhavan et al.(2006) mention that vocational education is education system intended for preparing students to recognize the work includes some field of activity. Learning is the construction knowledge of through a mental process that continuously.

This is progress through additional and fix from the perspective of comparison a new edition of with the concept that have been studied before. This is an intellectual process than memorization facta of economics. This is a variety of activities such as conglomeration problem solving, find out relationship, a prediction, arrived at the conclusion, rational thinking as well as critical, find application, grouping to another possibility and quarrying the crux of that. When the opportunity given to an intellectual process, learning would have been effective and intellectual ability will be more powerful. The findings that research shows that academic services have

contributed to motivation learn brake system in SMK Pembangunan Nasional of Sukoharjo, indicated by the spirit of the interaction of study the student with subject teacher.

Services and infrastructure in the vocational secondary school subjects in particular brake system is the prerequisite technical skills and abilities related domain knowledge, concepts, and skills so that can be taught, learned, and assessed. Based on the results of research David MacQuarrie et al. (2008) Criterion Referenced Assessment: Delineating Curricular Related Performance Skills Necessary for the Development of a Table of Test Specifications. This research is focused on the definition and describe the core skills and tasks necessary for the successful development of CTE students education and success through curriculum and assessment alignment process. The context for this project is located in Automotive Service Technology (AST), which is an additional must meet National Institute of Automotive Service Excellence (ASE) certification program standard.

Unfortunately, two areas of skills being unclear or valued in ase: basic skills for vehicles maintenance interval and basic skills repair vehicles, being joined to form service automotive technology basic skills. A qualitative analysis of a pattern system that appears used for building table the specifications for AST, that can facilitate curriculum development and appraisement. Specifically, this process defined and described prerequisite technical skill and ability related knowledge domain, concept, and skill so can be taught, learned, and judged. Learning and teaching besides need service academic and service of infrastructures also because of the administration. Based on the research by Olufemi Olayinka, Anthony Oyenuga (2010) called Integration of Automobile Technological Developments into Nigeria Technical College Motor Vehicle Mechanical Work.

This research is a study of the development of technological automobile in the school of mechanical engineering of vehicles in Nigeria in the curriculum of mechanical work. The curriculum for the mechanical workings of a motor vehicle in the school of engineering was developed to complement public education in junior high school in addition to the main areas of work with the aim of meeting the needs of mechanical power company motor vehicles in the industry outomobil. Based on the results of this research note that matter theory and practice are essential for technological development are taught in outomobil and at the same time a blend of theory and practice of unidentified materials in the curriculum of a motor vehicle mechanic

work. These findings indicate that between theory and practice that is contained in the curriculum of work to contribute in the development of automobile technology.

CONCLUSION

Results test in partial variable service academic show influence significantly to motivation learning students. It is revealed from the test t, variable that service academic obtained t $_{count}$ of = 2,117 and t table on 71 to 5 % is 1,994, so t $_{count}$ > t $_{table}$ and Ho rejected, mean the significant between variables service academic against motivation learn. This was confirmed value sig 0,038 and 44.70. Thus, hypothesis concerning contribution service academic effect on motivation learning students in SMK Pembangunan Nasional of Sukoharjo, proved.

Test results in partial service infrastructure variables showed significant effects on learning motivation of students. It is known from the t-test results, that the infrastructure Ministry obtained variable t $_{count}$ = 2,032 and t table = 1,994 so t $_{count}$ > t $_{tabel}$, Ho is rejected, so that means there is a significant influence among variables of service infrastructure on the motivation to learn. This reinforced the value of significance 0,044 < 0.05. Thus, the hypothesis concerning the contribution of the Ministry of infrastructure affect the motivation of SMK Pembangunan Nasional of Sukoharjo, proven.

Test results for partial administrative service variables showed significant effects on learning motivation of students. It is known from the t-test results, that the administrative services obtained variable t $_{count}$ amounted to 2,051 and t table = 1,994 then t $_{count}$ > t $_{tabel}$l, Ho is rejected, so that means there is a significant influence among variables administrative service against the motivation to learn. This reinforced the value of 0.046 significance and p = 0.05. Thus, the hypothesis concerning the contribution of the Ministry administration affect the motivation of SMK Pembangunan Nasional of Sukoharjo, proven.

Between the influence of academic services, infrastructure services, and administrative services to the motivation of vocational high school students of SMK Pembangunan Nasional of Sukoharjo, most variable influence is the academic services. This is shown from the value of the effective contribution of 28.8%.

SUGGESTION

1. Principal as leader, supervises the academic service, facilities administrative services to the students learn undisturbed and will raise motivation learning students.

2. Teacher, teachers should approach it with methods of instruction precisely so the relation between students with the teacher interwoven more closely. Nearness service academic between teacher and students will facilitate the teacher in give stimulation and motivation learning for students.

3. Management, should management, regard to the learning in motivate study in of SMK Pembangunan Nasional of Sukoharjo through improving services, academic service advice and infrastructures, and administrative services

4. For the relevant parties, department should respond evaluation national education standard education ministry is constantly nor sustained quality education and vocational school (SMK) can be maintained in accord with standards government.

5. For researchers coming develop research with problems centrarte factors that might affect motivation learn from the external economic conditions, such as: support families, cultural learning in family and others.

REFERENCES

(1) Arikunto, Suharsimi & Yuliana, Lia. Manajemen Pendidikan. Yogyakarta: Adita Media Yogyakarta.

(2) Azwar. Saifuddin. 2002. Tes Prestasi Fungsi dan Pengembangan Pengukuran Prestasi Belajar. Yogyakarta: Pustaka Pelajar.

(3) Beesley, Denise. 2004. Teachers' Perceptions of School Counselor Effectiveness: Collaborating. Univesity of Oklahoma.

(4) Bramastuti, Novia. 2009. Pengaruh Prestasi Sekolah Dan Tingkat Pendapatan Keluarga Terhadap Motivasi Berwiraswasta Siswa SMK Bakti Oetama Gondangrejo Karanganyar. Surakarta: Universitas Muhammadiyah Surakarta.

(5) Carr, Bowring. 2009. Belajar Secara Berkesan di Sekolah. Malaysia: Attin Press Sdn Bhd.

(6) Conttia, Lai Man Wai. 2007. The Influence of Learner Motivation on Developing Autonomous Learning in an English-for-Specific-Purposes Course. Hongkong: University of Hong Kong.

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(7)   Djamarah, Syaiful Bahri (2005) Strategi Belajar Mengajar. Jakarta: Rineka Cipta.

(8)   Ghozali, Imam. 2001. Model Persamaan Struktural: Konsep dan Aplikasi dengan Program Amos Ver.5.0. Semarang: UNDIP.

(9)   Gujarati, Damodar. 2003. Ekonometrika Dasar. Jakarta: Erlangga.

(10)   Hafteck, Lily Chen & Zhuoya Xu. 2008. The Interactions of Local and Global Influences in Chinese Early Childhood Music Education. China.

(11)   Ihsan, Fuad. 2005. Dasar-Dasar Kependidikan. Jakarta: PT.Rineka Cipta

(12)   Majid, Abdul. 2006. Perencanaan Pembelajaran Mengembangkan Standar Kompetensi Guru. Jakarta: PT Remaja Rosdakarya.

(13)   Poerwadarminta. 1984. Kamus Umum Bahasa Indonesia. Jakarta: PN Balai Pustaka.

(14)   Reid, Gavin. 2010. Effective Learning and Motivation - Ideas and Strategies for Independent Learning. Journal.

(15)   Rosyardi, Tania Bonita. 2011. Pembelajaran adalah Perubahan. Artikelpdf, diakses dari http://www.ayosemangatsekolah.co.cc/2011/05/pembelajaran-adalah-perubahan.html

(16)   Sardiman, 2006. Interaksi dan Motivasi Belajar Mengajar. Jakarta: PT.Raja Grafindo Persada.

(17)   Sucahyo, Bagyo, Darmanto, Soemarsono. 1997. Otomotif Mesin Tenaga. Surakarta: PT. Tiga Serangkai.

(18)   Sugiyono, 2006. Statistik untuk Penelitian. Bandung: Alfabeta.

(19)   Sunaryo. 2004. Psikologi Untuk Keperawatan. Jakarta: EGC

(20)   Sutama. 2010. Metode Penelitian Pendidikan Kuantitatif, Kualitatif, PTK, R&D. Surakarta: Fairuz Media.

(21)   Sutikno, Sobry. 2009. Belajar Pembelajaran Upaya Kreatif Dalam Mewujudkan Pembelajaran yang Berhasil. Bandung: Prospect.

(22)   UU Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional Republik Indonesia.

(23)   Yamin, Martinis. 2007. Profesionalisasi Guru & Implementasi. Jakarta: Gaung Persada Press.

(24)   Zetlin, Andrea. 2004. Problems and Solutions to Improving Education Services for Children in Foster Care. Los Angeles: California State University.

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