# THE ANALYSIS OF EDUCATION UNIT COST USING ACTIVITY BASED COSTING MODEL IN SMK 17 MAGELANG ACADEMIC YEAR 2014/2015

## ANALISIS BIAYA SATUAN PENDIDIKAN MENGGUNAKAN METODE ACTIVITY BASED COSTING DI SMK 17 MAGELANG TAHUN PELAJARAN 2014/2015

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### **Abstract**

The purposes of this research was to analyze the education unit cost used Activity Based Costing Model and to know the unit cost of education calculated using Activity Based Costing model on accounting program of SMK 17 Magelang academic year 2014/2015. This research was a quantitative research with one variable that, education unit cost. There are two stages to calculate the education unit cost using activity based costing, the first stage, there are fourth steps (1) identifying and classifying of activities (2) determining cost driver of activities (3) classifying of cost are homogeneous (4) calculating of rate group overhead, the second stage, multiplying the overhead rates per group costs by the amount of the cost drivers that are consumed each product. Based on stages of Activity Based Costing model the result of calculated the education unit cost SMK 17 Magelang, there are operational activities and development activities, the amount of cost drivers 182 students, 11 teachers and 6 education staffs, the amount cost of operational and development activities Rp 324,888,282 the over head of operational activities cost Rp 165,418,082 and the over head of development activities cost Rp 159,470,200, the total over head cost for X AK Rp 103,354,432 XI AK Rp 103,354,432 XII AK Rp 1,722,573 per students, XI AK Rp 1,722,573, XII AK Rp 1,891,367.

Keywords: Education Unit Cost, Activity Based Costing.

### Abstrak

Penelitian ini bertujuan untuk mengetahui biaya satuan pendidikan menggunakan metode Activity Based Costing dan untuk mengetahui penghitungan biaya pendidikan menggunakan metode Activity Based Costing di program akuntansi SMK 17 Magelang tahun pelajaran 2014/2015. Penelitian ini adalah penelitian quantitatif dengan satu variabel yaitu biaya satuan pendidikan. Ada dua tahap untuk menghitung biaya satuan pendidikan menggunakan Activity Based Costing, dalam tahap pertama ada 4 langkah (1) identifikasi dan klasifikasi aktivitas, (2) penentuan penggerak biaya (cost driver) dari tiap aktivitas, (3) pengelompokan biaya-biaya (cost pool) yang homogen, (4) perhitungan tarif overhead kelompok (pool rate), tahap kedua, mengalikan tarif overhead per kelompok biaya dengan besarnya penggerak biaya yang dikonsumsi oleh setiap produk. Berdasarkan tahap-tahap metode Activity Based Costing, hasil dari penghitungan biaya satuan pendidikan SMK 17 Magelang, terdapat aktivitas operasional dan aktivitas pengembangan total dari cost driver terdiri dari 182 siswa, 11 guru dan 6 staf. Total Biaya dari aktivitas operasional dan aktivitas pengembangan Rp 324.888.282, total biaya overhead aktivitas operasional Rp 165.418.082, total biaya overhead aktivitas pengembangan Rp 159.470.200. Total biaya overhead kelas X AK Rp 103.354.432, Kelas XI AK Rp 103.354.432 XII AK Rp 117.264.782 dan biaya overhead untuk siswa kelas X AK Rp 1.722.573 per siswa, XI AK Rp 1.722.573, XII AK Rp 1.891.367.

Kata Kunci: Biaya Satuan Pendidikan, Activity Based Costing

### INTRODUCTION

In the preface of *Undang-Undang Dasar Negara Republik* Indonesia, it is stated that one of the national goal of Indonesia is "*Mencerdaskan Kehidupan Bangsa*" (to educate the nation). It shows that Indonesian people understand how important education for every child. As a nation that understands the importance of education, Indonesian government allocates 20% of the budget of the country (*APBN*) for education needs. With a big number of budgets for education, the quality of education in Indonesia is still categorized into low level compared to other ASEAN countries.

Politic and Economic Risk Consultant puts Indonesia in the worst rank of the 12 ASEAN countries. It is shown by the low quality of education and the educational relevance of many elementary schools, the access imbalance to middle/ high schools, inefficient educational management, oldfashioned teaching methods and the lack of parents' roles in educating their children. One of many problems of education in Indonesia is the inefficient educational management. It is shown by the lack of planning preparation and the pragmatic policies of the stakeholders, thus education is not well managed. It is proven by determining the Curriculum 2013 as the national curriculum in the era of Muhammad Nuh, yet the ministry of

education changes the Curriculum 2013 into *KTSP* again as the national curriculum. Although the government allows some schools to use the Curriculum 2013, it gets them confused which curriculum should they use, whether the quality of the curriculum they use is the same as that of the latest curriculum.

Therefore, in the government era of Joko Widodo, the government keeps attempting to allocate budgets for educational sector by reducing fuel subsidies, hence the cost increases. Nevertheless, the policy is supported by many economic experts, because the budgets that get to subsidize fuel, now are allocated for more productive sectors, health and education. With such as educational subsidies from the government, it is hoped to minimize the costs of education that should be paid by students and also to improve the quality of education. For vocational high schools, the budget is called Dana BOS SMK. In the technical instructions of BOS SMK, it says that BOS SMK is a program of the government which is in the form of direct-giving budgets for state or private vocational high schools, in which the amount of the budgets is calculated based on the number of the students in each school times unit cost of the budgets. A school as an institution that conducts educational activities will experience the inappropriateness of the educational management from the government. A school is a non-profit institution, because, in its activities, a school is an institution that gives educational services.

Although a school belongs to a nonprofit institution, it also needs information regarding the costs of education. The information of the costs can minimize the school to make mistakes in determining the standard costs for education. Therefore, it will be very ideal if a school analyzes the costs by itself. The cost of education is one of the factors that can guarantee the process of education. Without costs of education. educational activities will not be implemented well. The sources of costs of education are from the central government, regional government, donation, private institutions, business, and parents. For that reason, schools have to calculate costs of education during one period accurately. The government regulation No. 32 year 2013 about National Standard of Education (Standar Nasional Pendidikan) explains that, in general, costs of education consist of investment, operational, and personal costs. Investment costs consist of costs of providing facilities and infrastructure, human resource development, and permanent capital. Personal costs include costs of education that are charged to students in order to join the learning activities regularly and continuously. Operational costs

of education cover teachers' salary, incentives, materials and equipment and non-direct costs of education, such as water, telecommunication services, facility and infrastructure maintenance, overtime pay, transportation, tax, insurance, etc.

Generally school used cost accounting system to evaluated based activity result which have been done especially related planning, managing, and product activity measurement. According to Femala in Supriyono (1999), product costs of traditional cost accounting systems give information about distorted costs. Hansen and Mowen (1992) say that distortion emerges due to the inaccuracy of charges, so it causes mistakes to determine costs, make decisions, plan, and control. The distortion also effects under cost/ over cost of a product. Therefore, it is possible to cause inaccuracy in calculating costs of education.

During the development of sciences, in 1800s and in the beginning of 1900s, a system in determining the cost of activity-based products was designed to resolve distortion in the traditional cost accounting. This system is called Activity-Based Costing. Activity-Based Costing (ABC) is a cost calculation system that tracks costs to activities and to products. The main difference of tuition fee calculation between traditional cost accounting and ABC is the amount of cost driver used.

Khusnul Sofiliana (2009) in her research, "This research is aimed to determine the school tuition fees using ABC system approach in SMP X Sidoarjo." The result of this research is unit cost of each student in the academic year of 2005/2006 is Rp 4,725,992, while in existing condition the unit cost is Rp 7,011,220, so the school earns fee budget surplus of each student each year Rp 2,285,228 or each month Rp 190,435. And then Eka Purwanti and Sumarjo in their journal (2012) say that "This research is aimed to know the unit cost of materials for garage internship program in Building Program of SMK Negeri 2 Yogyakarta." The result shows that unit cost gained from real calculation is Rp 47, 735, 920. A unit cost of each student each year is Rp 561, 599. The remaining budget of real needs is Rp 14, 773, 880. In ABC, costs are caused by activities that produce products. This approach uses activity-based cost driver (Femala, 2007). ABC can control costs by providing information of activities that cause costs. It has budgets as mental thought that a cost has its cause, and the cause of a cost can be managed (Mulyadi, 2006). ABC is a cost information system that provides complete information about activities that a company manages.

Vocational high schools are developed according to the region's potentials. Vocational high schools have various kinds of areas of skills that are also

based on the region's potentials. Every school has its own characteristics in managing costs of education. Consequently, there are no uniformity of standard costs of education yet in managing costs of education in vocational high schools. According to Indra Bastian (2007), the development of cost calculation in elementary and middle/ high school levels cannot solve challenges of autonomy and globalization eras. Costs of education calculation in elementary and middle/ high schools are still very simple and cannot give important information as a reference to take decisions. It inform the cost of each unit for students. The calculation cannot give and show informative data.

SMK 17 Magelang has a limitation of fund to conduct activities, because there are too many students have difficulty in paying the tuition fees, SMK 17 Magelang have to choose activities that are prioritized and allocate its fund. Therefore SMK 17 Magelang need an effective and efficient accounting system.

For that reason, the researcher uses unit cost calculation using Activity-Based Costing (ABC) to determine costs of educational services in the accounting program of SMK 17 Magelang. ABC is expected to be able to measure the accuracy of education cost and can track both total of education cost and education cost per unit in the accounting program. There are two principal things in costs of education concept

that needs to be analyzed: total cost and unit cost. By analyzing the unit cost, it is possible to find the efficiency in using any resources at school, benefits of educational investment, and equalization of educational budgets from societies and the government.

This research is conducted in SMK 17 Magelang in order to limit the scope of the research, thus the analysis of unit cost in SMK 17 Magelang is held for one year in 2014/2015. The researcher research entitled "The Analysis of Education Unit Cost Using Activity-Based Costing (ABC) Model in SMK 17 Magelang Academic Year 2014/2015."

### RESEARCH METHOD

## Research Types, Setting, and Subjects

This research uses quantitative approach. According to Sugiyono (2012:13), quantitative data is a characteristic from variable that the value are stated in the form of numerical. The calculation uses Activity-Based Costing (ABC) model and only uses one variable.

This research was conducted SMK 17 Magelang at Elo Jetis Street 17, Magelang. This research process includes writing proposals, implementation research, and reporting was conducted during the month of March – June 2016.

The subjects of the research are all school members of Vocational High School 17 Magelang. Samples in this research are the

headmaster, the school treasurer, and the head of administration staffs. The object of the research is unit cost of SMK 17 Magelang using ABC model.

### **Data Collection Techniques**

Interview is a data collection technique by asking a number of questions in the spoken form. It is done formally. Interview is used to collect data of school financial management, implementation of program plans and school budgets (*RKAS*), and any activities at school. The interviewees are the headmaster, the head of administration staffs, and the school treasurer.

Documentation is originated from a word "document" that means written things. In documentation, the researcher investigates written things such as books, magazines, rules/ regulations, meeting notes, daily notes, etc. The researcher collects data in the form of school documents such as data of students, teachers, staffs of education, facilities and infrastructures, and budgeting standard.

### **Data Analysis Techniques**

Data analysis techniques that used is acccording on the objective of this research that to obtain nominal costs of education of each student each month according to calculation using Activity-Based Costing (ABC). Instruments used are financial and non-financial data that are formulated to reach research stages and analyses as follow:

- a. Activity Study
  - Identifying all activities in Vocational High School 17 Magelang
  - 2. Identifying all resources consumed by the school, whether in the form of budgets, staffs, equipment, etc.
  - 3. Identifying a number of people, equipment, and facilities, salaries, honorarium, and incentives (resource driver) for each component related to activities.
  - 4. Determining relevant cost driver to activities, for example public activities such as electricity, telephone using total driver.
  - Charging full costs do activities according to consumed resources through chosen and relevant cost driver to main process activities
- b. Cost Object Study
  - Identifying and calssifying Coast objects
  - 2. Identifying and calssifying the activity driver, such as how long of the room using, total of student, building wide, the use of energy and service for every activity which need a fully cost to relate the activity to the consumed cost object.
  - Fully charge the cost to cost object according to how much the Coast consumed through school activity driver.

- Collecting secondary data,
   Budgeting standard.
- 5. Calculating the total of operasional cost and development cost in a year.
- c. Designing ABC model
  - Identifying financial data at SMK 17
     Kota Magelang through all processes including managerial process, main process, and supporting process.
  - Reviewing financial data in SMK 17 Kota Magelang, Budgeting standard.
  - Identifying and making definnition of some main activity in school into the activity detail which define all activity. It reflects all managerial processes, main and its supporting process.
  - Identifying and setting cost object, direct labaour cost, direct material, and overhead cost.
  - **5.** Identifying expense category, cost driver, and cost component.

# RESEARCH RESULT AND DISCUSSIONS

# **Description of Reasearch Subject**

The Research was conducted in SMK 17 Magelang locaten in JL. Elo Jetis No. 17-A, Kedungsari, Magelang

### **Financial Management**

a. Planning and Budgeting

In preparation of the work plans of the school budget, SMK 17 Magelang

engaged parties who concerned and knew the School Budget, as principal, vice principal, the school trasurer and head of expertise. program Stages of the preparation of the plan of activities of the budget of the school, Principal determined the meeting schedule of the preparation of the plan of activities and budget of the school (RKAS) and every unit of work recorded needs required in every part of it, such as head of program expertise recorded needs of programe and then deliberated on the entire input from each party and produced a activities plan and budget of the school (RKAS) for one academic year.

### b. Implementation and Management

Financial management in SMK 17 Magelang devided into two, the first is donation from government management and the second is donation from society management

Donation from Goverment
 Management

The donations from the Government such as "BOS" and edicators salary. The procedures has to be done to got the school fund "BOS" are as follows:

- a) The school send student data to the Magelang education authorities.
- b) The fund "BOS" distibutor institution distributed the fund "BOS" directly to the account of the School.

- c) The head of administration affairs as manager of fund "BOS" with The Principal took the many at the bank.
- d) The head administration affairs allocated donation in accordances with the rules that are already written in the technical guide SMK fund "BOS".
- e) The head administration affairs make fund "BOS" realization report.

# 2) Donation from society management

Fund received by the tresurer of the school is "SPP" Rp 135.000 students/months treasurer assited by one administration affairs stuff to managed "SPP". Task from school treasurer are:

- a) Recorded all inflow from "SPP" everday.
- b) Recorded the expenditure of school that used the fund of the committe, namely the operational activity at school.
- c) Save the school money in the account at the Bank, yaking money for the purposes of the school should be did by the treasure accompained by The Principal.
- d) The school treasurer shall be obliged to make a report monthly, at the end of each month submitted to the Principal and the Committe.

c. Accountability of the Implementation of the Budget

The Head of administration affairs who manage SMK the fund "BOS" make a reported which contained "SPJ" and evidance such as receipts for purchases, and this report would be submitted to the department of education of Magelang city with copy of the provincial education office, Head of administration affairs also makes the report of used fund "BOSDA" and submitted to the departement of with education Magelang, Magelang mayor copy. The School treasurer created a monthly report and year-end report which contained "SPJ" and evidance such as receipts for purchases, the report was given to the Principal and the Chief of Committe.

### d. Financial Controlling

The supervivion conducted by the inspectorate-General of the Departement of education of Magelang done every three months, supervision conducted in order to controlling the used of Supervison of the Government conducted by the General Inspectorate of the Ministry of education and culture done every 6 sixth months to controlling distribution of SMK fund "BOS" in the school. The supervison of committe's fund is conducted by The Chief of committe on each end of the semester and supervised every months by The Principal.

# The Aplication of Activity Based Costing Model

In this stages the activities at SMK 17 Magelang would be divided into two activities, the operational activities and development activities, the operational activities and development activities classified into direct material, direct labor and overhead cost. Implementation of ABC model can be applied in SMK 17 Magelang implemented the following stages:

- a. Review of financial data and business process identification of SMK 17 Magelang, in this stages the business process divided into three leves, namely: the managerial process, core process and support process, managerial process es relating to activities implemented planning, organizing, actuating and controlling. As for the activities of:
  - Determining of the visions, missons and the objective of the school Activities include the annual meeting held at the begining of new year academic to determined the direction and policies of the school.
  - 2) Strategic Makinng Includes activity coordination meetings for the divisions of work assignment to all the teachers and their structural position.
  - 3) Monitoring and Evaluating Includes internal and external supervisions

activities on teachers performance or supervisions was conducted in the financial system of the school, other activities such as evaluation in the end of the year.

The next process is core process includes:

- 1) Identification of needs and the development of SMK 17 Magelang products, included the activity of the preparation of the needs of the students in accounting program, the development of cooperation with the business world and industry, the preparation of the curriculum, the preparation of sports practice and tool requirements, preparation of instructional equipment needs.
- 2) The process of transformation and fulfillment SMK products, activities include teaching, observation of the practice field, charity program and other activities related to products needs.
- 3) An additional process in the SMK products follows: city level competition, province or national level, hold activities the exercise of leadership and other support activities.

The third levels is supporting process, follows:

# Human Resource development process

Includes educational activities and training for teachers, requiring teachers at

national seminars and various other development activities.

### 2) Procurement Infrastructure process

Procurement activity include the internet hotspot, CCTV, the procurement computer lab tools.

# 3) Financial and Administration process

Adminstration activity such as teachers administrations follows, the fulfillment of the "RPP", Sylabbus, "PROTA", and "PROMES" as well as financial administration, facilities and infrastructure student, curriculum and other activities related to administration and finance.

### 4) Maintenance

Activities incude the maitenance of school buildings, maintenance of facilities and infrastructure belonging to the school.

The third levels of the above, all of the activities undertaken with regard to managerial process, core process and supporting process and contained in a finance-managed with the receipt and expenditure of school, here is the sources of the budget accepted by the SMK 17 Magelang in 2014/2015.

Table 1. SMK 17 Magelang Budget Ni 2104/2015

	Source of	Total (Rp)	Proportio
	Fund		n
1	Donation		49%
	from		
	Government		

	a. <i>APBD</i>	251.964.7	
		88	
	b. <i>APBD</i> of	36.700.00	
	Province	0	
	c. APBD	9.600.000	
	District/City		
	d. Others	50.000.00	
	Source of	0	
	Government		
	Budget		
2	Donation		51%
	from Society		
	a. Education	226.562.0	
	cost of	00	
	Students		
	b. Donation	17.520.00	
	of students	0	
	parents		
	c. Others	112.910.0	
	Sources of	00	
	Donation		
	Total	705.256.7	
	TOTAL		
		85	

SMK 17 Magelang have activities that can be grouped into operational activities and development, here are the operational activity of SMK 17 Magelang:

Table 2. Operational Activities of SMK 17 Magelang in 2014/2015

No	Operatinal Activities
1	Teachers salary and Incentives
2	Education Staffs salary and
2	Incentives
3	Learning activities
4	Student activities
5	Stationary of study program
6	Supplies
7	Equipment
8	Transport
9	Procurement of exam papers
10	Maintenance
11	The other expenses

Activities related to operational activities in SMK 17 Magelang in 2014 there are 11 activity. As for the development of activities presented in the following table :

Table 3. Development Activities of SMK 17 Magelang in 2014/2015

No	Development Activities
1	The development of KTSP
2	Assesor/competence exam
3	Principal working unit
4	Investment and development of
	programs

Activities related to development activities in SMK 17 Magelang 2014/2015 there are 4 activities, so that the number of operational and development activities are 15 activities.

b. Identification cost object, direct labor cost, direct material cost and overhead cost. Operational and development activities are grouped into the direct labor cost, direct material cost and overhead cost, below was a table assignment cost object:

Table 4. Determining cost object, direct labor cost, direct material cost Ana overhead cost.

	Description	Details
Cost	The overall cost	Education
Object	of activities	
Direct	Peoples involved	Teachers and
Labor	in educational	Staff
Cost	activities	

Direct	The cost of raw	Supplies and
Materi	materials directly	equipments
al Cost	used in education	
	activities	
Overhe	Indirect raw	Cost of
ad Cost	materials cost,	facilities and
	indirect labor	infrastructur
	cosst and the	es
	others indirect	maintenance,
	cost.	cost of travel
		agency and
		cost tec.

On determining of cost object related to the products that produced by SMK 17 Magelang that was capable of producing profesionals and have good competence in technology so that expected able to a career in the corpoorate world in accordance with their expertise.

Direct cost in this case is the direct labor and direct material costs. Direct labor is cost that used for teachers and eductors to produced a competence students, and they would be adapt in environmental. Direct material cost is incurred for material and practice in carrying out activities of teaching and learning in school. Indirect cost namely overhead cost, overhead cost was used in order to supported the activities of primary produce in the form of general activities, routine administration and indirectly contributed in creating quality students.

c. Identification of expense category, cost driver and cost commponent. For ease in doing the calculation of activity based costing models, we need to defined expense category, cost drivers and cost component.

Table 5. Determining expense category, cost driver and cost component

Determini ng	Description	Details
Expense	Fund of	Routine
Category	education	expense:
0 ,	activities	material of
	expense	consumables
	1	expense,
		teachers and
		educators
		expense,
		power and
		services
		expense.
		Development
		expense
		:procurement
		of learning
		materials.
Cost	Factors that	Number of
driver	influence	students,
	cost of	number of
	activities	teachers.
Cost	The scheme	Power and
behaviour	of cost	services,
	absorption	material of
	that	consumables,
	influence by	procurement
	the types of	of exam
	cost drivers	papers
Activity	The place of	SMK 17
center	activities	Magelang

 d. Implementation Activity Based Costing Model In implemented the design of ABC model that can be applied in SMK 17 Magelang, then held the following stages:

### 1) Cost Drivers analysis

The following data relating to the cost drivers research. Data used was collected for 2014/2015 academic year, as much:

Table 6. Number of students SMK 17 Magelang 2014/2015.

NO	Clases	Number of Students		
		M	F	Total
1	X AK 1	0	30	30
2	X AK 2	0	30	30
3	XI AK 1	0	30	30
4	XI AK 2	1	29	30
5	XII AK 1	1	31	32
6	XII AK 2	0	30	30
	Total	2	180	182

SMK 17 Magelang has 6 groups of study, consisted of two groups of study class X, two groups of study class XI and two groups of study class XII.

Table 7. Recapitulation Number of StudentSMK 17 Magelang 2014/2015

N	CLASE	STUDEN	PROPORTI
O	SS	TS	ON
1	X	60	32%
2	XI	60	32%
3	XII	62	36%

Table 8. Recapitulation Number of Teachers in SMK 17 Magelang 2014/2015

No	Clasess	Teachers	Proportion
1	X AK	9	30 %
2	XI AK	10	33 %
3	XII AK	11	37 %
	Total	30	100 %

Number of teachers enrolled in SMK 17 Magelang fewer than the number of subjects, so that one teachers can holding 2 to 3 subjects.

Next was identification of the value of expense activity associated with a specific budget that resulted value of expenditure of funds. The following matrices in general that can be shown:

Table 9. Expense Activity Matrices

No	Activities	Total
1	teachers salary and	164.866.000
	Incentives	
2	Education staff	41.600.000
	salary and	
	incentives	
3	learning activities	47.956.432
4	student activities	37.044.700
5	Stationary of study	17.134.750
	program	
6	Supplies	24.544.756
7	Equipment	72.451.500
8	transport	24.000.000
9	exam papers	59.772.900
10	Maintenance	21.497.150
11	investment and	128.970.200
	development of	
	programe	
12	other expenses	58.919.800

13	Development of	105.100
	KTSP	
14	assesor/competence	4.655.000
	exam	
15	Principal Working	1.480.000
	Unit	
	Total	705.256.785

Overhead cost allocation used ABC model, after knew activity that occured in fiscal year 2014/2015, then the next would be identified as cost drivers any related activity. The principle of the selection of cost drivers with a basic covenience and availability of data based on exciting data that allocating overhead absorption appropriate activity. Allocation budget of exiting activity is done by calculating the prportion of cost driver against the exciting budget then look for the nominal value of the activity of each class.

 e. Calculation of Direct Labor Cost, Direct Material Cost and Overhead Cost in SMK 17 Magelang.

After determined of the overhead cost model then proceed with the calculation to determined direct labor cost, direct material cost and overhead cost in the management of the services in SMK 17 Magelang.

Calculation Of Direct Labor Cost
 Calculation of direct labor
 cost comprises the whole of the

known expenditures relating to direct costs in SMK 17 Magelang composed of teacher salaries and allowances, educator salaries and allowances.

Table 10. Direct Labor Cost Calculation

No	Clasess	Total
1	X AK	61.939.800
2	XI AK	68.133780
3	XII AK	76.392.420
	Total	206.466.000

### 2) Calculation of Direct Material Cost

Calculation of direct material cost also related to activity in SMK 17 Magelang, the entire expenditure related to direct material cost in each class which consists of stationery educational program, consumables of material, consumables of tools, procurement papers exam would be presented in the following table:

Table 11. Direct Material Cost Calculation

No	Class	Total	
1	X AK	55.649.250	
2	XI AK	55.649.250	
3	XII AK	62.605.406	
	Total	173.903.906	

### 3) Overhead Cost Calculation

Calculation overhead cost in SMK 17 Magelang was calculated used the proportion of the cost drivers that would be described there

Table 12. Overhead Cost Calculation

	Activities	Overhead cost		Tota	
		X	XI	XII	1
1	Teachers	1.95	2.14	2.4	6.50
	and	0.00	5.00	05.	0.00
	education	0	0	00	0
	staff			0	
	Developm				
	ent				
	expense				
2	Learning	15.3	15.3	17.	47.9
	activities	46.0	46.0	26	56.4
		58	58	4.3	3
				16	
3	Student	11.8	11.8	13.	37.0
	Activities	54.3	54.3	33	44.7
		04	04	6.0	00
				92	
4	Transport	7.20	7.92	8.8	24.0
	and travel	0.00	0.00	80.	0.00
	agency	0	0	00	00
				0	
5	Maintenan	6.87	6.87	7.7	21.4
	ce	9.08	9.08	38.	97.1
		8	8	97	50
				4	
6	investment	41.2	41.2	46.	128.
	and	70.4	70.4	42	970.
	developme	64	64	9.2	200
	nt of			72	
	programe				

7	Others	18.8	18.8	21.	58.9
	expenditur	54.3	54.3	21	19.8
	es	36	36	1.1	00
				28	
8	Total	103,	103,	11	324,
		354,	354,	7,2	888,
		432	432	64,	282
				78	
				2	

# CONCLUSION AND SUGGESTION

### **Conclusions**

Based on the results of the analysis of the calculating unit cost using Activity Based Costing model, There are two stages to calculate the education unit cost using activity based costing, the first stage, there are fourth steps (1) identifying and classifying of activities (2) determining cost driver of activities (3) classifying of cost are homogeneous (4) calculating of rate group overhead, the second stage, multiplying the overhead rates per group costs by the amount of the cost drivers that are consumed each product.

Based on by Activity Based Costing model analysis, we found that the activities in SMK 17 Magelang inculded Operational activities and development activities. The operational activities consisted fourth activities (1) learning activities, the amount of students as cost driver, (2) students activities, total activity frequence as cost driver, (3)

Maintenance activities, the amount of students as cost driver, (4) other expenditure, the amount of students as cost drivers. The development activities consisted third activities (1) Teacher and education staff development, the amount of teacher and eduacation staff as cost driver, (2) transport fee, the activity frequences as cost driver, (3) invesment and development of program, the amount of students as cost driver. The result show that education unit cost fo class X AK Rp 1,722,573 per year student, for class XI AK Rp 1,722,573 per year students, for class XII AK Rp 1,891,367 per year student.

## **Suggestions**

Based on this research, the author gives suggestions related part:

### 1. SMK 17 Magelang

SMK 17 Magelang can consider the use of Activity Based costing model to calculate the calculation of education unit costs since Activity Based Costing provide more accurate data for decision making. Activity Based Costing provide a more detailed information and can identify the cost inefficeincy to provide data for cost evaluation.

### 2. Future Researcher

The authors suggested that further research can enhanced this researched, with:

 The researcher involve more schools broader information, including

- making comparasion among school's education unit cost.
- The researcher can comparing ABC with Traditional method.
- 3) The reasearcher shoul communicate the need for more comprehensive information to able to analyze the financing system effectively.

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