

The Calculation Of The Pretest And Post-Test One Group Design Of The
Students' Number Of Words Before And After They Used The Brainstorming
Technique In Essay

$$t = \frac{Md}{\sqrt{\frac{\sum xd}{N(N-1)}}}$$

$$\Sigma 1 = 3910$$

$$\Sigma 2 = 14984$$

$$\Sigma d = 11074$$

$$x1 = 90.95$$

$$x2 = 348.46$$

$$Md = \frac{\Sigma d}{N} = \frac{11074}{43} = 257.53$$

$$\Sigma x^2 d = \Sigma d^2 - \frac{(\Sigma d)^2}{N} = 3163576 - \frac{122633476}{43} = 311634,7$$

$$t = \frac{257,53}{\sqrt{\frac{311634,7}{43(43-1)}}} = \frac{257,53}{\sqrt{172,55}} = \frac{257,53}{13,136} = 19,605 \quad d.b = N - 1 = 42.$$

$$t_{0,01} \quad t = 3,551$$

There is a significant difference between the first and the final results of number of words.

The Formula To Calculate The Mean Value Of Students' Attitudes That

Usually Called Semantic Differential Scales

$$\frac{(n \times m) + (n \times m) + \dots}{r}$$

n : number of mark at each space.

m : value for the space.

r : total number of readers.

THE STUDENTS' SCORES (xi) AND THEIR ATTITUDES VALUES (yi)

Respondents	Xi	Yi
1	60	4.4
2	65	1.7
3	75	5.7
4	70	4.9
5	80	4.4
6	80	5.3
7	70	5.2
8	70	4.5
9	80	4.8
10	70	5.1
11	60	1.5
12	65	3.9
13	100	5
14	90	5.9
15	65	6.4
16	55	3.9
17	85	4.9
18	60	4.2
19	70	3.4
20	98	4.5
21	90	6.4
22	55	4.1
23	50	4.3
24	92.5	6.5
25	50	5.5
26	60	5.6
27	70	4.6
28	90	4.6
29	65	6.2
30	50	4.1
31	70	5.1
32	82.5	4.9
33	80	4
34	65	4.9
35	65	5
36	67.5	5
37	50	6.5
38	75	5.9
39	70	5
40	70	5.5
41	72.5	4.4
42	60	4.7
43	75	5.7

The Calculation of xi And yi From Table 4.6 Page 49

$$\frac{[6 \times 105,43] - [21 \times 29,49]}{\sqrt{6 \times 91(91)[6 \times 145,68 - (145,68)]}}$$
$$= \frac{13,29}{124,47}$$
$$= 0,107$$

The air pollution which causes high risks for the citizens' health can be reduced by producing a good policy of the related authorities. In the several countries which usually has big cities, they have solved the problem. They make rules to reduce air pollution. But, our country is still left behind in that problem. Indonesian is still be the country with high grade of air pollution.

There are some reasons why Indonesia still have the air pollution problem. From the explanations above, we can take a lesson that we should be careful because the air pollution can disturb our health.

III. Conclusion:

- What we can do to reduce air pollution
- Explanation of each reason
- The reasons

II. There are some reasons why Indonesia still have the air pollution problem.

- Our country is still left behind
 - Some big cities abroad have solved the problem
 - by producing a good policy of the related authorities.
- I. The air pollution which causes high risks for the citizens' health can be reduced

OUTLINE

- Air pollution is caused by many factors: vehicles, factory,
- Air pollution can disturb human's health and be the ozone layer.
- Our country still can not solve the problem of air pollution.
- Indonesia is still be a country with high grade of air pollution.
- Indonesia lose many parts of forest.
- We can reduce air pollution start from our home.

The air pollution problem and solving:

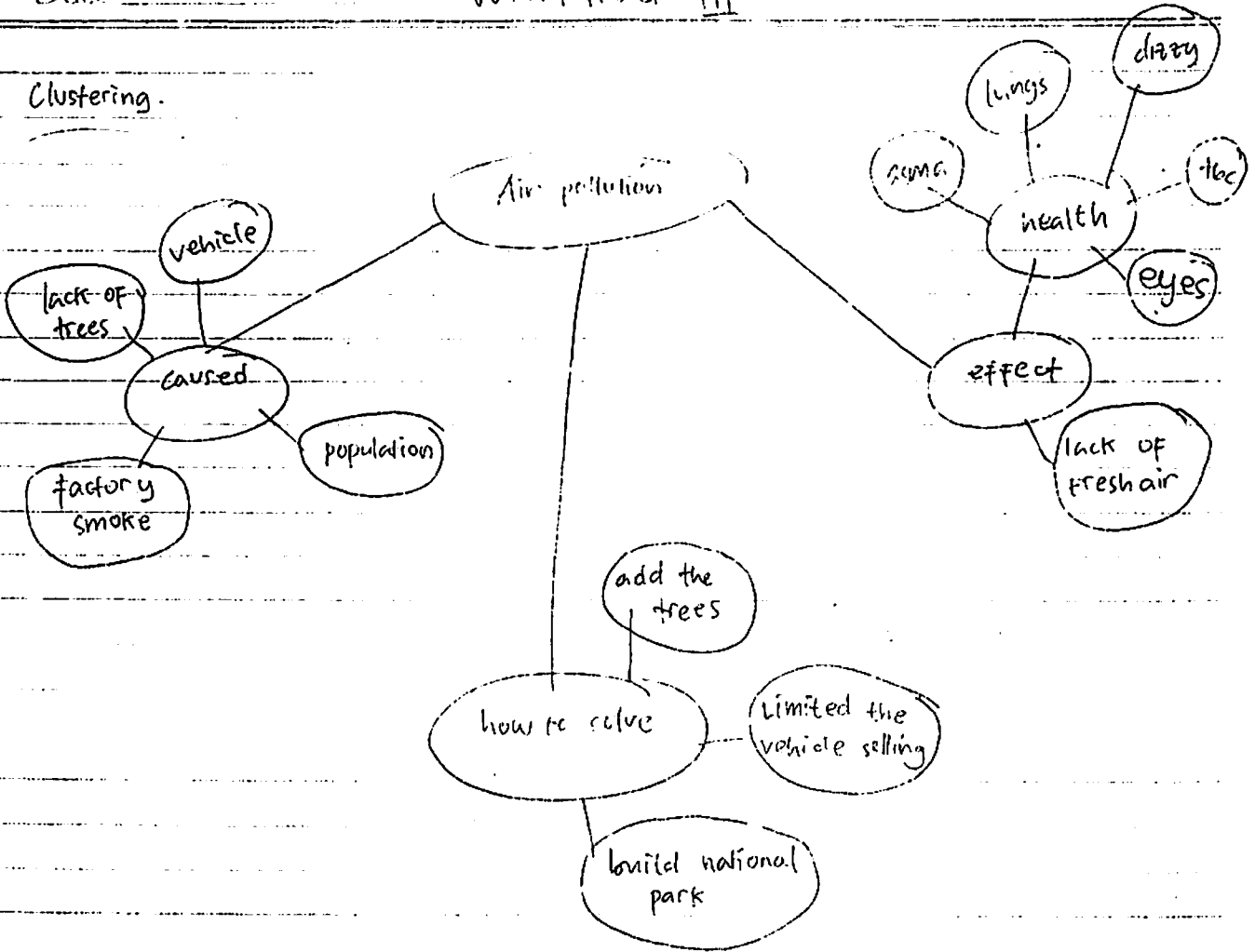
BRAINSTORMING

st, Indonesia is a developing country. The government has to make a condition
 the modern ones. Many factories are built and many vehicles are bought. The
 of the factories and vehicles causes air pollution. Second, Indonesia lose
 forests. Many trees are cut down, and now Indonesia lose many part of
 forests. As we know that forests can be a filter of air pollution. Trees changes
 carbon dioxide into oxygen. Third, the rule in Indonesia still can't avoid it. Ind-
 sian rules usually do not be obeyed by the citizens. It's just because car go-
 vernment doesn't serious to solve this problem. Those reasons above make the condition
 Indonesia worse. Nowadays, many people buy vehicles. They don't understand that
 many vehicles, air pollution increase. Then, by cutting the trees down, will make certain
 oxides can't be oxygen. Carbon dioxide make disturb our good circulation and air
 ings. And the government must make the rules clear. They should try to reduce the
 pollution. Although we know that our government can't solve the problem, we can re-
 duce air pollution with certain ways. First, try not to use vehicle if we can walk or use
 cycle which is not make pollution. Second, as far as possible use public transportation.
 Third, reduce the use of aerosol in the household. Fourth, do not cut the trees in your
 neighborhood and begin a tree- watch group to ensure that they are well tended and
 red car. Fifth, switch off all the lights and fans when not required. If possible share your
 in with others when the air conditioner, cooler or fan is on. Sixth, don't burn leaves in
 ur garden, put them in a compost pit. Seventh, make sure that the pollution check for your
 only car is done at regular intervals. And eighth, use carly unleaded petrol.
 From the explanations above, we can take a lesson that we should be careful
 cause the air pollution can disturb our health. We can reduce air pollution when start
 in our home. If everyone do these ways, air pollution can be reduced

Date _____

WRITING III

Clustering.



The outline

- Title : Air Pollution in Big City.
- Paragraph I : The globalization and the growth of population caused pollution in big city. especially the air.
- Paragraph II : The caused of air pollution
 - + vehicle
 - + lack of trees
 - + factory's smoke
 - + population
- Paragraph III : The effect of air pollution.
 - + health effect :
 - asma
 - lungs
 - dizzy
 - tbc

- Paragraph V : Conclusion .
- limited the selling of vehicle
 - replace the old and died trees with the new one
 - build national park / garden
 - add the trees
- Paragraph IV : How to solve .

Date

area that near the central of the city, fill it with trees, plants, and produce fresh air or oxygen. Next step is build the park or garden in quite large along the highway, these will help to reduce smoke that come from the vehicle and native from government and citizen. Government have to add the trees that will put the best way to take care this problem is build good cooperation and coordination but if it happened in a long term, it can be serious and dangerous.

their eyes is getting red. Although the effect is not quite heavy problem for our and also make irritation to our skin and also eye. Our skin become so dry and air, it caused asma, cancer / lungs cancer, dry our head, the / cough in years, of fresh air, it can be harmful for our health. If we breath the city and poison. The main effect of air pollution is we can lack of fresh air. If we lack black poison smoke.

pollution. Trees no longer there to produce fresh oxygen, and factory reduce it with the lack of trees and the existence of factory can increase the spread of the air, it was replaced with house, building (office), and also factory. The population in big city is the decrease of trees in city. The trees was already cut off, it was replaced with house, building (office), and also factory. The that come from those motor. Another caused of air pollution that also come from crowded in highway that full of motor vehicle make the fresh oxygen mixed with smog their tools to go to their office, school, etc. This made the pollution in the air, the people in my city, Surabaya, use to use motorcycle, car, or public transportation as city, the population is growth, and also the needs of transportation equipment. Also the migration made city is full of people. People needs vehicle like public and private transportation, they are bus, taxi, car, motorcycle, etc. More people come to considered that big city can make their dreams come true, the high of birth rates and high birth rates and also the migration from small town or village to big city. They the growth of population, the great increase of people in big city is come from the what might be caused the air pollution especially in big city is begin with

pollution and its effect, then we can decided what is the best solution for it. get together to solve this. To solve it, we have to know what the caused of air This complex problem need to be solved, the government and citizen have to give bad effect to human itself, but it also make human's job faster and easier. in factory to replace human labour, etc. Some of those equipment caused pollution and for transportation, telephone and internet for global communication, the use of machine their needs and also make their job easier, for example people using motorcycle or car of people needs is getting increase. A lot of people using modern equipment to fulfill the growth of population and globalization in this modern era make the growth

Air Pollution in Big City

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s. It will be good for the circulation of air in city and also can be function to place to rest and relax our mind or refreshing our mind. Other way to the pollution is to reduce the selling of vehicle. Government have to limited the of vehicle in big city. In Surabaya, for example, there are over 3.000 ~~new~~ new cycle and over 2000 ~~new~~ new cars per month. This data was came from officer. So, if we reduce and limited the selling of vehicle, we can also reduce both vehicle population and air pollution. In addition, we also have to replace and died trees with the big, fresh, and strong one.

After we know what the caused of air pollution and how bad it is to health, we have to take a real action to solve the problem so that we reduce the bad effect of air pollution and started to live with healthy. If we do ~~the~~ some reaction to combat air pollution, we'll live in the good environment with fresh air of course. With healthy live ~~and~~, healthy condition, and also, healthy environment, we can do our daily activity good way...

Brainstorming

Air pollution has been the major problem for Big cities. Every day ~~we~~^{they} have to deal with it. What is air pollution exactly? Air is the ~~main~~ ocean we breathe. Air supplies us with oxygen which is essential for our bodies to live. When the air is ... There are many kinds of air pollution, for example, black-carbon pollution - caused by ... Here in my essays, I'd like to explain about the ~~condition~~^{condition} air pollution in Indonesia, ~~and~~ about the causes, and ~~any~~^{any} efforts that has been done to solve this problem comparing with ~~other~~ Singapore and London.

Dwi I.R

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Outline

Topic : Air pollution

Title : Air Pollution in Indonesia.

A. Introduction :

- ⇒ What air pollution is
- The kinds of air pollution and their causes.
- The effect for human kind

B. : → The problem of Air-pollution in Indonesia

- The causes of air pollution in Indonesia
- ⇒ The kinds of efforts to solving the problem.
- ⇒ The kinds of efforts, done by London and Singapore.
- ⇒ Another way to solve this problem.

C. Conclusion ←

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WRITING III

Air Pollution in Indonesia

Air pollution has been the major problem for big cities, especially big cities in Indonesia. Everyday they have to deal with it. What is air pollution exactly? Air is the ocean we breathe. Air supplies us with oxygen which is essential for our bodies to live. Air is 99,9% nitrogen, oxygen, water vapor, and inert gases. When the air is polluted, it contains noxious particles and gases. There are many kinds of air pollution, for examples, black-carbon pollution caused by the tiny particles from burning fuel for energy which release into the air, the exhaust from burning fuels in automobiles, homes and industries, etc. Air pollution has many effects to the human's health and also to the environment. It can cause the inversion of temperature, acid rain, greenhouse effect, and even the ozone depletion. For human's health it may cause health problems, cancer, or even death. Here in my essay, I'd like to explain about the condition of air pollution in Indonesia, about the causes, and any efforts that has been done to solve this problem comparing with the efforts made by Singapore and London.

First, I'd like to explain the air condition in Indonesia. According to the World Bank, the air pollution in Indonesia is reaching catastrophic levels. While Indonesia Environment Monitor 2003 report said that one third of children are at risk of serious damage to their brains, lungs, and digestive system from lead poisoning because most vehicles still use leaded fuels. An official at the World Bank office in Jakarta added, that the air pollution in Indonesia imposes costs of at least \$400 million on the Indonesian economy every year and has very a serious impact on public health. Second, I'd like to explain the causes. Motor vehicles are one of the chief sources of air pollution in Indonesia, between 1995 and 2001, the number of vehicles in Indonesia grew from 12 million to almost 21 million. Many of these vehicles lack the catalytic converters required for cleaner emissions. Indonesia's industrial sector, which contains chemical, petroleum, coal, plastic and rubber products, and food industries, also is a significant polluter. Illegal logging also lead to the serious air pollution that leading to the levels of smog and acid rain. Many efforts has been done either by the public or the government to solve this problem. For examples, the campaign for using the leaded fuel, but it didn't work because Pertamina, as the state-owned oil company, has very limited refinery capacity. The use of clean air programs have also been

roduced by the government, The Jakarta administration and non-governmental organizations. But these programs have failed to significantly reduce air pollution. Since Jakarta is considered as the most polluted city in Indonesia, many clean air campaign were held. But it seems failed because, the Law isn't supporting enough. In Singapore, the Government take a very serious efforts to manage air pollution in their country. They controls air pollution by reducing emissions from the source and by reducing the impact of Residual pollution on surrounding developments by proper siting of industries, by monitoring the air quality with EVN through the Telemetric Air Quality Monitoring and Management System, and held Car-Free Day every 19th of April. In London, the Government purchases of energy-efficient automobiles, by funding public transportation and private cars. For example, the drivers who entrence within an 8-square-mile area of Central London, on weekdays between 7 a.m. and 6:30 p.m. must pay a £5 fee. This way has proven the decreasing of Nitrogen oxide and CO₂ levels.

No doubt that Indonesia facing a serious problem of air pollution. Air pollution has costs Indonesia very much and responsible for health problems. By adapting the way London and Singapore's efforts of solving the air pollution problem, Indonesia might be able to solve it in years to come. Therefore, all Indonesian, not only the government but also all citizens must united hand in hand to deal with air pollution problems.