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We would like to take this opportunity to thank everyone who was involved in preparing this report. First of all we would like to express our heartiest appreciation to the CMLHS Director, who has been very supportive for this project to be successfully completed.

We would like to convey our gratitude to our colleagues in the Centre for Modern Languages & Human Sciences and with the hope that we will always be together in enhancing research activities and highlighting our centre as part of our service in delivering new knowledge to the community.

We would like to express our eternal gratitude to the Ministry of Higher Education of Malaysia for the trust given to us through the award of FRGS type a grant with the purpose of revealing more knowledge in helping the undergraduates in overcoming their difficulties in their studies.

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CONTENT **Page**

UMP

LIST OF TABLES

LIST OF APPENDICES

UMP

ABSTRACT

The purpose of this research is to develop study orientation strategic tools towards achieving academic excellence among first year Engineering students of University Malaysia PAHANG. The measurement of study orientation skills is done by innovating a website based on a survey of study habits and attitudes questionnaire (SSHA); http://portal.ump.edu.my/survey. The students' study orientation skills are analyzed and sorted into three groups of achievement; the higher achiever, normal achiever and lower achiever. The strategic tools comprise of the treatment website; http://portal.ump.edu.my/survey/admin, a textbook (Study Orientation Skills in Action, Kit (Study Orientation Skills Kit), Ghani format of note-taking, DVD on the study orientation skills and lecture on each aspects of study orientations skills. The assessment on the academic performance is based on grade point average (GPA) scores of the undergraduates in their first semester and second semester examination results. 74 respondents selected by simple random sample taken from the Faculty of Civil Engineering & Natural Resources. The research uses Quasi-experimental design with a pre-test and post-test by comparing both group samples. The finding has shown that the study orientation skills (SOS) website was able to measure SOS effectively among the respondents in the two groups. There is a significant difference in SOS between pre-test and post test scores of the respondents. The results also show that there is a correlation between SOS and GPA scores in pre-test and post-test within and between each group.

ABSTRAK

Tujuan kajian ini dibuat adalah untuk menghasilkan satu alat strategik dala m kemahiran belajar kea rah pencapaian akademik yang cemerlang dikalangan pelajar kejuruteraan Sivil tahun pertama di Universiti Malaysia PAHANG. Pengukuran kemahiran orientasi belajar dibuat dengan menghasilkan satu website ke atas soalselidik tabiat belajar dan sikap belajar (SSHA): http://portal.ump.edu.my/survey. Kemahiran orientasi belajar para pelajar diukur dan dibahagikan kepada tiga kelompok pencapaian; pencapaian tinggi, sederhana dan pencapaian rendah. Alat strategic kemahiran orientasi belajar ini juga terdiri dari buku teks (Study Orientation in Action, Kit (Study orientation skills Kit), Catatan Nota Format Ghani, DVD dan bahan kuliah ke atas setiap aspek kemahiran orientasi belajar. Penilaian mengenai pencapaian akademik adalah berdasarkan hitung panjang GPA skor keputusan peperiksaan semester 1 dan 2. Sampel terdiri dari 74 pelajar Kejuruteraan Awam & Sumber Asli yang dipilih secara rawak mudah. Kajian ini menggunakan rekabentuk quarsi eksperimen pra-ujian dan pos-ujian dengan menggunakan kelompok perbandingan. Dapatan kajian menunjukkan website kemahiran orientasi belajar berjaya mengukur kemahiran orientasi belajar para pelajar bagi kedua-dua kelompok kajian. Terdapat perbezaan yang signifikan di antara kemahiran orientasi belajar dalam pra-ujian dan pos-ujian. Dapatan kajian juga menunjukkan terdapat korelasi antara SOS dengan skor GPA dalam pra-ujian dan pos-ujian bagi setiap kelompok.

CHAPTER 1
INTRODUCTION

1.0 INTRODUCTION:

New students enrolling in tertiary institutions will feel disorientated as they face learning difficulties due to a transition period and changes in their study orientation. A lot of research has been done to show that changing environment of study among undergraduates students who have to orientate themselves from the various systems of learning. They have to adapt from dependent, teacher cantered, monotonous and convergent into independent, student cantered, autonomous and divergent form of learning (Carpenter, 1990; Rozana Zubir, 1988, Entwisle, 1982). Hence, a study on their study orientation skills will be able to determine their study difficulties encountered by these students. Hence by knowing the faults of the students, they can easily re-correct them by using a series of remedial devices and improve their academic performance.

One of the main problems among freshman university students is that they have to adapt to a new learning environment. They have to shift their study orientation skills from a monotonous, stereotype, convergent, dependent learning and more to a teacher cantered approach in schools after having experienced ten to twelve years of schooling. They should practice in school an autonomous, divergent, independent learning based on student cantered approach (SCL) of learning and e-com learning atmosphere as being practiced at University Malaysia PAHANG (Liddell, 2004; Miller, 2000; Weissman 1996; Ewing, 1993; Rohana Zubir, 1988; Entwisle, 1982).

Apparently a lot of studies on the study difficulties experienced during this transitional period for new undergraduates have been done by frontier researchers such as by Brown & Holtzman (1956, 1960). They developed a strategic tool known as Survey of Study Habits & Attitudes (SSHA) with 100 item questionnaires to measure students study orientation skills. The SSHA comprises of the summation of study habits and study attitudes. Their work had been practiced by so many researchers globally and in so many fields. SSHA is said to be the most reliable and valid tool in measuring SOS until today. The continuation of work on SOS was done by Entwisle (1960), Goldfried & D'Zurilla (1973), Vermont & Rijswick (1988), Hurburt (1990), Johnson (1991), Ewing (1993), Giovani (1994), John (1997), Bhatnager (1999), Partin (2002), Corey (2003), Vineeta (2004), Lice (2005), Praakh (2007) and so forth. Studies has been done in Malaysia on SOS by using SSHA such as by Rohana Zubir (1988), Zainul Asmawi (1988), Salleh (1994), Shahril (1994), Pandian (1997), Harianto (2006), and many more frontier researchers.

One way to help students to perform better in their academic performance is to practice a good SOS. SOS is comprises of study methods, study techniques, study habits, study attitudes and study motivations Cloete & Schocet, (1986); Hersh (1984); Rasor (1998) said by knowing a correct SOS, the students will eliminate anxiety and difficulties in learning. Elton (1988) added that the feeling of satisfaction will produce a well-being and potentiality in the individual and as a result, they will inherit a force of intrinsic and extrinsic motivation and higher self-awareness in learning. Shahril (1994) has shown that failure rate among science students depended so much on their study habits and study

attitudes. Warren (1991); Estes, (1994) supported the findings and stressed that the SOS will directly effect science students academic performance. Svenson (1977) stated group of students who have higher level of self-awareness will contribute a need and drive to resurrect their study methods in the new learning experiences. This kind of students is also have a higher perception and belongs to the group of students who have in-depth study (atomistic) methods and holistic study methods.

So far the use of SSHA in measuring study orientation skills was based on the standard SSHA manual produced by Brown and Holtzman in 1960. There was no website or computer software program in simplifying the measurement of study orientation skills by SSHA. Hurburt (1990); Bruce (1992) used SOS teaching in a formal class. The same was done by others such as by Herdeen (1995), who used holistic approach in teaching SOS and Lisa (2005) was using peer tutoring. Fullilove (1990) used workshop programs in teaching SOS, whereas Abid (2006) used guidance services in teaching SOS.

Normally using the SSHA manual will take a few weeks to evaluate and analyze the SOS, whereas using the new invented website of SSHA, the determination of SOS will only take about 40 minutes, together with the SOS treatments. This research also provides other treatment tools such as SOS text-book, SOS kit, SOS-DVD of format Ghani and SOS-DVD and lectures on SOS. Correcting the SOS at an instance will improve the academic performance. The finding of this research will be able to be a

model in improving SOS and academic performance among undergraduates and also post graduates students.

1.1 Statement of Problem:

There is so much literature and research done by well known scholars in the field of study skills to measure study orientation skills among undergraduates using the Study Skills Habits and Attitudes questionnaire. These studies used traditional methods of assessing the SOS and GPA among undergraduates across many disciplines which includes engineering, humanities and medical. Eventually these traditional ways in measuring SOS takes time to interpret the data.

Reviewing the academic performance among those graduated in 2006/2007 and the entry qualifications of new students, UMP students are considered as average students. The academic performance of those graduated from the Civil Engineering faculty in 2007 show that only 8% passed with a first class honours, 92 % second class upper and ------ lower class. In comparison the Computer engineering (Computer system and network) graduating students showed that only 5.63% scored first class, 94.3 % second class upper and ------lower class.

With regards to the above student's academic performance, this research is trying to develop *study orientation strategic tools towards achieving academic excellence among first year students of University and also to* determine the level of study orientation skills among various group of achievers and its correlation towards the academic performance of UMP undergraduates. The research used strategic tools such as

new and more complete SOS devices comprising of a website for measurement, website for remedial and other devices such as textbooks, DVD, and lectures in measuring students SOS and method in re-correcting students SOS. Results from the research will show the UMP undergraduates score in their SOS and its relationship to their academic performance. These findings can be used to access and provide remedial devices to all university undergraduates in Malaysia either local or private universities, colleges or Polytechnics.

1.2 Research Objectives:

The objectives to be achieved by the research are:

1. To measure study orientation group achievement categories among respondents.
2. To provide a remedial website to correct study orientation skills among new respondents.
3. To provide other study orientation skills devices to re-correct students study orientation skills such as SOS text-book, SOS DVD and SOS lecture.
4. To find out the significant differences of SOS among Civil Engineering respondents
5. To find out the significant difference on grade points average among Civil Engineering students.
6. To find out the relationship between SOS and academic performance among respondents.

1.3 Research Hypotheses:

Below are the null hypotheses to be answered by the research finding:

1. There is no significant difference between pre-test and post-test of study orientation skills among Civil Engineering respondents.

2. There is no significant difference between pre-test and post test on grade points average of Civil Engineering respondents.

3. There is no correlation between study orientation skills and academic performance among Civil Engineering respondents

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction:

This chapter will elaborate on the definition and explanation of study orientation skills, research parameters, study orientation skills aspects, the significance of study orientation skills. Besides these it will also discuss on related background learning theories, teaching of SOS, remedial devices in measuring and correcting SOS, the instrument used in assessing SOS and the statistical analysis in assessing SOS and undergraduate's academic performance.

2.2 Study Orientation Skills (SOS) and its Parameters:

Study orientation skills are also known as study skills Dash (1994); Svenson (1988); Cloete & Schocet, (1986), Hersh (1984). They said that study skills comprises of study methods, study techniques, study habits and study motivation. Estes, (1994) Warren (1991); Entwisle (1972), Brown & Holtzman (1956, 1960); added study orientation skills were the product of study habits and study attitudes.

Gallick (1999); William (1991); said study orientation skills is also related to self-concept and students personality. The factors are interest or hobby, habits, attitudes, motivation, aptitude, self-esteem, and self-concept. They stress on the factor of personality as a moderator in students study orientation skills. The students, who always

resist in reading, always end up having poor study orientation skills. Another factor is self discipline which plays an important role in motivating the students in their reading habits.

Deborah (2006) added study habits are related to the motivation. Both factors will determine the students study behaviour in performing as a student. Study motivation will influence and sustain the student's mood, energy and drive towards their study activities. She added that the students who spend at least of one hour of homework everyday normally have good study habits as well as display a good academic performance. She said that among medical students who follow problem based learning shows that those who practice correct study habits will also display excellent results in the academic performance. Gurung (2003) added those students who exhibit a correct study habits in using pedagogical learning will show an improvement in their academic performance.

2.3 The Significance of Study Orientation Skills in Learning:

New students in the university need to know and practice correct study methods suitable to the university learning environment. Vermunt (1988) said knowing a correct study method will endeavor their adaptation to the new learning atmosphere within a short interval of period. The adaptation is important in overcoming their study difficulties.

Entwisle (1982) said the prime sources of the study problem in the university environment are from a variety of teaching styles and teaching approaches of lecturers. Some of the lecturers are not exposed to any pedagogical classes, thus they don't really know appropriate teaching methods and techniques in giving lectures. Besides that Entwisle also stressed on that almost all students entering into the university who do not have a proper studying technique to suit the university learning requirement. Beard & Senior (1980), Rohana Zubir (1988) added the new students entering university are dependent on lecturers and are used to spoon feeding habit will take sometime to adapt to their new study methods which are independent and self-cantered approach. The effect of school system for about 11-12 years of experience isn't an easy task to erase in the short-time. Nevertheless higher achiever group will always be very fast in adapting to the changes of learning environment compared to the normal and under achiever groups (Hewitt, 1973; Harvey, 1962). He added although they are exposed to the poor teaching styles, they still can perform well in the academic performance. Watkins (1983) added those students who are matured are faster to adapt to the new learning atmosphere compared to the fresh students. Pandey (1972) stressed that the faster the students adapt to the learning atmosphere, it will help them to perform better in academic performance.

2.4 Study Orientation Skills and Academic Performance – Use of the SSHA:

Beginning with the study done by Brown & Holtzman, (1956, 1960); Entwisle (1960); Hewitt (1973); Hills & Porter (1981); Rohana Zubir (1988); till very recent research done by Carpenter (1990); Wang (1993); Isaak (2007, They said that study

orientation skills are very much correlated with the academic performance among undergraduates especially among college freshman.

Finkel & Krawitz (1973) said knowing the correct study method among undergraduates enables them to perform better with an academic strategy. Harvey et.al al (1961) stressed that the higher achiever group normally have correct study methods. They easily adapt to the new teaching atmosphere although they are exposed to the poor teaching methods, they still manage to perform excellently in the academic setting.

Hills & Potter (1981) said the problem in passing and failing in the examination is related to the study methods exhibited by the undergraduates. Those who exhibited better study methods normally show a good in standing the academic performance. They stressed on the factor of adaptation to the new academic environment. Those who practiced a correct study method adapted faster and will perform better academically.

Snodgrass (1990) using SSHA on 136 University of Alabama students found that there is a strong positive correlation between the SOS and the academic performance among respondents. The finding shows that student with a good score in SOS also demonstrated good scores in their CGPA.

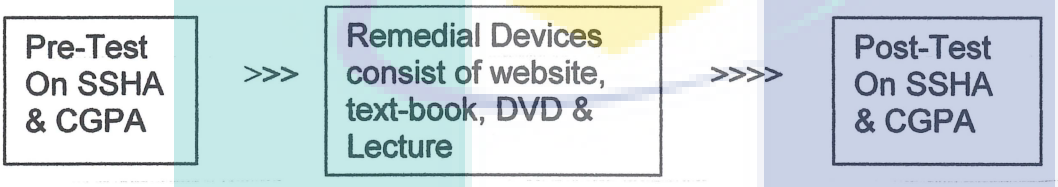
CHAPTER 3

METHODOLOGY

3.1 Methodology:

1.4.1 Conceptual Framework:

The conceptual framework for this research is as illustrated in the following chart as:



3.2 Research Process:

This research used a pre-test and post-test with remedial devices with respondents who were civil engineering undergraduates. Pre-test was given to the respondents after two weeks they resumed their study in their second semester. The assessment on SOS was measured and the GPA score for the first semester results was obtained. Post-test is given after respondents received their second semester results. The assessment on SOS and GPA was once again calculated as source of data. Analysis of data by percentage scores, mean scores and ANOVA was used to determined the significant difference at p-values of 0.05 between pre-test and post-test scores on SOS and GPA within the groups. The correlation test using Spearman – Brown formula was tested to find out the correlation within the groups.

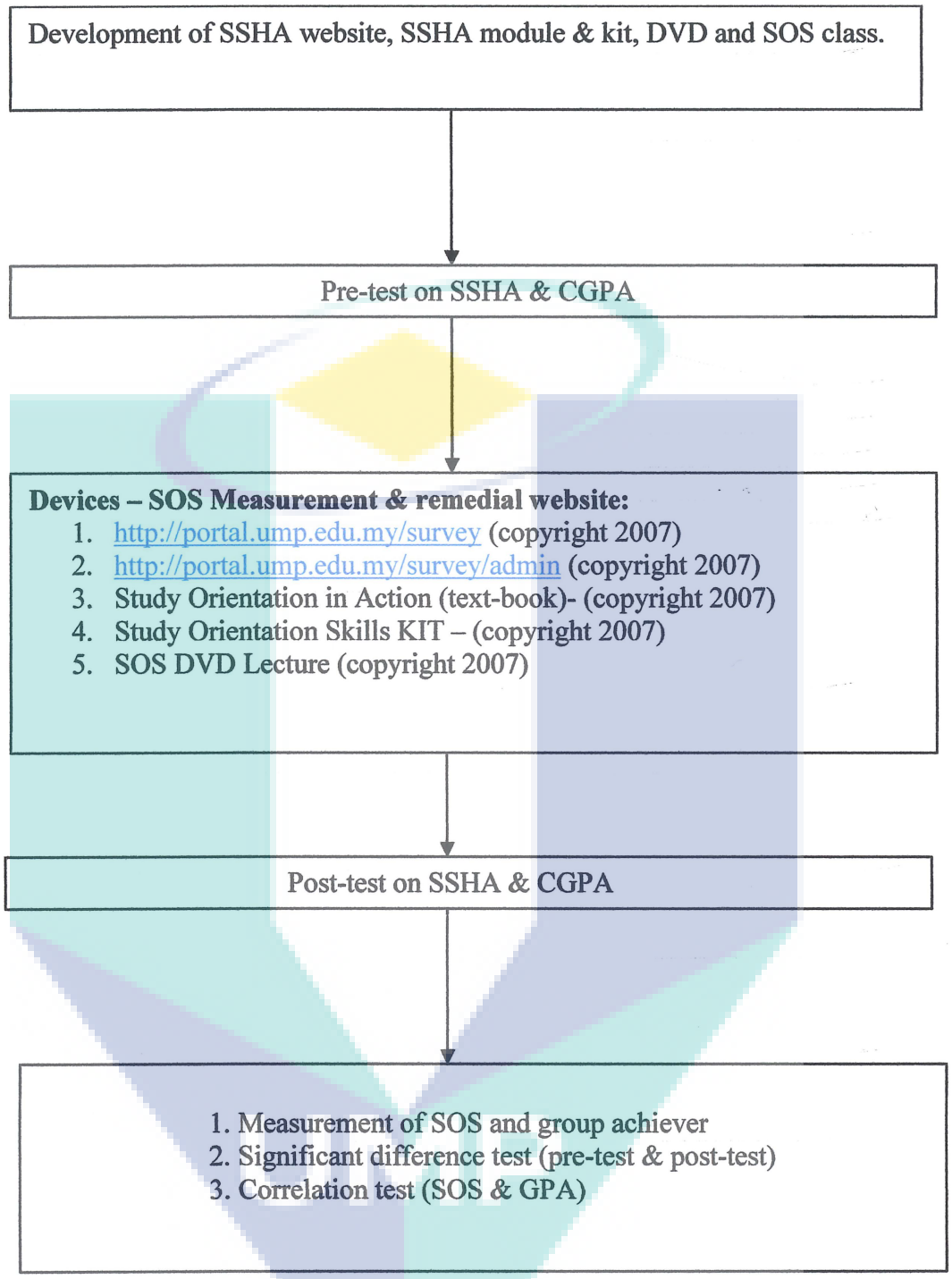


Figure 2: Research process

3.3 Sample

Sample was chosen among the faculty of civil engineering & natural resources. 75 first year students were chosen as respondent's .The 75 respondents were chosen by simple random sample and who completed all the research activities. The total number (the research population) for the first year student's intake in 2006 was 829 students. The respondents were chosen based on voluntarily basis and by their own effort to study about SOS. The same method of choosing the sample of respondents was done by the frontier researcher such as by Elshout-Mohr (1983), Gersten (1989), Carpenter (1990), Wang (1993), Yip (2005), and Isaak (2007).

Scales for Grade Points Average (GPA):

The scale is to determine GPA is based on the standard grade classified in University Malaysia PAHANG as Student Academic Centre Guide:

- Higher Achiever 80 – 100% A+ - A-
- Normal Achiever 55 – 79.99% C+ - B+
- Under achiever < 55 % < C+

Table 5: The detail of the grading system for Diploma and Degree in University Malaysia PAHANG.

Grade	Point	Pass	Min	Max	Grading type
A	4	PASS	80	100	NORMAL
A-	3.67	PASS	75	79.99	NORMAL
B+	3.33	PASS	70	74.99	NORMAL
B	3	PASS	65	69.99	NORMAL
B-	2.67	PASS	60	65.99	NORMAL
C+	2.33	PASS	55	59.99	NORMAL
C	2	PASS	50	54.99	NORMAL
C-	1.67	PASS	47	49.99	NORMAL
D+	1.33	PASS	44	46.99	NORMAL
D	1	PASS	40	43.99	NORMAL

From The above table the CGPA calculation for measuring the group achiever in this research are specified as it is done by Brown & Holtzman (1956, 1960), Haslam & Brown (1982), Heerden (1995), Weissman (1996), Miller (2000), Deborah (2006) as follow:

Table 6: Grade point average standard in University Malaysia PAHANG

Grade	Point	Pass	Min	Max	Grading type
A	4	PASS	80	100	Higher A.
A-	3.67	PASS	75	79.99	Normal A.
B+	3.33	PASS	70	74.99	Normal A.
B	3	PASS	65	69.99	Normal A.
B-	2.67	PASS	60	65.99	Normal A.

C+	2.33	PASS	55	59.99	Normal A.
C	2	PASS	50	54.99	Under A.
C-	1.67	PASS	47	49.99	Under A.
D+	1.33	PASS	44	46.99	Under A.
D	1	PASS	40	43.99	Under A.

3.4 Analysis of Data

3.4.1 Testing of Significant Difference

Significant Difference Test Formula

The significant difference depend on the value of ANOVA which is based on the F-test as follow:

$$F_{test} = \frac{\text{variance between samples}}{\text{variance within samples}} = \frac{\left[\frac{\sum n_i (\overline{x_i} - \overline{\overline{x}})^2}{k-1}\right]}{\left[\frac{\sum (n_i - 1)s_i^2}{\sum (n_i - 1)}\right]}$$

$\overline{\overline{x}}$ = mean of all sample values combined
k = number of population means being compared
n_i = number of values in the ith sample
$\overline{x_i}$ = mean of values in the ith sample
s_i^2 = variance of values in the ith sample

3.4.2 Testing of the correlation:

The correlation is determined between -1 and 1 inclusive, -1<r<1 where:

r = 1	-	indicates perfect positive linear correlation
r = -1	-	indicates perfect negative linear correlation.
r = 0	-	indicates no correlation
r nearer to 1	-	positive linear correlation

r nearer to -1 - negative linear correlation

CORRELATION TEST FORMULA

A correlation exists between two variables when one of them is related to the other in some way. While, the linear correlation coefficient *r*, measure the strength of the linear relationship between the paired of *x* and *y* values of sample. Discovered by Karl Pearson, this *r* value is sometimes referred to as the Pearson product moment correlation

The **Pearson product moment correlation coefficient, *r*, is a numerical value between** -1 and 1 inclusive, where
r = 1 indicates perfect positive linear correlation
r = -1 indicates perfect negative linear correlation
r = 0 indicates no correlation
The nearer the value of *r* is to 1 or -1, the closer the points on the scatter diagram are to the regression line
Nearer to 1 – strong positive linear correlation

S = Estimate value of standard deviation
X = Mean value of X
Y = Mean value of Y
n = Number of sample

$$r = \frac{S_{xy}}{\sqrt{S_{xx} S_{yy}}}$$ where

$$S_{xx} = \sum x^2 - \frac{\left(\sum x\right)^2}{n}$$

$$S_{yy} = \sum y^2 - \frac{\left(\sum y\right)^2}{n}$$

$$S_{xy} = \sum xy - \frac{\sum x \sum y}{n}$$

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CHAPTER 4

RESULTS AND DISCUSSION

4.1 Results and Discussion:

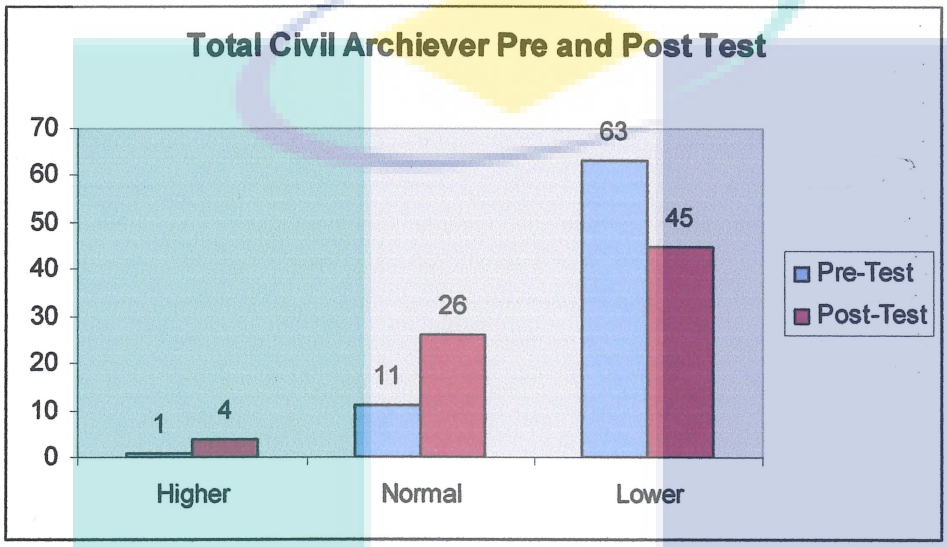
4.1.1 The measurement of Study Orientation Skills in pre-test and post-test based on group achievers among Civil engineering respondents:

As shown in Table 7, the Pre-test result showed that the number of higher achiever group was 1 (1.33%); normal achiever was 11 (14.67%) and under achiever was 63 (84%). Post-test results shows that there was an increase in the percentage value for the higher achiever group and normal achiever group; 4 (5.33%); 26 (34.67%) and decrease in the under achiever number to 45 (60%). Table 2 shows all parameters of SOS such as DA (Means = 14.85 to 19.65), WM (15.81 to 22.37), TA (18.25 to 22.97), EA (19.61 to 23.6), SH (30.67 to 42.03) and SA (37.87 to 46.57) showed an increase in each means score.

This result has shown that there was an increase in higher and normal achiever group as well as a decrease in the percentage of under achiever after the respondents had received the remedial devices of study orientation skills. This means the respondents were successful in re-correcting their study orientation skills. Hence it was found that the website seems successful in measuring the value of study orientation skills among Civil engineering respondents into three group of achievers.

Table 7: Percentage score for group Achiever

	Total		Percentage	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Higher	1	4	1.33	5.33
Normal	11	26	14.67	34.67
Lower	63	45	84	60



Obliviously, the histogram shows the details of the difference between pre test and post test scores

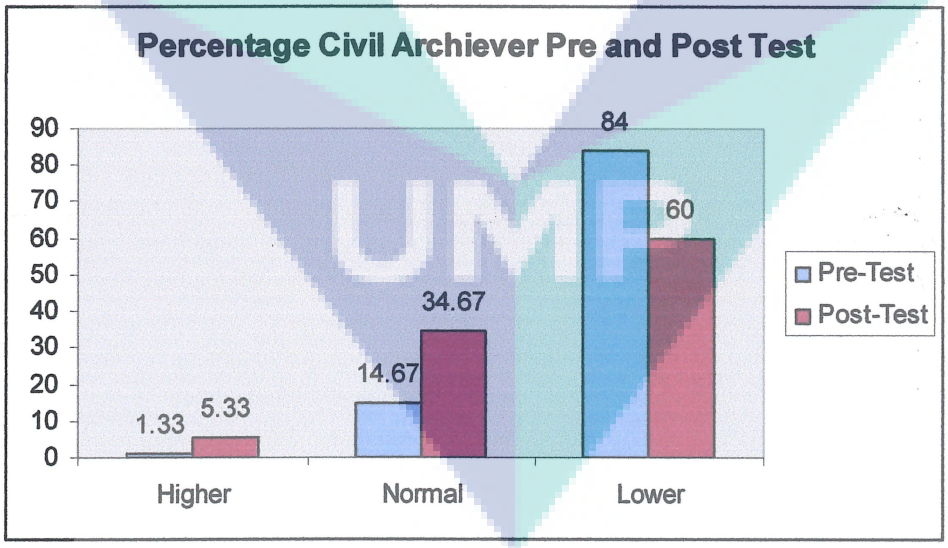
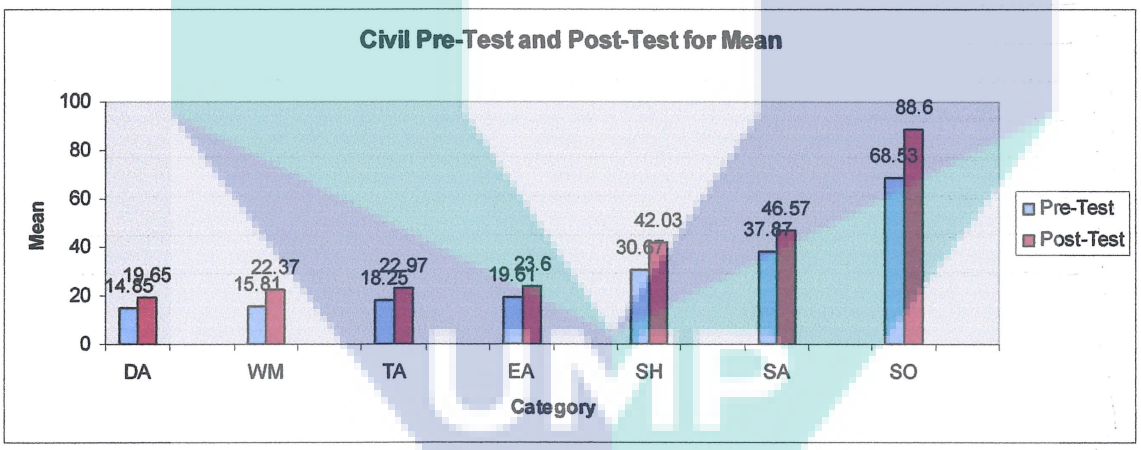


Table 8 : Mean score in Pre Test and Post Test.

Category	Mean	
	Pre-Test	Post-Test
DA	14.85	19.65
WM	15.81	22.37
TA	18.25	22.97
EA	19.61	23.6
SH	30.67	42.03
SA	37.87	46.57
SO	68.53	88.6



4.1.2. There is no significance difference between pre-test and post-test study orientation skills among civil engineering undergraduates.

H_0, Hypothesis Null: There is no difference between pre-test & post-test in so score for Civil Engineering Students

H_1, Hypothesis Alternative: There is difference between pre-test & post-test in so score for Civil Engineering Students

Table 9 : Significant difference test scores between pre test and post test.

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
PreTestSO	75	5140	68.53333	738.6577
PostTestSO	75	6645	88.6	1064.351

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	15100.17	1	15100.17	16.74996	6.98E-05	3.90506
Within Groups	133422.7	148	901.5045			
Total	148522.8	149				

Reject Ho if Ftest>Fcrit ($F_{0.05,\ 1,212}$) or P-value < 0.05
16.75 > 3.905 or 6.98E-05<0.05
So Reject H_0 and Accept H_1
There is a sufficient evidence to conclude that there is difference between pre-test & post-test in so score for civil engineering students at significance level 0.05.

From the above table, the results has shown that there was a significant difference in study orientation skills among civil engineering students between pre test and post test at the alpha level of 0.05 (0.00001<0.05)

From table 9, the value of mean score for study orientation skills in pre test are 68.53(variance 738.66) was below from normal means 100. The post test results have shown that the value of mean scores for study orientation skills has increased to 88.6(variance 1064.34). The value of means has increased bigger then pre test means and closer to the level of normal means score of 100. The above results has shown that there

was a positive impact in improving SOS among civil engineering respondents after the remedial attention was given through the introduction of strategic tools which were given to the respondents.

4.1.3. There is no correlation between study orientation skills and academic performance among civil engineering undergraduates.

Table 10:

	Post-test	*CGPA*
Post-test	1	
CGPA	0.220928	1

r = 0. 0.220928, weak positive correlation

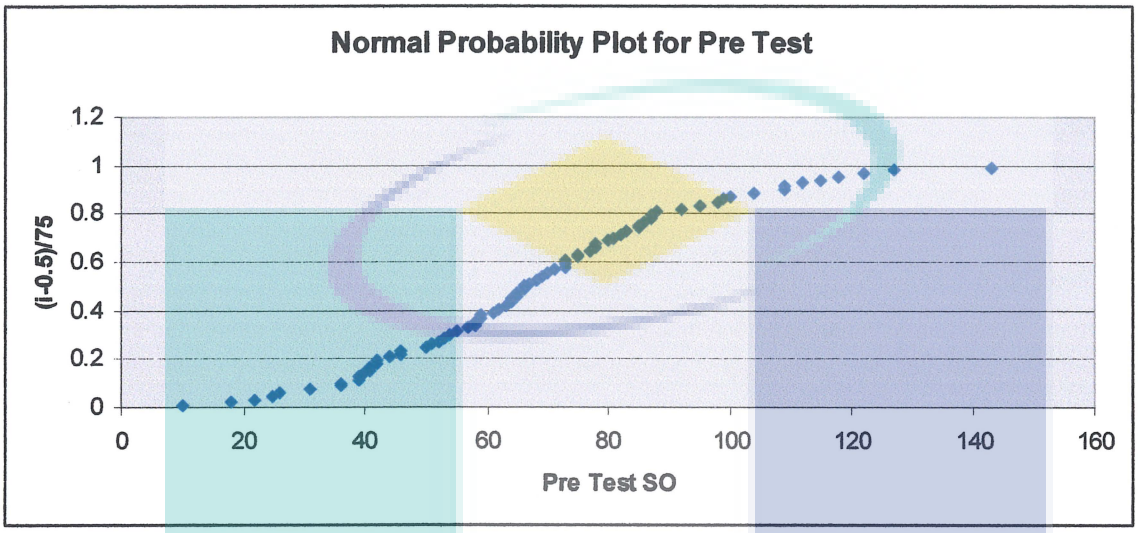
The correlation between study orientation skills and academic performance among civil engineering respondents.

Table 10 shows that the results that there was a weak positive correlation between study orientation skills and grade point average among Civil engineering respondents. The r Spearman Brown formula score is 0.22093. This value shows that the correlation between study orientation skills and grade point average score after the respondents received the remedial devices within the 6 months of interval. The strong correlation is

determined by the value of r > 8.0. Weak positive correlation was sometimes found due to the sample size and the duration of the remedial devices used in correcting the

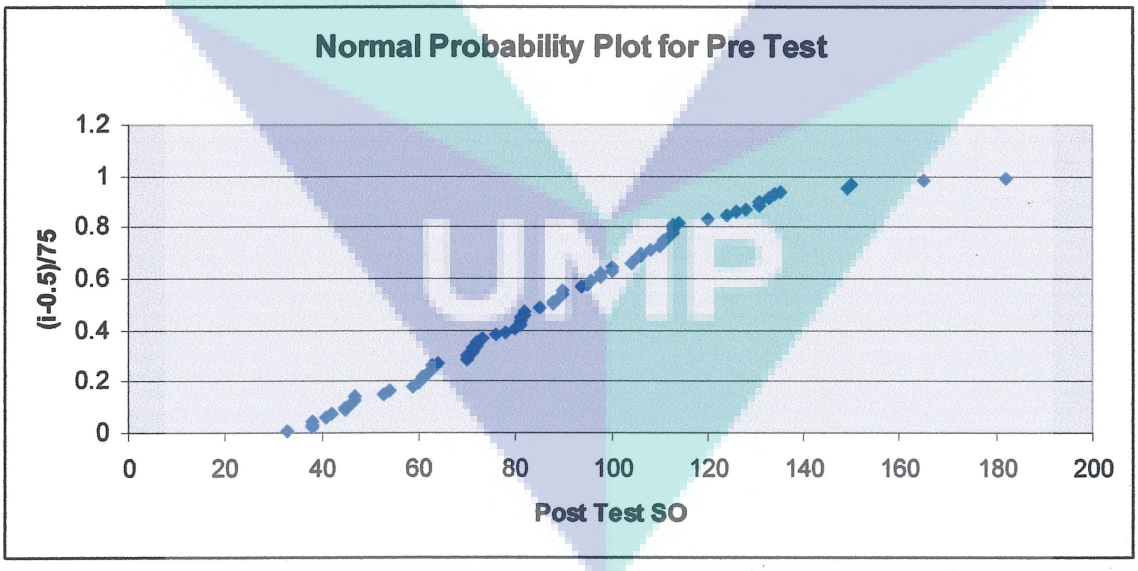
respondents study orientation skills. The smaller the number of the sample will contribute to the smaller the value of correlation between SOS and GPA.

4.1.3.1 Normal Probability Plot Pre Test SO Score



The Data sample does exactly lie on a straight line, thus the data appears to come from a normal population / distribution

4.1.3.2 Normal Probability Plot Post Test SO Score



Data sample does exactly lie on a straight line, thus the data appears to come from a normal population / distribution.

CHAPTER: 5

CONCLUSION AND RECOMMENDATION

It was found that the one of the strategic tools that is the portal website was successful in measuring respondents study orientation skills and had divided them into three groups of achievers such as higher achiever, normal achiever and under achiever. The results also showed there was an increase in mean scores from pre-test to post-test. The increase in the number of higher achiever and normal achiever as well as decrease in the number of under achiever for Civil engineering respondents showed that the SOS strategic tools were effective in inculcating SOS among respondents. And the intervention website was an effective device in inculcating SOS and re-correcting students fault in their study methods. With the help and guidance by the following strategic tools such as SOS text book or using DVD supplied to the respondents, who can easily go through the process of intervention and to re-correct their study methods. The results above shows that the finding of this research is effective and will produce a new portal website in evaluating and re-correcting the undergraduates study orientation skills.

The result has shown that there was a correlation between SOS and their academic performance. Other reason which had influenced the academic performance was the time taken in practicing SOS in their studies. Thus to find out weather the longer time is necessary for respondents in practicing SOS will give a better effect and a better grade point average score, thus it is timely a research should been done.

The results also proved that with an increase in respondents study orientation skills it will also increase the respondent's academic performance. These findings were supported by previous finding done by Brown & Holtzman (1960), Hill & Porter (1981), Rohana Zubir (1988), Wang (1993), Isaak (2007) and many more other research findings. The innovation and improvement done by this research through its portal website was successful in accessing and providing remedial devices to the respondent's study orientation skills in a short interval period of time and in a more convenient way.

The newly introduced remedial devices should also be tested in evaluating and re-correcting study orientation among probation group and normal group of students. Research done as by Carpenter (1990) had shown weak study habits score will determine poor academic performance among ninth grade of probation students. Schultz (1989) has shown 48.5% of undergraduates with CGPA of 2.0 and below, improved in their SOS as well as in their academic performance.

The next stage of research is to involve students from other faculties from University Malaysia Pahang. It's better to have a larger number of respondents for each group in order to have a stronger relationship between the SOS and GPA among them.

Recent research is more focused in using bio-feedback and human energy field in the medical field. So far there is no research done by incorporating the above methods as complementary tools in accessing emotional, feeling and anxiety parameters of the respondents. Thus a research must be done by incorporating the behaviour-cognitive

way, bio-feedback and human energy field in accessing undergraduates study methods. Using these devices may help in determining factors that effect student study difficulties and be able to provide instant treatment.

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APPENDICES

Appendix 1: Civil Engineering pre Test Data

Post Test - Civil Data
Higher = 138 - 200
Normal = 98 - 137
Probation = 0 - 97

No	Name	ID	DA	WM	TA	EA	SH	SA	SO	Status
1	Mohd Fahmi Bin Mustakim	AA06060	3	3	1	3	6	4	10	Lower
2	Muhammad Hafiz Bin Ishak	AA06016	4	2	7	5	6	12	18	Lower
3	Ahmad Fakhirin Bin Ali	AA06089	2	9	3	8	11	11	22	Lower
4	Bud Anthony Kuayun	AA06078	2	7	7	9	9	16	25	Lower
5	Mohamad Saridi Bin Mat Jaya	AB06032	5	6	6	9	11	15	26	Lower
6	Mohd Azri Bin Azmi	AA06013	7	9	5	10	16	15	31	Lower
7	Nur Syafarina Abd Yazid	AA06072	8	6	8	14	14	22	36	Lower
8	Faris Bin Mohd Pauzi	AA06088	9	6	7	14	15	21	36	Lower
9	Norhidayah Bt Hamidon	AA06053	5	4	12	18	9	30	39	Lower
10	Muhammad Shahrom Bin Mazlan	AA06094	13	12	4	10	25	14	39	Lower
11	Ahmad Azri Bahari Bin Mamat	AA06100	11	10	10	9	21	19	40	Lower
12	Nur Hidayah Binti Said	AA06069	7	9	11	14	16	25	41	Lower
13	Nor Afzam Binti Ya	AB06018	7	8	15	11	15	26	41	Lower
14	Tengku Mohd Hazrin	AA06037	9	14	11	8	23	19	42	Lower
15	Khairul Anuar Bin Hukarim	AB06019	10	10	15	7	20	22	42	Lower
16	Annas Robani Bin Aminudin	AA06080	9	12	7	16	21	23	44	Lower
17	Suhaya Bt. Sekeri	AA06052	10	9	11	16	19	27	46	Lower
18	Nurfathin Izzati Bt Mohd Azhar	AB06024	10	8	16	12	18	28	46	Lower
19	Muhammad Amir Syam Bin Samsuddin	AA06096	9	10	15	16	19	31	50	Lower
20	Nazira Binti Mahmud	AA06082	9	8	15	19	17	34	51	Lower

21	Mohammad Solhi Bin Mohammed	AA06036	10	12	16	14	22	30	52	Lower
22	Driane Joan Rintha	AA06055	16	18	8	11	34	19	53	Lower
23	Nurul Zawarni Binti Zaim	AB06050	18	13	7	16	31	23	54	Lower
24	Mohd Shahir Hj Zahari	AA06073	6	10	19	20	16	39	55	Lower
25	Ahmad Firdaus Bin Mohd Rafit	AB06042	18	13	7	19	31	26	57	Lower
26	Wartini Binti Warni	AA06057	16	8	16	18	24	34	58	Lower
27	Zila Binti Mohd Tahir	AA06110	7	14	20	17	21	37	58	Lower
28	Khairul Akmal Bin Aersid	AA06038	3	14	23	19	17	42	59	Lower
29	Hasfizah Bte Salimin	AB06030	12	14	16	17	26	33	59	Lower
30	Aatiq Aftini Bt Ab Rahman	AA06076	11	16	16	18	27	34	61	Lower
31	Loqman Hakim Bin Hasulbullah	AB06039	19	19	11	13	38	24	62	Lower
32	Norfahana Binti Rashid	AA06011	8	11	22	22	19	44	63	Lower
33	Zulaikha Binti Roslan	AA06081	11	14	18	21	25	39	64	Lower
34	Siti Amira Binti Alang Ahmat	AB06048	20	14	12	18	34	30	64	Lower
35	Nur Syafawaty Binti Abd. Rahman	AA06014	9	21	12	23	30	35	65	Lower
36	Christopher Anak Nyalang	AA06027	8	19	20	18	27	38	65	Lower
37	Mohd Haffizul Said Bin Mohd Ramdzan	AA06012	9	16	19	22	25	41	66	Lower
38	Syahrul Syawal Bin Malike	AB06037	14	15	20	17	29	37	66	Lower
39	Ahmad Faiz Bin Nasir	AB06007	18	14	18	17	32	35	67	Lower
40	Khoo Lai Peng	AA06042	13	13	20	22	26	42	68	Lower
41	Shamir Bin Sharafaddin	AB06003	12	17	20	20	29	40	69	Lower
42	Muhamad 'izzat Bin Zulfatar	AA06071	13	23	17	17	36	34	70	Lower
43	Mohd Airul Iskandar Bin Razaz	AB06004	22	13	13	23	35	36	71	Lower
44	Priscilla Serimah Bundan	AA06098	9	23	19	22	32	41	73	Lower
45	Norhamidah Binti Abdul Ghani	AA06106	18	14	22	19	32	41	73	Lower
46	Suriyana Binti Wagiman	AA06113	20	16	16	21	36	37	73	Lower
47	Wan Mohd Zainuddin Bin Wan Ismail	AA06062	19	20	18	18	39	36	75	Lower
48	Mimi Syafizah Binti Yusof	AA06097	17	11	22	25	28	47	75	Lower

49	Nurzanatul Nabila Binti Sakedan	AA06091	29	23	8	17	52	25	77	Lower
50	Nur Hidayah Binti Zainal	AA06102	20	11	21	26	31	47	78	Lower
51	Hasren Binti Toni	AA06103	13	18	22	25	31	47	78	Lower
52	Afif Afandi Bin Ayob	AA06116	11	15	28	26	26	54	80	Lower
53	Juzeeyanna Elazreen Binti Jumaat	AA06107	10	19	30	22	29	52	81	Lower
54	Siti Syazwani Binti Hamzah	AA06114	13	21	27	21	34	48	82	Lower
55	Siti Khadijah Kamarul Zaman	AA06099	13	15	30	25	28	55	83	Lower
56	Mohd Nurfaizal Jinin @ Awang Damit	AA06019	24	17	25	19	41	44	85	Lower
57	Audi Munir Bin Mahmud	AA06040	19	12	27	27	31	54	85	Lower
58	Muhammad Farhan Bin Abdul Latif	AB06041	14	17	27	28	31	55	86	Lower
59	Ngu Sing Chiong	AA06067	27	21	20	19	48	39	87	Lower
60	Char Jin Chee	AA06086	21	17	19	30	38	49	87	Lower
61	Muhammad Solehan Bun Abdul Hamid	AB06002	15	15	32	26	30	58	88	Lower
62	Hew Yee Chuen	AA06032	18	24	26	24	42	50	92	Lower
63	Nurazlin Binti Rahim	AA06090	16	20	29	30	36	59	95	Lower
64	Nur Atiqah Bt Zulkifli	AB06023	31	32	12	23	63	35	98	Normal
65	Nor Al-fidahti Juana Bt Sulaiman	AA06058	18	26	26	29	44	55	99	Normal
66	Nurliyana Binti Md.asari	AA06093	27	25	25	23	52	48	100	Normal
67	Mohamad Hilman Bin Mohamed Sabri	AB06027	13	33	33	25	46	58	104	Normal
68	Gobinath A/l Sabaratnam	AA06031	34	33	21	21	67	42	109	Normal
69	Kevin Kamarau Ak Kenneth Tinggom	AA06049	21	27	32	29	48	61	109	Normal
70	Ng Kel-wynn	AA06066	27	25	30	30	52	60	112	Normal
71	Tan Jing Huii	AA06087	29	33	27	26	62	53	115	Normal
72	Thamarai A/p Thangaveloo	AB06068	25	22	34	37	47	71	118	Normal
73	Diana Laura Thomas	AA06101	36	21	28	37	57	65	122	Normal
74	Low Ai Ti	AA06046	32	24	36	35	56	71	127	Normal

Appendix 2: Civil Engineering Post-Test Data

Post Test - Civil Data

Higher = 138 - 200

Normal = 98 - 137

Probation = 0 - 97

No	Name	ID	DA	WM	TA	EA	SH	SA	SO	St
1	Mohd Azri Bin Azmi	AA06013	12	8	8	5	20	13	33	Lo
2	Muhammad Hafiz Bin Ishak	AA06016	8	8	5	17	16	22	38	Lo
3	Nur Syafarina Abd Yazid	AA06072	13	10	4	11	23	15	38	Lo
4	Ahmad Azri Bahari Bin Mamat	AA06100	8	11	5	14	19	19	38	Lo
5	Nurfathin Izzati Bt Mohd Azhar	AB06024	5	7	16	13	12	29	41	Lo
6	Faris Bin Mohd Pauzi	AA06088	14	9	4	15	23	19	42	Lo
7	Tengku Mohd Hazrin	AA06037	11	10	11	13	21	24	45	Lo
8	Nur Hidayah Binti Said	AA06069	5	7	18	15	12	33	45	Lo
9	Mohd Fahmi Bin Mustakim	AA06060	15	11	3	17	26	20	46	Lo
10	Bud Anthony Kuayun	AA06078	4	16	10	17	20	27	47	Lo
11	Annas Robani Bin Aminudin	AA06080	6	12	15	14	18	29	47	Lo
12	Norhidayah Bt Hamidon	AA06053	6	8	21	18	14	39	53	Lo
13	Mohammad Solhi Bin Mohammed	AA06036	12	13	12	17	25	29	54	Lo
14	Hasfizah Bte Salimin	AB06030	18	12	8	21	30	29	59	Lo
15	Nurzanatul Nabila Binti Sakedan	AA06091	16	17	11	16	33	27	60	Lo
16	Mohamad Saridi Bin Mat Jaya	AB06032	14	17	10	20	31	30	61	Lo
17	Loqman Hakim Bin Hasulbullah	AB06039	10	22	12	17	32	29	61	Lo
18	Muhammad Amir Syam Bin Samsuddin	AA06096	21	15	11	15	36	26	62	Lo
19	Muhammad Shahrom Bin Mazlan	AA06094	15	17	10	21	32	31	63	Lo
20	Mimi Syafizah Binti Yusof	AA06097	15	8	21	19	23	40	63	Lo
21	Afif Afandi Bin Ayob	AA06116	14	16	18	16	30	34	64	Lo
22	Zila Binti Mohd Tahir	AA06110	10	19	20	21	29	41	70	Lo
23	Nor Afzam Binti Ya	AB06018	14	13	22	21	27	43	70	Lo
24	Aatiq Aftini Bt Ab Rahman	AA06076	16	18	16	21	34	37	71	Lo
25	Ahmad Faiz Bin Nasir	AB06007	13	19	19	20	32	39	71	Lo
26	Mohd Shahir Hj Zahari	AA06073	13	17	23	19	30	42	72	Lo
27	Zulaikha Binti Roslan	AA06081	14	16	22	20	30	42	72	Lo
28	Siti Syazwani Binti Hamzah	AA06114	13	20	18	22	33	40	73	Lo
29	Mohd Haffizul Said Bin Mohd Ramdzan	AA06012	16	19	19	22	35	41	76	Lo
30	Norhamidah Binti Abdul Ghani	AA06106	14	23	24	17	37	41	78	Lo

31	Priscilla Serimah Bundan	AA06098	10	21	27	22	31	49	80	Lc
32	Suhaya Bt. Sekeri	AA06052	21	15	26	19	36	45	81	Lc
33	Nazira Binti Mahmud	AA06082	13	19	23	26	32	49	81	Lc
34	Mohd Airul Iskandar Bin Razaz	AB06004	14	22	22	23	36	45	81	Lc
35	Norfahana Binti Rashid	AA06011	11	21	27	23	32	50	82	Lc
36	Juzeeyanna Elazreen Binti Jumaat	AA06107	10	21	31	20	31	51	82	Lc
37	Shamir Bin Sharafaddin	AB06003	18	26	22	19	44	41	85	Lc
38	Mohd Nurfaizal Jinin @ Awang Damit	AA06019	17	20	28	23	37	51	88	Lc
39	Khairul Anuar Bin Hukarim	AB06019	22	22	18	26	44	44	88	Lc
40	Nur Syafawaty Binti Abd. Rahman	AA06014	12	26	26	25	38	51	89	Lc
41	Ahmad Firdaus Bin Mohd Rafit	AB06042	18	24	21	27	42	48	90	Lc
42	Siti Amira Binti Alang Ahmat	AB06048	28	16	24	22	44	46	90	Lc
43	Wartini Binti Warni	AA06057	21	28	18	27	49	45	94	Lc
44	Khairul Akmal Bin Aersid	AA06038	13	28	31	23	41	54	95	Lc
45	Wan Mohd Zainuddin Bin Wan Ismail	AA06062	27	17	26	26	44	52	96	Lc
46	Hasren Binti Toni	AA06103	26	23	27	22	49	49	98	N
47	Muhammad Farhan Bin Abdul Latif	AB06041	20	19	26	33	39	59	98	N
48	Christopher Anak Nyalang	AA06027	20	25	26	29	45	55	100	N
49	Muhammad Solehan Bun Abdul Hamid	AB06002	19	22	33	26	41	59	100	N
50	Diana Laura Thomas	AA06101	24	24	27	29	48	56	104	N
51	Mohamad Hilman Bin Mohamed Sabri	AB06027	15	29	34	27	44	61	105	N
52	Nurazlin Binti Rahim	AA06090	24	26	28	28	50	56	106	N
53	Siti Khadijah Kamarul Zaman	AA06099	19	27	28	32	46	60	106	N
54	Nur Hidayah Binti Zainal	AA06102	26	21	28	33	47	61	108	N
55	Nurliyana Binti Md.asari	AA06093	31	34	21	24	65	45	110	N
56	Ngu Sing Chiong	AA06067	22	28	30	31	50	61	111	N
57	Suriyana Binti Wagiman	AA06113	27	33	24	27	60	51	111	N
58	Char Jin Chee	AA06086	25	31	33	23	56	56	112	N
59	Audi Munir Bin Mahmud	AA06040	30	26	29	28	56	57	113	N
60	Kevin Kamarau Ak Kenneth Tinggom	AA06049	23	32	30	28	55	58	113	N
61	Tan Jing Huii	AA06087	30	32	26	25	62	51	113	N
62	Nurul Zawarni Binti Zaim	AB06050	35	26	24	29	61	53	114	N
63	Chan Wan Yong	AA06068	18	35	39	28	53	67	120	N
64	Nor Al-fidahti Juana Bt Sulaiman	AA06058	23	34	36	31	57	67	124	N
65	Syahrul Syawal Bin Malike	AB06037	27	34	28	37	61	65	126	P
66	Thamarai A/p Thangaveloo	AB06068	30	33	35	30	63	65	128	P
67	Hew Yee Chuen	AA06032	27	34	34	36	61	70	131	P
68	Ng Kel-wynn	AA06066	41	31	33	26	72	59	131	P
69	Muhamad 'izzat Bin Zulfatar	AA06071	31	34	42	26	65	68	133	P

70	Khoo Lai Peng	AA06042	23	30	43	38	53	81	134	No
71	Gobinath A/l Sabaratnam	AA06031	47	41	20	27	88	47	135	No
72	Nur Atiqah Bt Zulkifli	AB06023	39	38	39	33	77	72	149	Hi
73	Low Ai Ti	AA06046	42	38	34	36	80	70	150	Hi
74	Driane Joan Rintha	AA06055	42	44	38	41	86	79	165	Hi
75	Ahmad Fakhirin Bin Ali	AA06089	48	50	42	42	98	84	182	Hi

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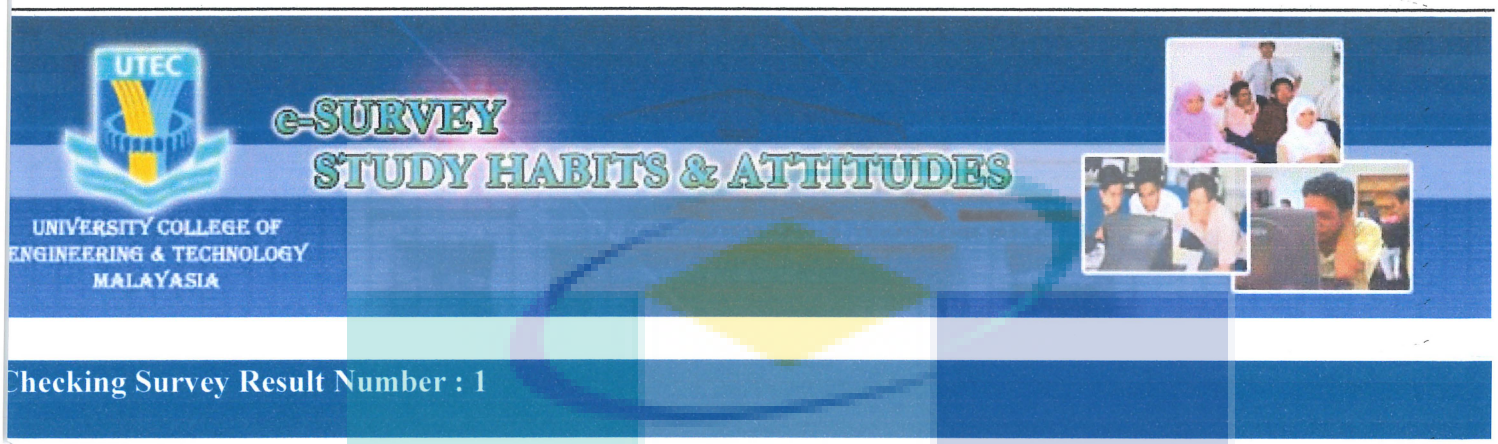
Appendix 3: Study Orientation Skills Measurement Website

(http://portal.ump.edu.my/survey)



Checking Survey Result Number : 1

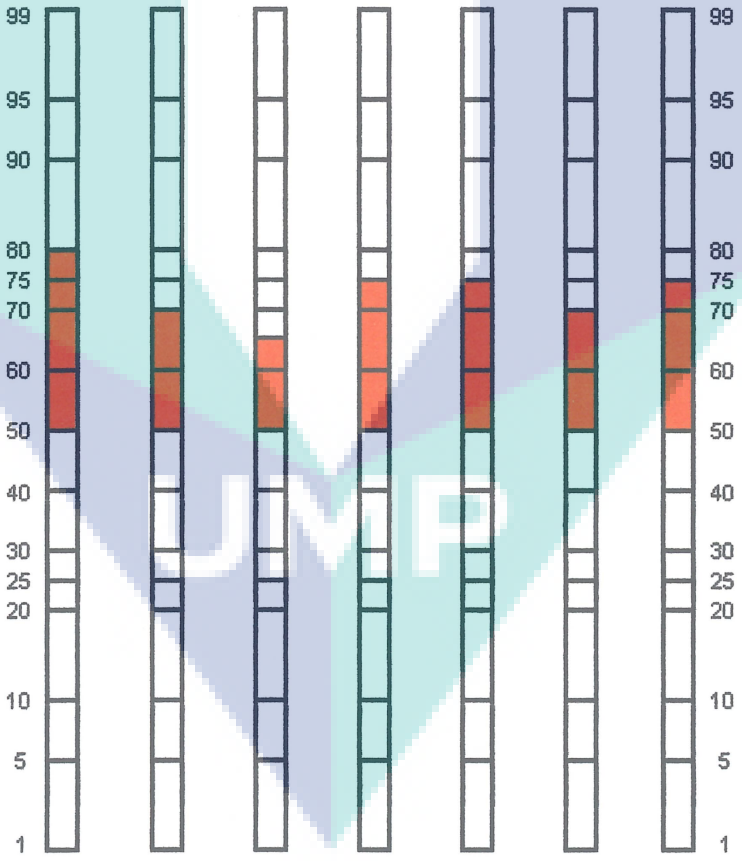
Take Survey Again

View Survey Number 1

Name	Ng Siao Shan			
ID	AA06033			
Gender	Female			
Result	Diploma CGPA 2.75			
Faculty	Civil and Environmental Engineering			
Category	**Mark**	**Percentile**	**StatusView**	**Treatment**
Delay Avoidance (DA)	34	80	Higher Achiver(HA)	Yes
Work Method (WM)	30	70	Normal Achiver(NA)	Yes

Teacher Approval (TA)	36	65	Normal Achiver(NA)	Yes
Education Acceptance (EA)	37	75	Normal Achiver(NA)	Yes
Study Habits (SH)	64	75	Normal Achiver(NA)	No
Study Attitudes (SA)	73	70	Normal Achiver(NA)	No
Study Orientations (SO)	137	75	Normal Achiver(NA)	No

	DA	WM	TA	EA	SH	SA	SO
Mark	34	30	36	37	64	73	137
Percentile	**80**	**70**	**65**	**75**	**75**	**70**	**75**



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Appendix 4: SOS treatment website (http://portal.ump.edu.my/survey/admin)

No	Answers	Question No	Question
1	R	Question No. 5	If I have to be absent from class, I make up missed lessons without being reminded by the teacher
No.	**Treatment**		
1	Correct habit - Don't be a last minute worker.		
2	Get help from a friend, lecturer and do more reading and references.		
3	Note-taking skills, reading skills and reference skills.		

No	Answers	Question No	Question
2	F	Question No. 21	When I am having trouble with my school work, I try to talk it over with the teacher
No.	**Treatment**		
1	Correct habit - You have to develop a good rapport with your lecturer.		
2	Try to solve by yourself at first, then get help from a friend then approach your lecturer.		
3	Reference skills, questioning skills, exercises skills.		

No	Answers	Question No	Question
3	F	Question No. 61	Having too many other things to do causes me to get behind in my school
No.	**Treatment**		

1	Wrong habit - Organize and plan your work will help you in your study difficulties.
2	Don't be last minute worker, you should know to make decision of what comes first.
3	Improve your organizing skills, planning skills, discipline.

No	Answers	Question No	Question
4	R	Question No. 85	I study an hour or more each day outside of school

No.	Treatment
1	Correct habit - The ideal hour for home study in university is between 3-4 hrs a day.
2	Studying more then one subject (three subjects) in a day is recommended for university students.
3	Improve your organizing skills, time-tabling, revision technique.

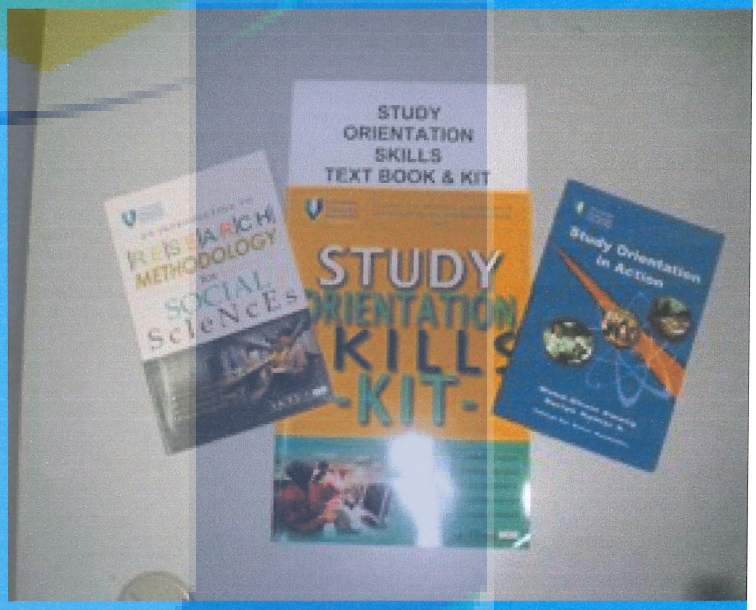
Appendix 5: Research Product

Universiti Malaysia PAHANG
Engineering • Technology • Creativity

DEVELOPING DEVICES IN MEASURING AND CORRECTING STUDY ORIENTATION SKILLS FOR IMPROVONG ACADEMIC PERFROMANCE AMONG UNDERGRADUATES

By:
MOHD.GHANI AWANG, DR. MUHAMAD NUBLI ABDUL WAHAB & SURIYA KUMAR S.

1 RESEARCH PRODUCTS



A. **WEBSITE**
   i) **SOS Measurement Website** http://portal.ump.edu.my/survey (copyright)
   ii) **SOS Correcting Website** http://portal.ump.edu.my/survey/admin (copyright)
   iii) **SOS Webpage** http://portal.sos.ump.edu.my (copyright)

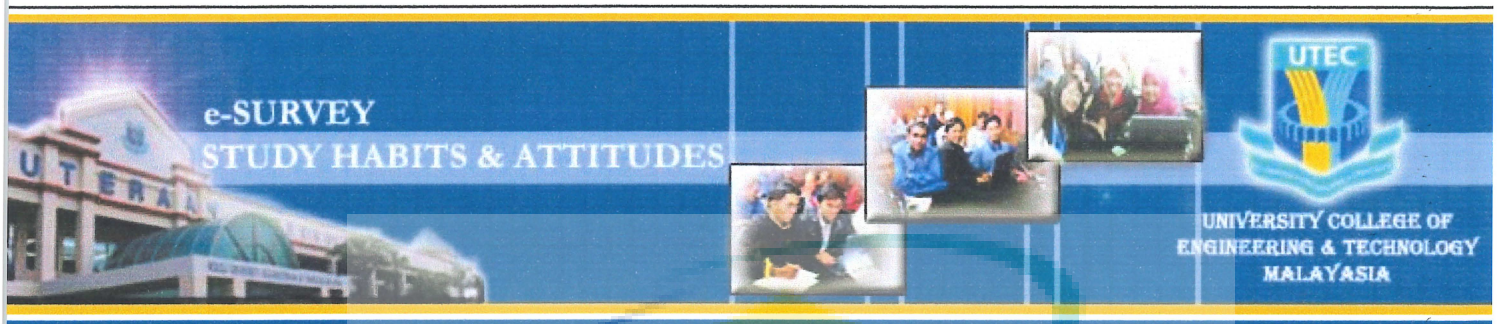
B. **TEXT BOOK**
   i) "Study Orientation Skills in Action" UMP Publication (copyright)
   ii) "A Study Orientation Skills – KIT" UMP Publication (copyright)
   iii) Research Methodology for Social Sciences

C. **DVD**
   i) Ghani Format of Note-taking
   ii) Organizing Skills
   iii) Listening Skills
   iv) Reading Skills
   v) Reference Skills
   vi) Assignment & Essay Writing Skills
   vii) Examination Skills
   viii) Presentation Skills
   ix) Motivation Skills

D. **GHANI's FORMAT (copyright)**
   i) Note-taking Skills
   ii) Presentation Skills
   iii) Assignment & Essay Writing Skills
   iv) Technical Report Writing
   v) Project Paper/Dissertation Writing Skills
   vi) UHS 1041 – Study Skills subject for elective of Centre for Languages & Human Sciences of UMP

E **MEDALS**
   i) Gold Medal Malaysia Technology Expo 2007
   ii) Finalist MOSTI National Expo and Innovation (NICE) 2007

Appendix 6: SOS website measurement – http://portal.ump.edu.my/survey



Take Survey] - [Check Result]

Please fill the form completely

Name	
Matric ID	
Gender	
Result	SPM Matric Diploma Choose Result Where Your Come From
Faculty	

Submit Reset

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ZAM...321

Please answer the questions with answers given [R- Rarely, ...S-Sometimes, ...F-Frequently, ...G-Generally, ...A-Almost Always]

No	Question	Answer
1	When my assigned homework is extra long or unusually hard, I either quit or study only the easier parts of the lesson	R S F G A
2	In preparing reports, themes, and other written work, I make certain that I clearly understand what is wanted before I begin work	R S F G A
3	I fell that teachers don't understand the needs and interests of students	R S F G A
4	My dislike for certain teachers causes me to neglect my school work	R S F G A
5	If I have to be absent from class, I make up missed lessons without being reminded by the teacher	R S F G A
6	I have trouble saying what I want to say on tests, reports, and other work to be turned in.	R S F G A
7	My teachers make their subjects interesting and meaningful to me	R S F G A
8	I feel that I would study harder if I were given more freedom to choose subject that I like	R S F G A
9	Daydreaming distracts my attention from my lesson while I am studying	R S F G A
10	My teachers criticize my written work from being poorly planned or hurriedly written	R S F G A
11	I feel that teachers allow their likes and dislike for students to influence their grading too much	R S F G A
12	Even through I don't like a subject, I still work hard to make a good grade	R S F G A
13	Even though an assignment is dull and boring, I still stick to it until it is completed	R S F G A
14	I give special attention to neatness on themes, reports, and other work to be turned in	R S F G A
15	I believe that the easiest way to get good grades is to agree with everything the teachers say	R S F G A
16	I lose interest in my studies after the first few days of school	R S F G A
17	I keep all my work for each subject together and carefully arranged in some planned order	R S F G A
18	I memorize spelling rules, definitions of works, rules of grammar, etc., without understanding them	R S F G A

19	I think that teachers like to show who's boss too much	R S F G A
20	I believe that teachers really want their students to like them	R S F G A

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Submit the answers

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e-SURVEY STUDY HABITS & ATTITUDES

ZAM...321

Please answer the questions with answers given [R- Rarely, ...S-Sometimes, ...F-Frequently, ...G-Generally, ...A-Almost Always]

No	Question	Answer
21	When I am having trouble with my school work, I try to talk it over with the teacher	R S F G A
22	I hesitate to ask a teacher for further explanation of an assignment that is not clear to me	R S F G A
23	I feel that teachers are too narrow-minded and set in their ways	R S F G A
24	I feel that students are not given enough freedom in selecting their own topics for themes and report	R S F G A
25	I do not bother to correct errors on the papers my teachers have graded and returned to me	R S F G A
26	I get nervous and confused when taking a test and fail to answers questionns as well as I otherwise could	R S F G A
27	I think that teachers expect students to do too much studying outside of class	R S F G A

28	Lack of interest in my school work makes it hard for me to keep at attention on my reading assignments	R	S	F	G	A
29	My place of study at home is kept neat and businesslike	R	S	F	G	A
30	I have trouble with spelling, grammar, and punctuation while writing themes and reports	R	S	F	G	A
31	When explaining a lesson or answering questionion, my teachers use words I do not understand	R	S	F	G	A
32	Unless I really like a subject, I believe in doing only enough to get a passing grade	R	S	F	G	A
33	Interruptions disturb my studies when I am studying at home	R	S	F	G	A
34	In taking notes, I tend to write down things which later turn out to be unimportant	R	S	F	G	A
35	My teachers fail to give enough explanation of the things they are trying to teach	R	S	F	G	A
36	I feel confused and undecided as to what I want to study in school and want to do after I get out of school	R	S	F	G	A
37	It takes a long time me to get warmed up to the job of studying	R	S	F	G	A
38	I do poorly on tests because I find it hard to think clearly and plan my work within a short period of time	R	S	F	G	A
39	I feel that teachers are too strict and know-it-all in dealing with students	R	S	F	G	A
40	Some of my school work is so uninteresting that I have to make myself do the assignment	R	S	F	G	A

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e-SURVEY
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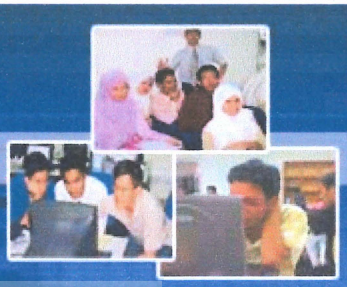

ZAM...321

Please answer the questions with answers given [R- Rarely, ...S-Sometimes, ...F-Frequently, ...G-Generally, ...A-Almost Always]

lo	Question	Answer
1	I am unable to study well because I get restless, moody, or have the blues	R S F G A
2	I skip over the figures, graphs, and tables in a reading assignment	R S F G A
3	I believe that teachers secretly enjoy giving their students a ?hard time?	R S F G A
4	I believe that having a good time and getting one's full share of fun out of life is more important that studying	R S F G A
5	I put off doing written assignment until the last minutes	R S F G A
6	After reading several pages of an assignment, I an unable to remember what I have just read	R S F G A
7	I think that teachers tend to talk too much	R S F G A
8	I believe that teachers tend to avoid discussing present-day problems and events with their classes	R S F G A
9	When I sit down to study I find my self too tired, bored, or sleepy to study well	R S F G A
0	I find it hard to pick out the important points of a reading assignment ? points that later appear on tests	R S F G A
1	I feel that teachers try to give the same amount of attention and help to all their students	R S F G A
2	I feel that my grades show about what I can really do	R S F G A
3	I waste too much time talking, watching TV, listening to the radio, going to the movies, etc., for the good of my studies	R S F G A
4	When in doubt about the proper form for a written assignment, I find a model or guide to follow	R S F G A

55	The illustrations, examples, and explanations given by my teachers are dull and hard to understand	R S F G A
56	I feel that it is no worth the time, money, and effort that one must spend to get a college education	R S F G A
57	My studying at home is done in an easy-going unplanned manner	R S F G A
58	When reading a long assignment, I stop now and then try to remember what I have read	R S F G A
59	I feel that teachers tend to look down upon their poorer students and make fun of their mistakes	R S F G A
60	Some of my classes are so boring that I spend the class period drawing pictures, written notes, or daydreaming instead of listening to the teacher	R S F G A

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e-SURVEY STUDY HABITS & ATTITUDES

ZAM...321

Please answer the questions with answers given [R- Rarely, ...S-Sometimes, ...F-Frequently, ...G-Generally, ...A-Almost Always]

No	Question	Answer
61	Having too many other things to do causes me to get behind in my school	R S F G A
62	I seem to get very little done for the amount of time I spend studying	R S F G A
63	I feel that teachers make their subjects too hard for average student	R S F G A
64	I feel that I taking subjects which will do me little good	R S F G A
65	I try to do my assignments at school so as to reduce my homework	R S F G A

66	I can study a reading assignment for only a short while before the words stop making sense	R	S	F	G	A
67	I think that football coaches do more for school life than do the teachers	R	S	F	G	A
68	I believe that the main job of the schools is to teach students thing that will help them earn a living	R	S	F	G	A
69	Problems outside of school - with others student or at home - cause me to neglect my school work	R	S	F	G	A
70	I copy the diagrams, drawings, tables, and other illustrations that the teacher puts on the black - board	R	S	F	G	A
71	I feel that teachers think more about grades than they do about the real purpose of schools	R	S	F	G	A
72	I try to become really interested in every subject I take	R	S	F	G	A
73	I complete my homework assignment on time	R	S	F	G	A
74	I lose points on test because I change my first answer only to discover later than I was right the first time	R	S	F	G	A
75	I think that students who ask questionions and take part class discussion are only trying to ?get in good? with the teacher	R	S	F	G	A
76	I feel that the main reason for going to college is to be admired and envied by others	R	S	F	G	A
77	I like to have radio, record player, or television set turned on while I'm studying	R	S	F	G	A
78	When getting ready for a test I arrange fact to be learned in some planned order ? order of importance, order in which taught, order of time in history, etc	R	S	F	G	A
79	I believe that teachers deliberately give tests on the days following parties and ball games	R	S	F	G	A
80	I believe that having a winning football team is just as important as learning history or math	R	S	F	G	A

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ZAM...321

Please answer the questions with answers given [R- Rarely, ...S-Sometimes, ...F-Frequently, ...G-Generally, ...A-Almost Always]

No	Question	Answer
81	With me, studying is sort of hit - or - miss depending on the mood I'm in	R S F G A
82	I am careless about spelling, punctuation, and grammar when answering test questionions	R S F G A
83	I believe that one way to get good grades is by using flattery on yours teachers	R S F G A
84	I think it might be best for me to drop out of school and get a job	R S F G A
85	I study an hour or more each day outside of school	R S F G A
86	Although I work until the last possible minute, I am unable to finish test within the time allowed	R S F G A
87	I fell that it is almost impossible for the average student to do all of his assigned homework	R S F G A
88	I feel that the thing taught in school do not help one to meet adult problem	R S F G A

89	I keep my assignment up to date by doing my work regularly from day to day	R S F G A
90	If time is left, I take a few minutes to check over my answers before turning in my test paper	R S F G A
91	I feel that ridiculous assignments made by teachers are the main reason for student cheating	R S F G A
92	Too much reading or studying give me a headache	R S F G A
93	I prefer to study my lessons alone rather than with others	R S F G A
94	When test are returned, I find that my grade has been lowered by careless mistakes	R S F G A
95	I feel that student cannot be expected to like most teachers	R S F G A
96	I feel like skipping school whenever there is something I'd rather do	R S F G A
97	At the beginning of study period I plan my work so that I will make best use of my time	R S F G A
98	During test I forgot names, dates, formula, and other details that I really do know	R S F G A
99	I believe that the teachers go into teaching mainly because they enjoy it	R S F G A
100	I believe that higher grades are given to students who can memorize facts than to those who? Think? things through	R S F G A

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