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FACTORS RELATE TO COLLEGE ENROLLMENT RATE

Code: DA-005

4/20/2008

Executive Summary

This project collects data from 135 public high schools in order to predict the number of students that will engage in the following post high school activities:

- Two-year public colleges
- Four-year public colleges
- Two-year private colleges
- Four-year private colleges
- Military, work or other activities

Each of these response variables fits into a multi-linear regression to determine the factors that are important to each. Since this method would be similar for each response variable, "Percentage of Going to Two-Year Public Colleges" (short-hand Percent2YrPub) will be the main focus of this report. This response variable will be a good example due to its high R Square value and its linear relationship between the response and explanatory variables. The average SAT math score, SAT participation rate, dropout rate, cost per pupil, and student/counselor ratio are important factors when trying to determine if a student will attend a two-year public college.

Introduction

There are concerns about the quality of the educational system here in the United States. A study of a particular high school's statistical record in relation to the college enrollment rate will no doubt generate piqued interests from parents, high school officials, and students alike. I believe there is a linear relationship between the characteristics of a high school and the enrollment rate into a two-year public college. Multi-linear regression is used to do the analysis. Multivariate is also discussed since we have a few response variables that are related to one other, for example, the number of students going to two-year college compared to those going to a four-year college.

Summary Information

The dataset contains information from 135 public schools in a large North-eastern US metropolitan area. Please see table1 for the variable description. There are 20 independent variables that are collected. In this project, we will focus on these 11 independent variables in order to predict the dependent variable: enrollment, cost per pupil, aveteach, SATV, SATM, SATPartRate, GMCASEng, GMCAASMth, STRatio, SCounselRatio, and drop out rate. Four of the records have a zero value in regards to Percent2YrPub and have thus been deleted from this analysis. The total number of records that are used is 131.

Table 1. Description of Response Variable and Predictors

Simple Statistics						
Variable	Description	Mean	Std Dev	Sum	Minimum	Maximum
Percent2YrPub	Percent of students going to two-year public college	13.82443	8.48844	1811	1.00000	40.00000
Enrollment	Number of students enrolled	1112	576.28522	145637	266.00000	3945
CostPupil	Cost Per Pupil	7095	1198	929392	4675	12586
AveTeach	Average teacher salary (\$)	46931	4525	6147931	32067	66654
SATV	Average SAT Verbal Score	512.41985	41.75495	67127	387.00000	609.00000
SATM	Average SAT Math Score	517.81679	44.05151	67834	381.00000	617.00000
SATPartRate	SAT Participation Rate	0.80588	0.13397	105.57000	0.45000	1.00000
GMCASEng	Average 10 th grade MCAS English Score	243.31298	6.98249	31874	223.00000	257.00000
GMCASMth	Average 10 th grade MCAS Math Score	241.72519	7.40172	31666	221.00000	256.00000
STRatio	Student/Teacher Ratio	13.13740	1.96023	1721	9.00000	19.00000
SCounselRatio	Student/Counselor ratio	224.57252	51.86225	29419	113.00000	389.00000
DropoutRate	Dropout rate	2.02977	2.18198	265.90000	0	12.20000

Figure1: Scatter Plot Matrix

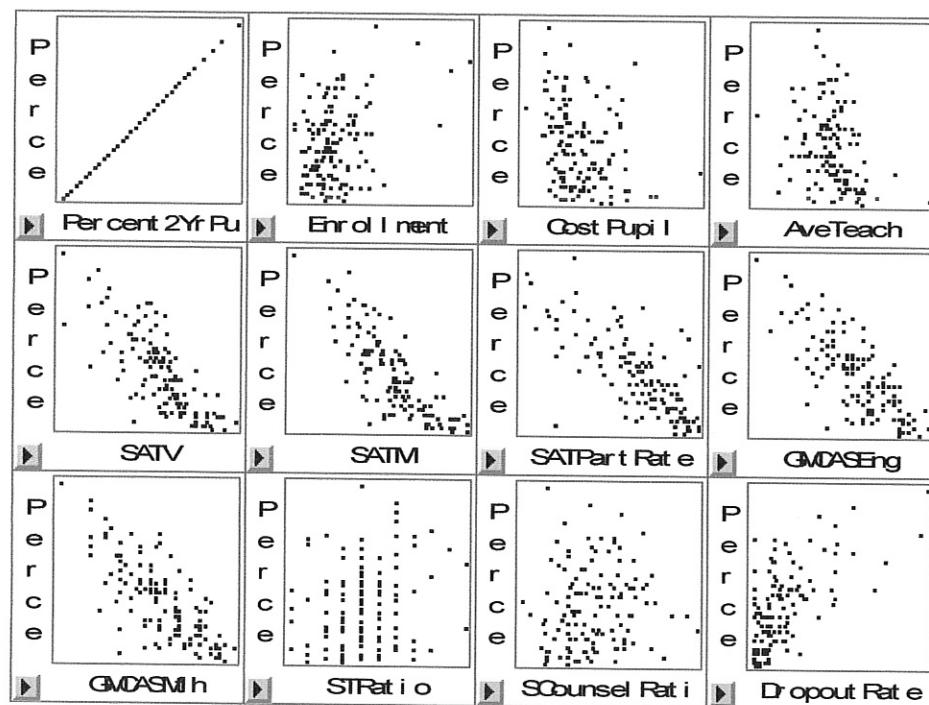


Figure 1 shows that SATV, SATM, SATPartRate, GMCASEng and GMCASMth have relatively good linear relationship against Percent2yrPub. Independent variables like enrollment, costpupil, SCounselRatio might need some transformation in order to make the linear relationship clearer.

Table 2. Pearson Correlation Matrix

Pearson Correlation Coefficients, N = 131 Prob > r under H0: Rho=0														
	Percent2YrPub	Enrollment	CostPupil	AveTeach	SATV	SATM	SATPartRate	GMCASEng	GMCASMth	STRatio	SCounselRatio	DropoutRate		
Percent2YrPub	1.00000	0.33230 0.0001	-0.28031 0.0012	-0.30918 0.0003	-0.76756 <.0001	-0.78759 <.0001	-0.75409 <.0001	-0.77283 <.0001	-0.76218 <.0001	0.21689 0.0128	0.09557 0.2776	0.62675 <.0001		
Enrollment		1.00000	-0.03721 0.6730	0.17423 0.0466	-0.35258 <.0001	-0.26166 0.0025	-0.41217 <.0001	-0.43276 <.0001	-0.37773 <.0001	0.27564 0.0014	-0.00831 0.9250	0.54986 <.0001		
CostPupil			1.00000	0.35466 <.0001	0.21334 0.0144	0.26771 0.0020	0.17351 0.0475	0.21354 0.0143	0.23310 0.0074	-0.46704 <.0001	-0.38697 <.0001	-0.17182 0.0497		
AveTeach				1.00000	0.29227 0.0007	0.36227 <.0001	0.24873 0.0042	0.27518 0.0015	0.31512 0.0002	-0.02884 0.7437	-0.15800 0.0715	-0.22125 0.0111		
SATV					1.00000	0.93357 <.0001	0.80486 <.0001	0.88604 <.0001	0.89321 <.0001	-0.19647 0.0245	-0.14150 0.1069	-0.66739 <.0001		
SATM						1.00000	0.76658 <.0001	0.84882 <.0001	0.90200 <.0001	-0.21368 0.0143	-0.19998 0.0220	-0.60668 <.0001		
SATPartRate							1.00000	0.80978 <.0001	0.83112 <.0001	-0.25998 0.0027	-0.13494 0.1244	-0.63330 <.0001		
GMCASEng								1.00000	0.94829 <.0001	-0.21279 0.0147	-0.12831 0.1441	-0.71261 <.0001		
GMCASMth									1.00000	-0.23648 0.0065	-0.14483 0.0988	-0.68535 <.0001		
STRatio										1.00000	0.32481 0.0002	0.17151 0.0501		
SCounselRatio											1.00000	0.00130 0.9883		
													1.00000	
DropoutRate														

Table 2 shows that many of the variables including enrollment, cost per pupil, aveTeach, SATV, SATM, SATPartRate, GMCASEng, GMCASMth, STRatio, and dropout rate have a strong relationship with Percent2YrPub. There is also a strong correlation between the independent variables. For example, SATV, SATM, SATPartRate, GMCASEng and GMCASMth all seem to have a strong correlation. This might indicate that there is a lot of Multicollinearity among the independent variables.

Statistical Analyses

I believe there is a linear relationship between the number of students going to two-year public college and the characteristics of certain high school. Due to the number of independent explanatory variables that can be used to predict the response variable, Multilinear Regression will be used.

A few variables such as enrollment, costpupil, STRatio, and SCounselRatio do not seem to have a linear relationship with the response variable. In order to clarify this, the Box Cox transformation method was used. The variables in question showed little improvement and can be seen in Figures 1 and 2. The original forms of the independent variables are used in the final model to give a simpler interpretation.

Due to the high Multicollinearity in the explanatory variables, variable selection is used.

In Table2, all predictors except SCounselRatio are significant. This may indicate a strong relationship between these variables and percent2yrCollege individually. Simultaneously, only costpupil, SATV, SATM, SATPartRate, GMCASEng, GMCASMth, SCounselRatio, and drop out rate are significant (these are the ones with p-value <0.15 in table 3). There is also a Multicollinearity relationship among SATV, SATM, GMCASEng and GMCASMth.

After variable selection, only SATM, SATPartRate, dop out rate, costpupil and SCounselRatio are used in the model. Although SATV, GMCASEng, GMCASMth have strong relationship with the response variable, they are not included since they have a strong correlation with SATM. As such, adding these additional predictors would not improve the overall performance of the model.

Figure 2: Scatter Plot for variables after transformation

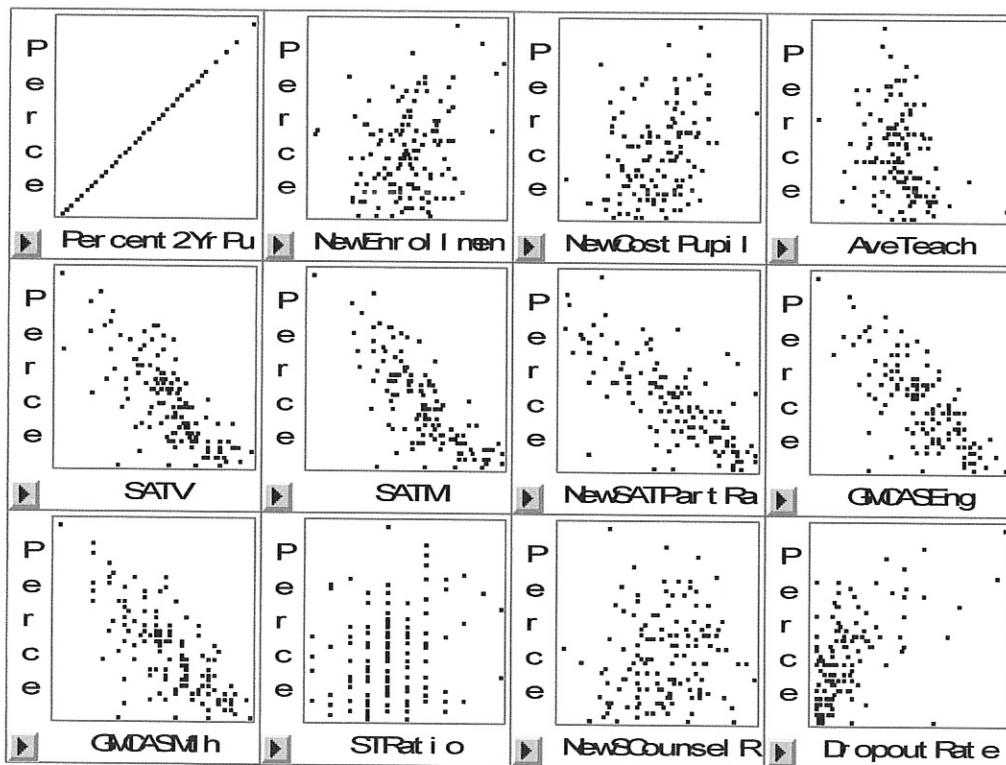


Table3: Parameter estimates and VIF values

Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Variance Inflation
Intercept	1	91.05737	30.73403	2.96	0.0037	0
Enrollment	1	0.00004712	0.00097208	0.05	0.9614	1.86342
CostPupil	1	-0.00077186	0.00043750	-1.76	0.0803	1.63225
AveTeach	1	-0.00002834	0.00010994	-0.26	0.7970	1.46925
SATV	1	0.04900	0.03353	1.46	0.1466	11.64112
SATM	1	-0.13282	0.03215	-4.13	<.0001	11.91050
SATPartRate	1	-22.48985	5.88313	-3.82	0.0002	3.68883
GMCASEng	1	-0.59260	0.20871	-2.84	0.0053	12.61009
GMCASMth	1	0.57141	0.22587	2.53	0.0127	16.59580
STRatio	1	-0.01782	0.25880	-0.07	0.9452	1.52816
SCounselRatio	1	-0.01470	0.00894	-1.64	0.1027	1.27604
DropoutRate	1	0.45022	0.30315	1.49	0.1402	2.59807

Table4: Results of Multiple Linear Regression-ANOVA Table

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6562.26396	1312.45279	58.49	<.0001
Error	125	2804.69787	22.43758		
Corrected Total	130	9366.96183			

Table 5: Results of Multiple Linear Regressions -R² Values

Root MSE	4.73683	R-Square	0.7006
Dependent Mean	13.82443	Adj R-Sq	0.6886
Coeff Var	34.26422		

Table 6: Parameter Estimates after Variable selection process

Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Variance Inflation
Intercept	1	82.44112	7.84498	10.51	<.0001	0
SATM	1	-0.08679	0.01557	-5.58	<.0001	2.72475
SATPartRate	1	-19.93870	5.12932	-3.89	0.0002	2.73607
DropoutRate	1	0.52452	0.25780	2.03	0.0440	1.83328
CostPupil	1	-0.00080253	0.00038659	-2.08	0.0399	1.24357
SCounselRatio	1	-0.01326	0.00888	-1.49	0.1379	1.22804

Stepwise regression identifies SATM, SATPartRate, DropoutRate, CostPupil, and SCounselRatio as the only significant predictors and produces the following model:

$$\begin{aligned} \text{Percent2YrPub} = & 82.4 - 0.087\text{SATM} - 19.939\text{SATPartRate} + 0.525\text{DropoutRate} \\ & - 0.0008\text{CostPupil} - 0.013\text{SCounselRatio} \end{aligned}$$

The ANOVA table for this model (Table 4) gives a relatively small MSE and a large F-Value. Only a p-value so minute would cause this model to be rejected. This shows that the model appears to be a good fit for the data.

The final regression model reflects a reasonable good R^2 value (Table 5) and also explains 70% of the variability in Percent2yrPub.

The preliminary model also indicated multicollinearity when all of the variables are in the model. Although it doesn't help the predictive outcome of the model, an absence of multicollinearity makes it easier to discern the relationships between the predictive variables and the response variable. The variance inflation factor between the two variables in the model is now below 10 (Table 6).

In order to judge the appropriate model, an inspection of the residual was necessary. The variation of the response variable appears constant across the predicted values (Figure 3) and the predictors (Please see appendix for additional graphs). Since a pattern did not exist on the plot below, the predictors including enrollment, AveTeach, SATV, GMCASEng, GMCASMth, and STRatio, were not included for the model as they did not help explain any of the variability in our response variable (Please see the appendix for the graphs).

Figure 3: Plot of Predicted value vs Residual

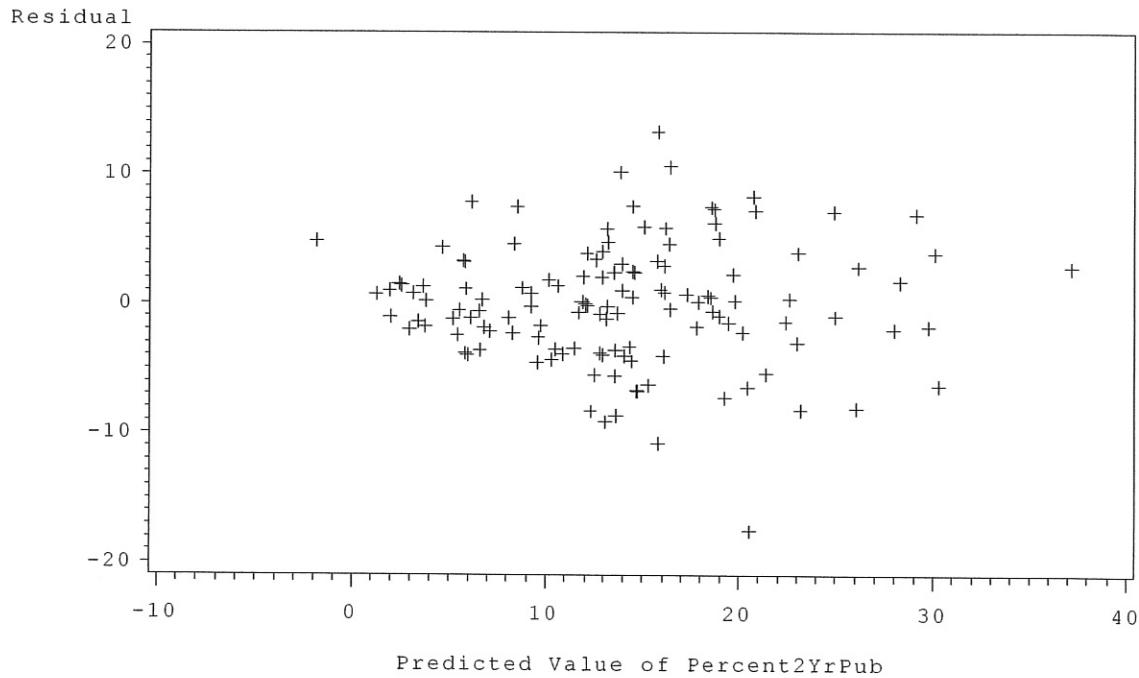
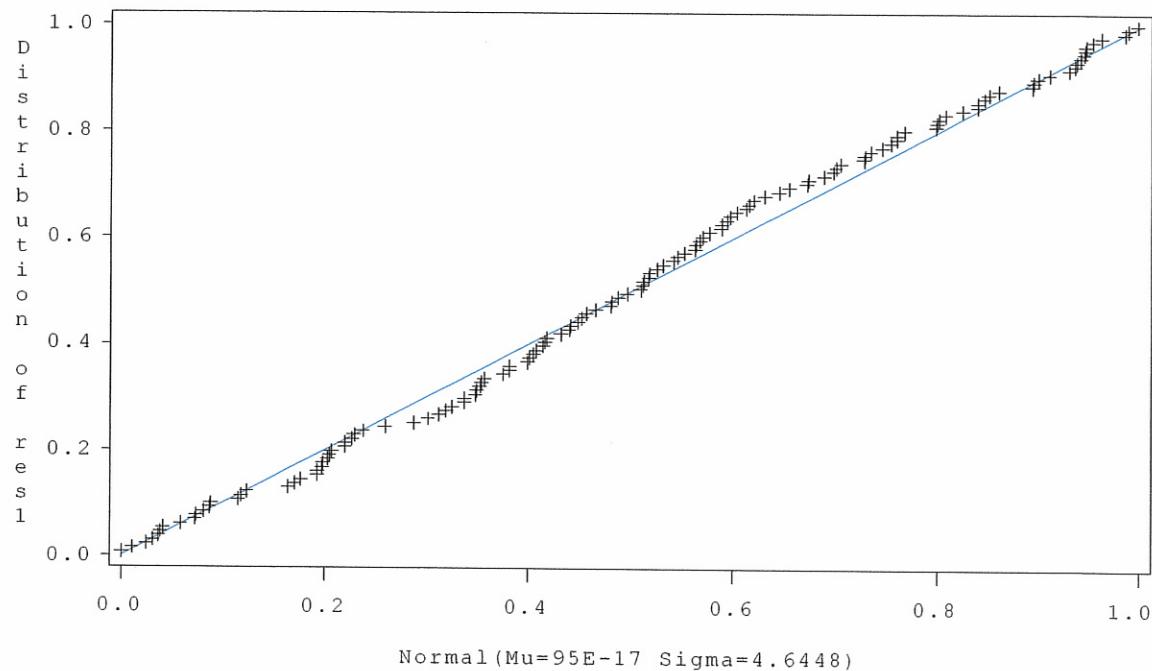


Table 7: Normality Test

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.986802	Pr < W	0.240
Kolmogorov-Smirnov	D	0.054046	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.075335	Pr > W-Sq	0.240
Anderson-Darling	A-Sq	0.426094	Pr > A-Sq	>0.250

Table 7 shows some normality tests with H_0 : Data Normal; H_α : Data not Normal. The entire test show that we fail to reject H_0 , that the data is normal. Figure 4 contains a Q-Q plot, making it visually apparent that the residuals are normally distributed.

Figure 4: Q-Q Plot of residuals



Conclusion

In conclusion, the average SAT math score, SAT participation rate, dropout rate, cost per pupil, and student/counselor ratio are key factors when trying to indicate whether a high school student will attend a two-year public college.

Higher than average SAT math scores, more SAT participation by the students, the cost associated with a two-year public college, and a higher ratio in regards to the number of students/number of counselors available all seem to have a negative relationship with the Percent2YrPub variable. When these factors increase, the number of students enrolling in a two-year public college decreases.

Dropout rate is the one factor that seems to have a positive relationship with the response variable. The higher the dropout rate a school has, more likely students of that school will attend a two-year public college after graduation.

Specifically, a unit increase in SATM will decrease Percent2YrPub by 0.087 while all other factors remain fixed; a unit increase in SATPartRate will decrease Percent2YrPub by -19.939; a unit increase in dropout rate will increase Percent2YrPub by 0.525; a unit increase in cost of

pupil will decrease Percent2YrPub by 0.0008 and a unit increase in student to counselor ratio will decrease Percent2YrPub by 0.013.

The result is reasonable since students with a higher SAT scores will more likely go to a four-year college instead of a two-year college where SAT scores are not required. Similarly, schools with higher SAT participate rate would have a higher percentage of students going to four-year college instead of two-year college. Schools with higher cost per pupil and student/counselor ratio would indicate that students perform better and are therefore less likely to enroll in a two-year public college. However, schools with higher drop rate would seem to show that many of the students there are having problems and are more likely go to a two-year public college.

Other variables like SATV, GMCASEng, and GMCASMth are significant to Percent2YrPub. However, these variables also have a strong correlation with SATM and are not significant when SATM is present in the model.

Transformation was not used for the regression model. Box Cox transformation was applied to a few predictors but the results did not show much improvement. There are a few predictors like enrollment, costpupil, SCounselRatio that did not have a clear relationship against Percent2YrCollege. Even after the Box Cox transformation, the linear relationship did not improve. Therefore, these variables are used in fitting the model.

Four records, whose values were zero for the response variable, were deleted from this project, improving the overall results. The model has an R^2 value around 70%, which means that 70% of variation in the response variable can be explained by the predictors. The remaining 30% could not be explained and may be dependent on other factors like average income and the distribution of student ethnicity. These factors were not included in the original data set.

Similar studies can be applied to the other response variables (number going to a four-year public college, number going to a two-year private college, number going to a four-year private college, number going into the military, number going to into the work force, and the number choosing other activities). Percent2YrPub had a relatively good R^2 value and was the main reason why that variable was chosen. When fitting a multilinear regression for the other response variables, the results yielded a relatively small R^2 value:

- Percent of students going to a four-year public college is around 29%;
- Percent of students going to the military has a R^2 value around 30%;
- Percent of students going to the work force has a R^2 value around 40%
- Percent of students engaging in other activities has a R^2 value around 12%.

Please refer to the appendix for the tabulated numbers.

Multivariate method applies to this project as well since there are many response variables that are depended on one another. Percentage of students going to colleges is the summation of the percentages of the individual cases:

$$\text{Percentcollege} = \text{Percent2YrPub} + \text{Percent4YrPub} + \text{Percent2YrPri} + \text{Percent4yrPri}$$

And also summation of all the percentages sums up to be 1.

$$\begin{aligned} & \text{Percent2YrPub} + \text{Percent4YrPub} + \text{Percent2YrPri} + \text{Percent4yrPri} + \text{PercentMilitary} \\ & + \text{PercentWork} + \text{PercentOther} = 1 \end{aligned}$$

Table 8: Simple Statistics for all the response variables

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
PercentCollege	135	82.91852	7.87121	11194	59.00000	100.00000
Percent2YrPub	135	13.41481	8.68554	1811	0	40.00000
Percent4YrPub	135	27.05185	7.78951	3652	10.00000	56.00000
Percent2YrPri	135	3.34074	4.36260	451.00000	0	36.00000
Percent4YrPri	135	39.11852	14.63998	5281	11.00000	75.00000
PercentMilitary	135	2.10370	1.71592	284.00000	0	10.00000
PercentWork	135	9.21481	6.01538	1244	0	30.00000
percentOther	135	5.80000	5.02501	783.00000	0	33.00000

Table 9: Correlation Matrix for the response variables

Pearson Correlation Coefficients, N = 135 Prob > r under H0: Rho=0								
	PercentCollege	Percent2YrPub	Percent4YrPub	Percent2YrPri	Percent4YrPri	PercentMilitary	PercentWork	percentOther
PercentCollege	1.00000	-0.44083 <.0001	0.27819 0.0011	-0.22585 0.0084	0.71958 <.0001	-0.47399 <.0001	-0.73741 <.0001	-0.51758 <.0001
Percent2YrPub		1.00000	-0.17515 0.0422	0.00471 0.9568	-0.73835 <.0001	0.44374 <.0001	0.45721 <.0001	-0.01296 0.8814
Percent4YrPub			1.00000	-0.31170 0.0002	-0.18532 0.0314	-0.21815 0.0110	-0.14708 0.0887	-0.18753 0.0294
Percent2YrPri				1.00000	-0.25594 0.0027	0.24148 0.0048	0.16412 0.0572	0.09062 0.2959
Percent4YrPri					1.00000	-0.47461 <.0001	-0.63915 <.0001	-0.19840 0.0211
PercentMilitary						1.00000	0.34848 <.0001	-0.01316 0.8796
PercentWork							1.00000	-0.16028 0.0633
percentOther								1.00000

The results in table 9 can be summarized by the following:

- The number of students going to a four-year private college comes to about 72%.
- The number of students going to a four-year private college has a strong negative relationship with number of students going to a two-year public college. The number of students going to two-year public college decreases as the number of students going to a four-year private college increases.
- There is also a strong negative relationship between the number of students going to college versus the number of students going straight to work after high school. The number of students going to work decreases as number of students going to college increases.

Multivariate Analysis, although a useful tool when analyzing multiple dependent measures, was not used for this project as it might be too difficult to interpret the result. It would be hard to determine which explanatory variable contributes to the appropriate response variable. When fitting linear regression individually, the correlation between the dependent variables has to be considered since they are not independent.

Appendix

```
data school;
infile 'C:\Documents and Settings\xzchen\Desktop\Data Analysis\school.txt'
dlm='09'x; /* dlm=', ' */
/* change delimilator Space is default */
input School $ Enrollment      CostPupil    AveTeach     SATV   SATM   SATPartRate
      GMCASEng      GMCASMth    STRatio     SCounselRatio  DropoutRate
      PercentCollege  Percent2YrPub  Percent4YrPub  Percent2YrPri
      Percent4YrPri   PercentMilitary PercentWork percentOther ;
NewEnrollment=log(Enrollment);
NewCostPupil=1/CostPupil;
NewSATPartRate=SATPartRate**2;
NewSCounselRatio=log(SCounselRatio);
newPercent2YrPub=sqrt(Percent2YrPub);
if (Percent2YrPub=0) then delete; run;
Proc contents data=school; run;
proc insight data=school;
scatter Percent2YrPub * Percent2YrPub Enrollment      CostPupil    AveTeach
          SATV       SATM       SATPartRate GMCASEng      GMCASMth    STRatio
          SCounselRatio  DropoutRate;
scatter Percent2YrPub * Percent2YrPub NewEnrollment  NewCostPupil
          AveTeach     SATV       SATM       NewSATPartRate GMCASEng      GMCASMth
          STRatio     NewSCounselRatio  DropoutRate;
run ; quit ;
proc transreg data =school ss2 detail ;
model boxcox(Enrollment) = identity (Percent2YrPub);
run ; /*lamda=0 */ quit ;
proc transreg data =school ss2 detail ;
model boxcox(CostPupil) = identity (Percent2YrPub);
run ; /*lamda=-1 1/y */quit ;
proc transreg data =school ss2 detail ;
model boxcox(SATPartRate) = identity (Percent2YrPub);
run ; /*lamda=2 y**2*/quit ;
proc transreg data =school ss2 detail ;
model boxcox(SCounselRatio) = identity (Percent2YrPub);
run ; /*lamda=0 */quit ;
proc transreg data =school ss2 detail ;
model boxcox(DropoutRate) = identity (Percent2YrPub);
run ; /*lamda=0.25*/quit ;
proc transreg data =school ss2 detail ;
model boxcox(Percent2YrPub) = identity (DropoutRate);
run ; /*lamda=0.5*/quit ;
proc transreg data =school ss2 detail ;
model boxcox(Percent2YrPub) = identity (Enrollment);
run ; /*lamda=0.5*/quit ;
proc insight data=school;
scatter Percent2YrPub * Percent2YrPub Enrollment      CostPupil    AveTeach
          SATV       SATM       SATPartRate GMCASEng      GMCASMth    STRatio
          SCounselRatio  DropoutRate;
scatter Percent2YrPub * Percent2YrPub NewEnrollment  NewCostPupil
          AveTeach     SATV       SATM       NewSATPartRate GMCASEng      GMCASMth
          STRatio     NewSCounselRatio  DropoutRate;
run ;
quit ;
```

```

ods rtf file='C:\Documents and Settings\xzchen\Desktop\DA
Analysis\Percent2YrPub.rtf';
Proc contents data=school; run;
proc corr;
var Percent2YrPub Enrollment CostPupil AveTeach SATV SATM SATPartRate
    GMCASEng GMCASMth STRatio SCounselRatio DropoutRate;
run;
quit;
proc reg;
model Percent2YrPub=Enrollment CostPupil AveTeach SATV SATM
    SATPartRate GMCASEng GMCASMth STRatio SCounselRatio
    DropoutRate /VIF;
run;
quit;
proc reg;
model Percent2YrPub=Enrollment CostPupil AveTeach SATV SATM
    SATPartRate GMCASEng GMCASMth STRatio SCounselRatio
    DropoutRate /selection=stepwise;
run; /* SATM SATPartRate DropoutRate CostPupil SCounselRatio are selected */
quit;
proc reg;
model Percent2YrPub=SATM SATPartRate DropoutRate CostPupil SCounselRatio/VIF;
run;
quit;
proc reg;
model Percent2YrPub = SATM SATPartRate DropoutRate CostPupil SCounselRatio;
output
out = regout1
r = res1
p = predicted1;
run ;
quit ;
proc corr;
var Percent2YrPub SATM SATPartRate DropoutRate CostPupil SCounselRatio;
run;
quit;
proc gplot data=regout1;
plot res1 * ( Predicted1 SATM SATPartRate DropoutRate CostPupil
SCounselRatio);
run ;
quit ;
proc capability data = regout1 normal;
var res1;
probplot ;
ppplot res1;
qqplot res1;
run ;
quit ;
*****2) Percent2YrsPub as the response variable *****/
proc reg;
model Percent2YrPub>NewEnrollment NewCostPupil AveTeach SATV SATM
    NewSATPartRate GMCASEng GMCASMth STRatio NewSCounselRatio
    DropoutRate /VIF;
run;
quit;
proc reg;

```

```

model Percent2YrPub=Enrollment          CostPupil    AveTeach    SATV   SATM
      NewSATPartRate   GMCASEng     GMCASMth    STRatio    NewSCounselRatio
      DropoutRate /selection=stepwise;
run; /* SATM NewSATPartRate DropoutRate NewCostPupil  are selected */
quit;
proc reg;
model Percent2YrPub =  SATM NewSATPartRate DropoutRate CostPupil;
output
out = regout2
r = res2
p = predicted2;
run ;
quit ;
proc gplot data=regout2;
plot res2 * (Predicted2 SATM NewSATPartRate DropoutRate CostPupil);
run ;
quit ;
proc capability data = regout2 normal;
var res2;
probplot ;
ppplot res2;
qqplot res2;
run ;
quit ;
*****transform y*****
proc reg;
model NewPercent2YrPub>NewEnrollment      NewCostPupil      AveTeach    SATV
      SATM  NewSATPartRate   GMCASEng     GMCASMth    STRatio
      NewSCounselRatio  DropoutRate /selection=stepwise;
run; /* SATM NewSATPartRate NewCostPupil  are selected */
quit;
proc reg;
model NewPercent2YrPub = SATM NewSATPartRate NewCostPupil;
output
out = regout3
r = res3
p = predicted3;
run ;
quit ;
proc gplot data=regout3;
plot res3 * ( SATM NewSATPartRate NewCostPupil);
run ;
quit ;
proc capability data = regout3 normal;
var res3;
probplot ;
ppplot res3;
qqplot res3;
run ;
quit ;
ods rtf close;
run;
quit;

```

*The SAS System**The CONTENTS Procedure*

Alphabetic List of Variables and Attributes			
#	Variable	Type	Len
4	AveTeach	Num	8
3	CostPupil	Num	8
12	DropoutRate	Num	8
2	Enrollment	Num	8
8	GMCASEng	Num	8
9	GMCASMth	Num	8
22	NewCostPupil	Num	8
21	NewEnrollment	Num	8
23	NewSATPartRate	Num	8
24	NewSCounselRatio	Num	8
16	Percent2YrPri	Num	8
14	Percent2YrPub	Num	8
17	Percent4YrPri	Num	8
15	Percent4YrPub	Num	8
13	PercentCollege	Num	8
18	PercentMilitary	Num	8
19	PercentWork	Num	8
6	SATM	Num	8
7	SATPartRate	Num	8
5	SATV	Num	8
11	SCounselRatio	Num	8
10	STRatio	Num	8
1	School	Char	8
25	newPercent2YrPub	Num	8
20	percentOther	Num	8

*The SAS System**The CORR Procedure*

12 Variables:	Percent2YrPub	Enrollment	CostPupil	AveTeach	SATV	SATM	SATPartRate	GMCASEng
	GMCASMth	STRatio	SCounselRatio	DropoutRate				

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Percent2YrPub	131	13.82443	8.48844	1811	1.00000	40.00000
Enrollment	131	1112	576.28522	145637	266.00000	3945
CostPupil	131	7095	1198	929392	4675	12586
AveTeach	131	46931	4525	6147931	32067	66654
SATV	131	512.41985	41.75495	67127	387.00000	609.00000
SATM	131	517.81679	44.05151	67834	381.00000	617.00000
SATPartRate	131	0.80588	0.13397	105.57000	0.45000	1.00000
GMCASEng	131	243.31298	6.98249	31874	223.00000	257.00000
GMCASMth	131	241.72519	7.40172	31666	221.00000	256.00000
STRatio	131	13.13740	1.96023	1721	9.00000	19.00000
SCounselRatio	131	224.57252	51.86225	29419	113.00000	389.00000
DropoutRate	131	2.02977	2.18198	265.90000	0	12.20000

*The SAS System**The CORR Procedure*

Pearson Correlation Coefficients, N = 131 Prob > r under H0: Rho=0							
	Percent2YrPub	Enrollment	CostPupil	AveTeach	SATV	SATM	SATPartRate
Percent2YrPub	1.00000	0.33230 0.0001	-0.28031 0.0012	-0.30918 0.0003	-0.76756 <.0001	-0.78759 <.0001	-0.75409 <.0001
Enrollment	0.33230 0.0001	1.00000	-0.03721 0.6730	0.17423 0.0466	-0.35258 <.0001	-0.26166 0.0025	-0.41217 <.0001
CostPupil	-0.28031 0.0012	-0.03721 0.6730	1.00000	0.35466 <.0001	0.21334 0.0144	0.26771 0.0020	0.17351 0.0475
AveTeach	-0.30918 0.0003	0.17423 0.0466	0.35466 <.0001	1.00000	0.29227 0.0007	0.36227 <.0001	0.24873 0.0042
SATV	-0.76756 <.0001	-0.35258 <.0001	0.21334 0.0144	0.29227 0.0007	1.00000	0.93357 <.0001	0.80486 <.0001
SATM	-0.78759 <.0001	-0.26166 0.0025	0.26771 0.0020	0.36227 <.0001	0.93357 <.0001	1.00000	0.76658 <.0001
SATPartRate	-0.75409 <.0001	-0.41217 <.0001	0.17351 0.0475	0.24873 0.0042	0.80486 <.0001	0.76658 <.0001	1.00000
GMCASEng	-0.77283 <.0001	-0.43276 <.0001	0.21354 0.0143	0.27518 0.0015	0.88604 <.0001	0.84882 <.0001	0.80978 <.0001
GMCASMth	-0.76218 <.0001	-0.37773 <.0001	0.23310 0.0074	0.31512 0.0002	0.89321 <.0001	0.90200 <.0001	0.83112 <.0001
STRatio	0.21689 0.0128	0.27564 0.0014	-0.46704 <.0001	-0.02884 0.7437	-0.19647 0.0245	-0.21368 0.0143	-0.25998 0.0027
SCounselRatio	0.09557 0.2776	-0.00831 0.9250	-0.38697 <.0001	-0.15800 0.0715	-0.14150 0.1069	-0.19998 0.0220	-0.13494 0.1244
DropoutRate	0.62675 <.0001	0.54986 <.0001	-0.17182 0.0497	-0.22125 0.0111	-0.66739 <.0001	-0.60668 <.0001	-0.63330 <.0001

Pearson Correlation Coefficients, N = 131 Prob > r under H0: Rho=0					
	GMCASEng	GMCASMth	STRatio	SCounselRatio	DropoutRate
Percent2YrPub	-0.77283 <.0001	-0.76218 <.0001	0.21689 0.0128	0.09557 0.2776	0.62675 <.0001
Enrollment	-0.43276 <.0001	-0.37773 <.0001	0.27564 0.0014	-0.00831 0.9250	0.54986 <.0001
CostPupil	0.21354 0.0143	0.23310 0.0074	-0.46704 <.0001	-0.38697 <.0001	-0.17182 0.0497
AveTeach	0.27518 0.0015	0.31512 0.0002	-0.02884 0.7437	-0.15800 0.0715	-0.22125 0.0111
SATV	0.88604 <.0001	0.89321 <.0001	-0.19647 0.0245	-0.14150 0.1069	-0.66739 <.0001
SATM	0.84882 <.0001	0.90200 <.0001	-0.21368 0.0143	-0.19998 0.0220	-0.60668 <.0001

*The SAS System**The CORR Procedure*

Pearson Correlation Coefficients, N = 131 Prob > r under H0: Rho=0					
	GMCASEng	GMCASMth	STRatio	SCounselRatio	DropoutRate
SATPartRate	0.80978 <.0001	0.83112 <.0001	-0.25998 0.0027	-0.13494 0.1244	-0.63330 <.0001
GMCASEng	1.00000	0.94829 <.0001	-0.21279 0.0147	-0.12831 0.1441	-0.71261 <.0001
GMCASMth	0.94829 <.0001	1.00000	-0.23648 0.0065	-0.14483 0.0988	-0.68535 <.0001
STRatio	-0.21279 0.0147	-0.23648 0.0065	1.00000	0.32481 0.0002	0.17151 0.0501
SCounselRatio	-0.12831 0.1441	-0.14483 0.0988	0.32481 0.0002	1.00000	0.00130 0.9883
DropoutRate	-0.71261 <.0001	-0.68535 <.0001	0.17151 0.0501	0.00130 0.9883	1.00000

*The SAS System**The REG Procedure**Model: MODEL1**Dependent Variable: Percent2YrPub*

Number of Observations Read	131
Number of Observations Used	131

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	6761.65249	614.69568	28.08	<.0001
Error	119	2605.30934	21.89336		
Corrected Total	130	9366.96183			

Root MSE	4.67903	R-Square	0.7219
Dependent Mean	13.82443	Adj R-Sq	0.6962
Coeff Var	33.84613		

Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Variance Inflation
Intercept	1	91.05737	30.73403	2.96	0.0037	0
Enrollment	1	0.00004712	0.00097208	0.05	0.9614	1.86342
CostPupil	1	-0.00077186	0.00043750	-1.76	0.0803	1.63225
AveTeach	1	-0.00002834	0.00010994	-0.26	0.7970	1.46925
SATV	1	0.04900	0.03353	1.46	0.1466	11.64112
SATM	1	-0.13282	0.03215	-4.13	<.0001	11.91050
SATPartRate	1	-22.48985	5.88313	-3.82	0.0002	3.68883
GMCASEng	1	-0.59260	0.20871	-2.84	0.0053	12.61009
GMCASMth	1	0.57141	0.22587	2.53	0.0127	16.59580
STRatio	1	-0.01782	0.25880	-0.07	0.9452	1.52816
SCounselRatio	1	-0.01470	0.00894	-1.64	0.1027	1.27604
DropoutRate	1	0.45022	0.30315	1.49	0.1402	2.59807

*The SAS System**The REG Procedure**Model: MODEL1**Dependent Variable: Percent2YrPub*

Number of Observations Read	131
Number of Observations Used	131

Summary of Stepwise Selection

Step	Variable Entered	Variable Removed	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value	Pr > F
1	SATM		1	0.6203	0.6203	35.4547	210.74	<.0001
2	SATPartRate		2	0.0548	0.6751	14.0027	21.60	<.0001
3	DropoutRate		3	0.0136	0.6887	10.1746	5.56	0.0199
4	CostPupil		4	0.0065	0.6952	9.3928	2.69	0.1036
5	SCounselRatio		5	0.0053	0.7006	9.1073	2.23	0.1379

*The SAS System**The REG Procedure**Model: MODEL1**Dependent Variable: Percent2YrPub*

Number of Observations Read	131
Number of Observations Used	131

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6562.26396	1312.45279	58.49	<.0001
Error	125	2804.69787	22.43758		
Corrected Total	130	9366.96183			

Root MSE	4.73683	R-Square	0.7006
Dependent Mean	13.82443	Adj R-Sq	0.6886
Coeff Var	34.26422		

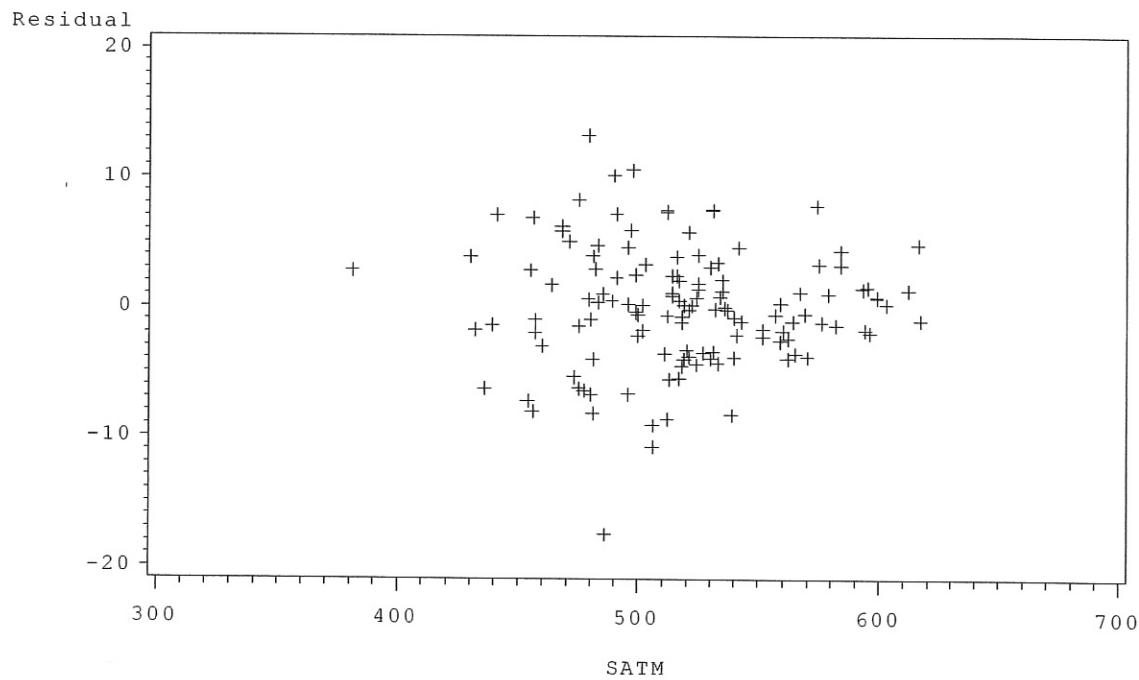
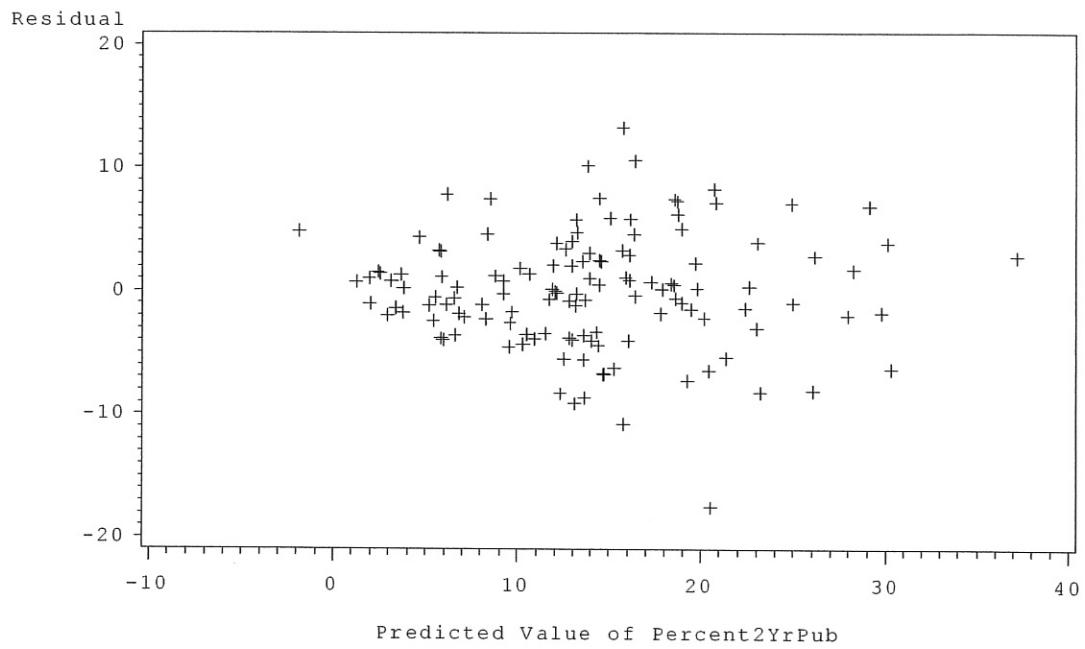
Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Variance Inflation
Intercept	1	82.44112	7.84498	10.51	<.0001	0
SATM	1	-0.08679	0.01557	-5.58	<.0001	2.72475
SATPartRate	1	-19.93870	5.12932	-3.89	0.0002	2.73607
DropoutRate	1	0.52452	0.25780	2.03	0.0440	1.83328
CostPupil	1	-0.00080253	0.00038659	-2.08	0.0399	1.24357
SCounselRatio	1	-0.01326	0.00888	-1.49	0.1379	1.22804

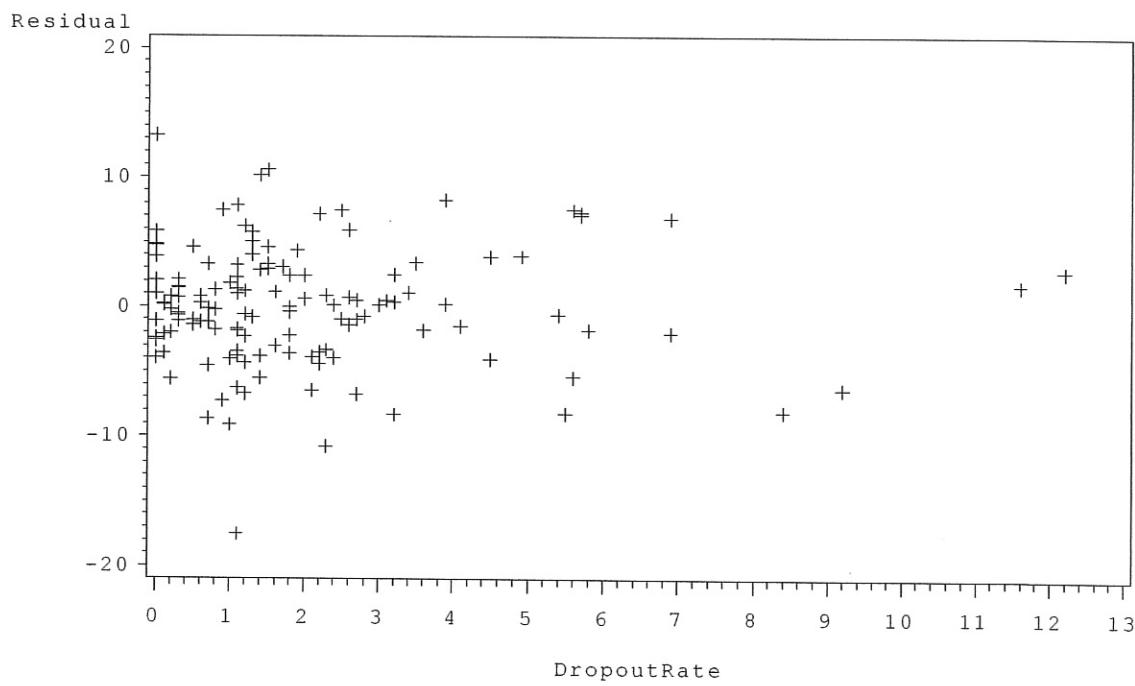
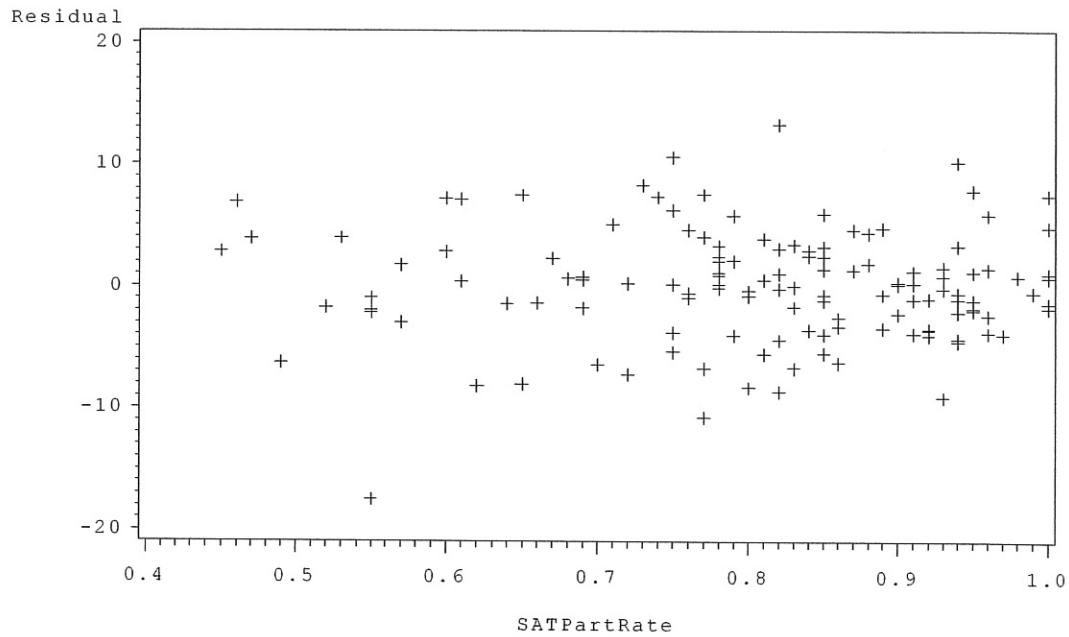
*The SAS System**The CORR Procedure*

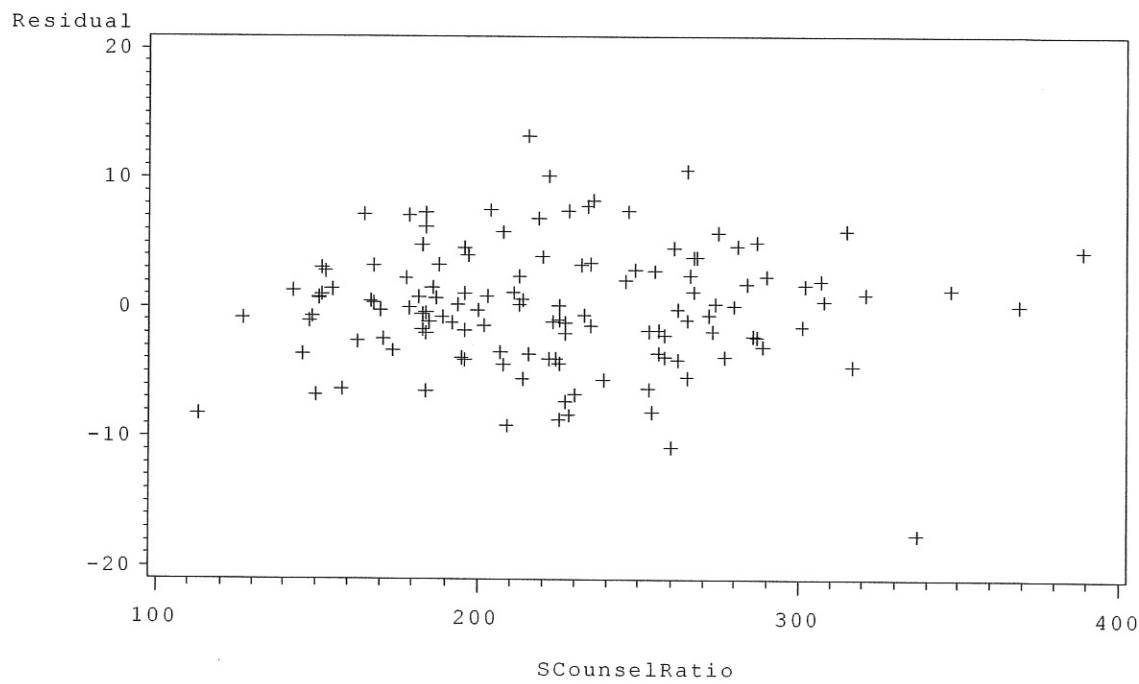
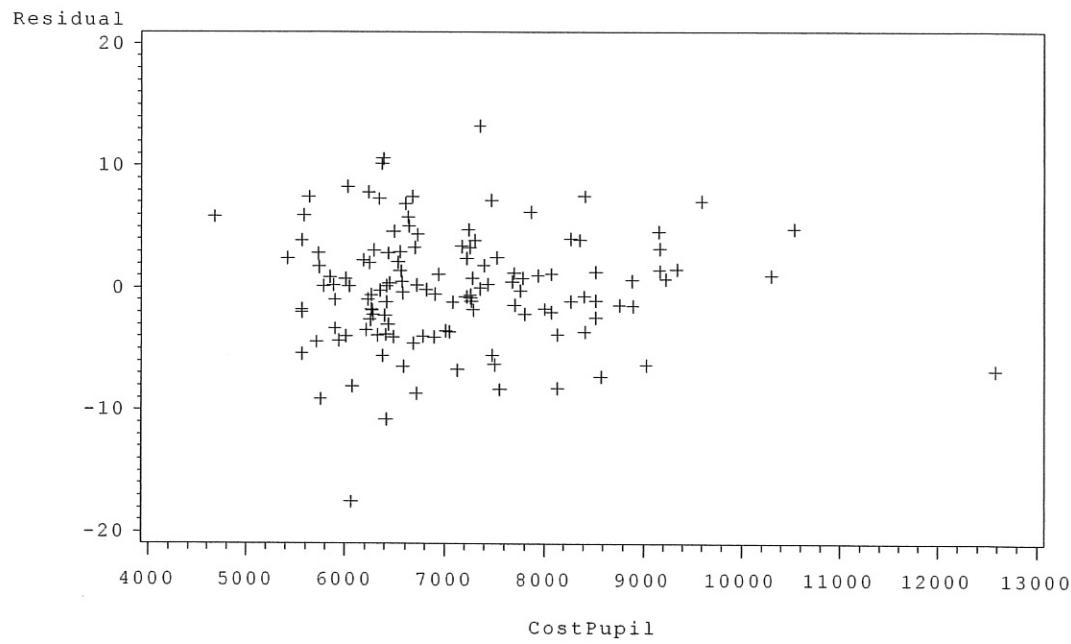
6 Variables:	Percent2YrPub	SATM	SATPartRate	DropoutRate	CostPupil	SCounselRatio
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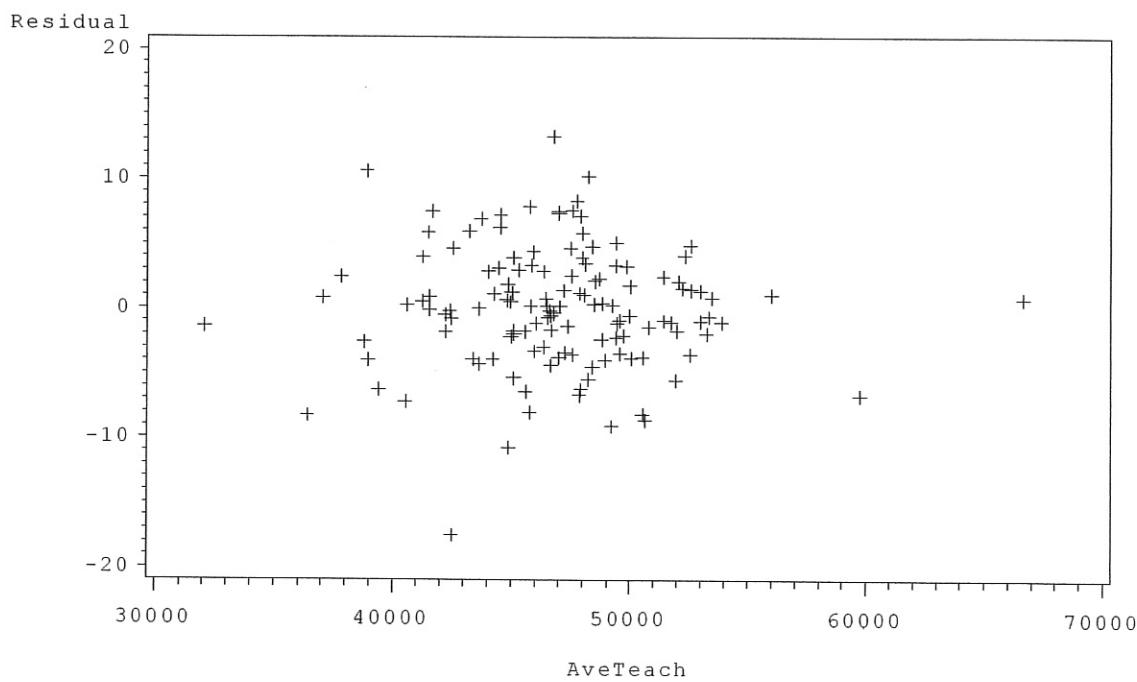
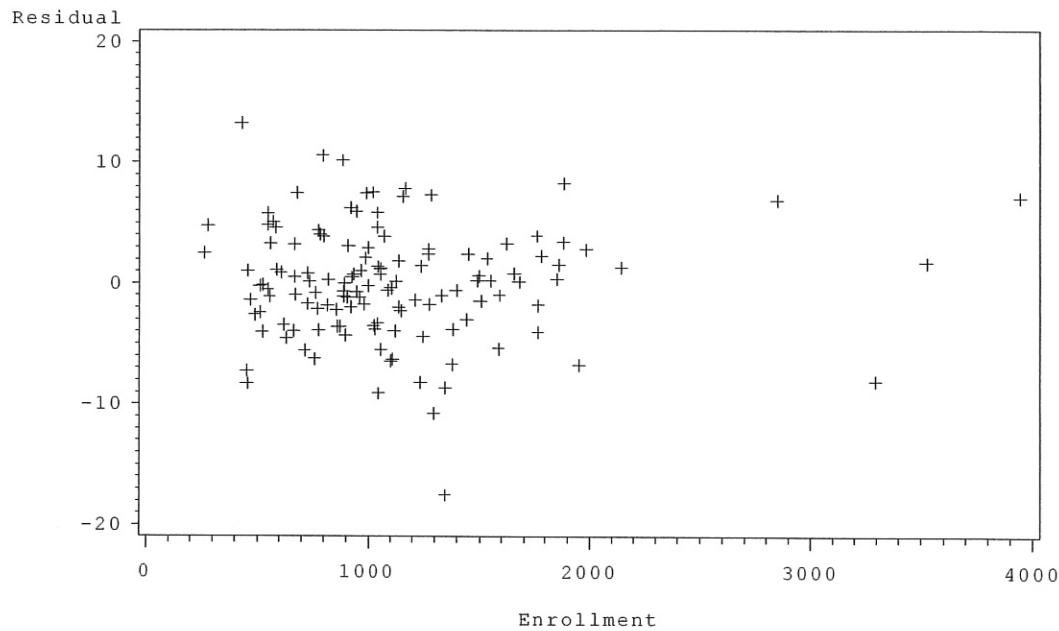
Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Percent2YrPub	131	13.82443	8.48844	1811	1.00000	40.00000
SATM	131	517.81679	44.05151	67834	381.00000	617.00000
SATPartRate	131	0.80588	0.13397	105.57000	0.45000	1.00000
DropoutRate	131	2.02977	2.18198	265.90000	0	12.20000
CostPupil	131	7095	1198	929392	4675	12586
SCounselRatio	131	224.57252	51.86225	29419	113.00000	389.00000

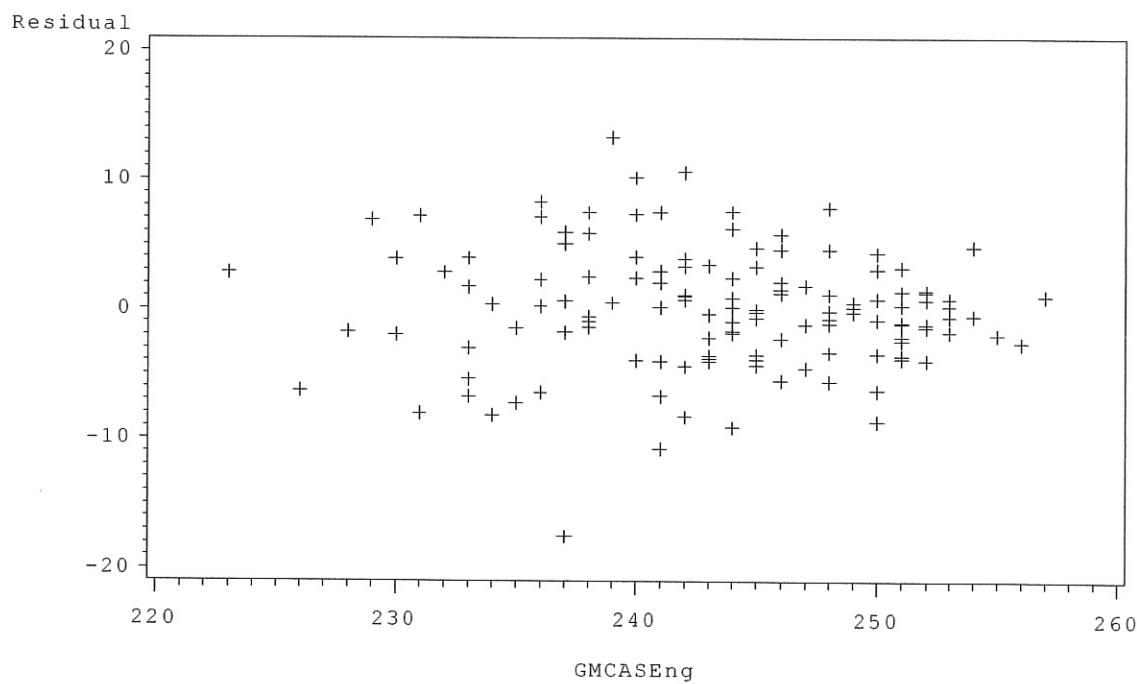
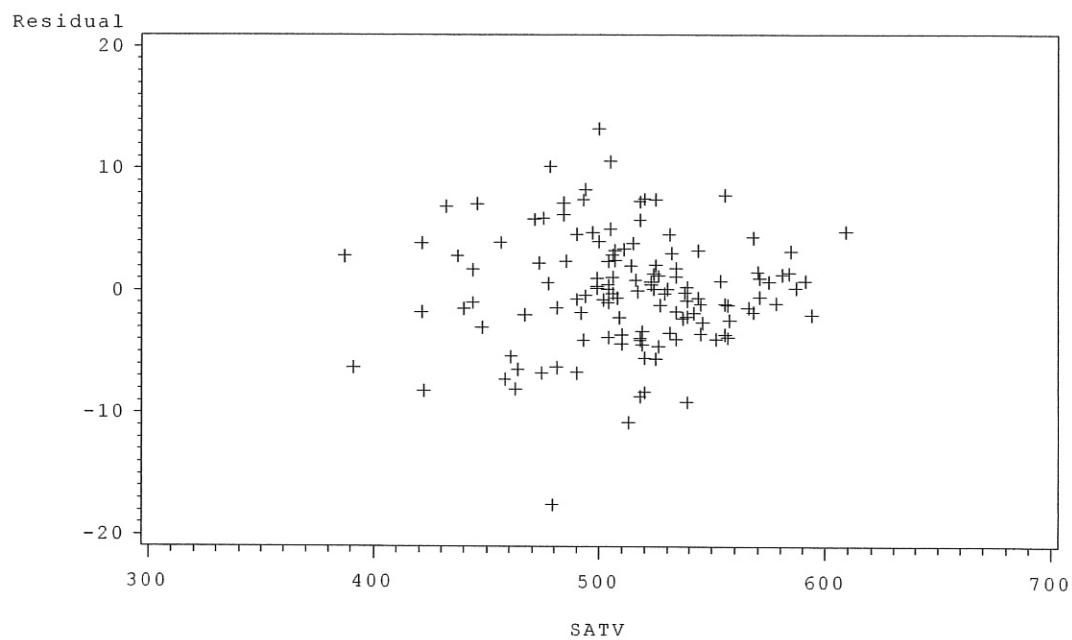
Pearson Correlation Coefficients, N = 131 Prob > r under H0: Rho=0						
	Percent2YrPub	SATM	SATPartRate	DropoutRate	CostPupil	SCounselRatio
Percent2YrPub	1.00000	-0.78759 <.0001	-0.75409 <.0001	0.62675 <.0001	-0.28031 0.0012	0.09557 0.2776
SATM	-0.78759 <.0001	1.00000	0.76658 <.0001	-0.60668 <.0001	0.26771 0.0020	-0.19998 0.0220
SATPartRate	-0.75409 <.0001	0.76658 <.0001	1.00000	-0.63330 <.0001	0.17351 0.0475	-0.13494 0.1244
DropoutRate	0.62675 <.0001	-0.60668 <.0001	-0.63330 <.0001	1.00000	-0.17182 0.0497	0.00130 0.9883
CostPupil	-0.28031 0.0012	0.26771 0.0020	0.17351 0.0475	-0.17182 0.0497	1.00000	-0.38697 <.0001
SCounselRatio	0.09557 0.2776	-0.19998 0.0220	-0.13494 0.1244	0.00130 0.9883	-0.38697 <.0001	1.00000

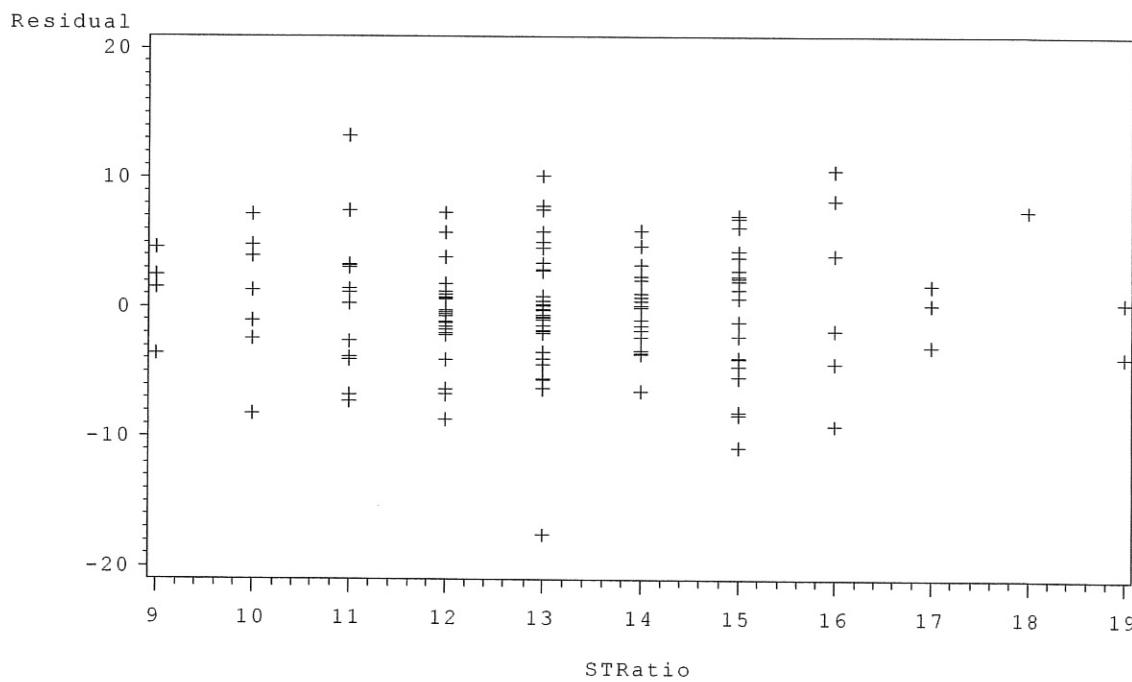
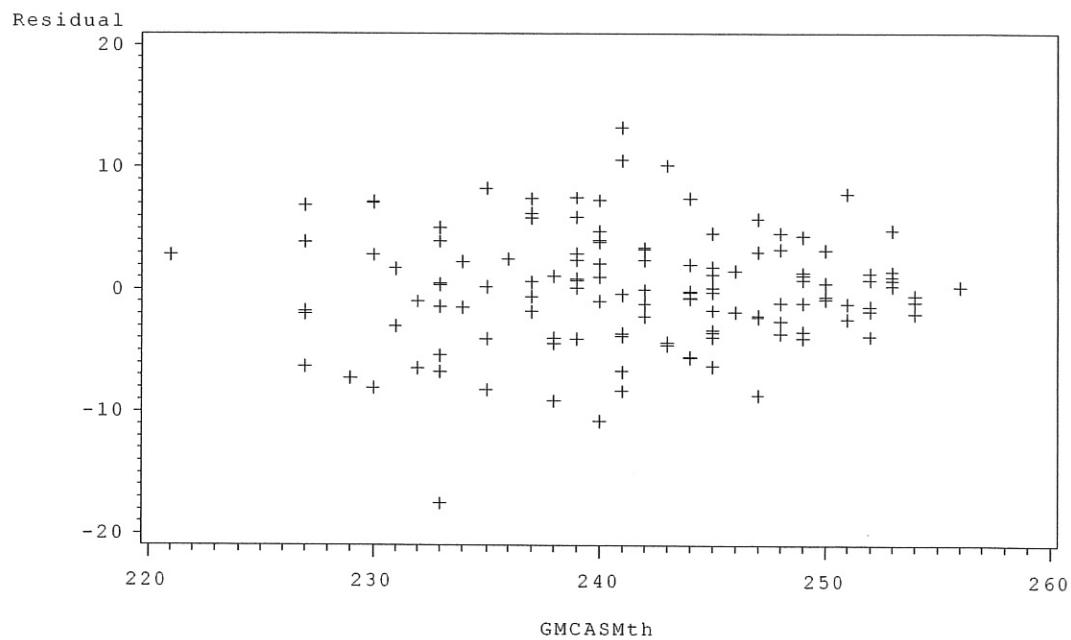












The SAS System

The CAPABILITY Procedure

Variable: res1 (Residual)

Moments			
N	131	Sum Weights	131
Mean	9.4581E-16	Sum Observations	1.239E-13
Std Deviation	4.6448465	Variance	21.574599
Skewness	-0.2062398	Kurtosis	1.16229348
Uncorrected SS	2804.69787	Corrected SS	2804.69787
Coeff Variation	4.91098E17	Std Error Mean	0.40582212

Basic Statistical Measures			
Location		Variability	
Mean	0.000000	Std Deviation	4.64485
Median	0.110367	Variance	21.57460
Mode	.	Range	30.78007
		Interquartile Range	5.43008

Tests for Location: Mu0=0				
Test		Statistic		p Value
Student's t	t	2.33E-15	Pr > t 	1.0000
Sign	M	0.5	Pr >= M 	1.0000
Signed Rank	S	12	Pr >= S 	0.9781

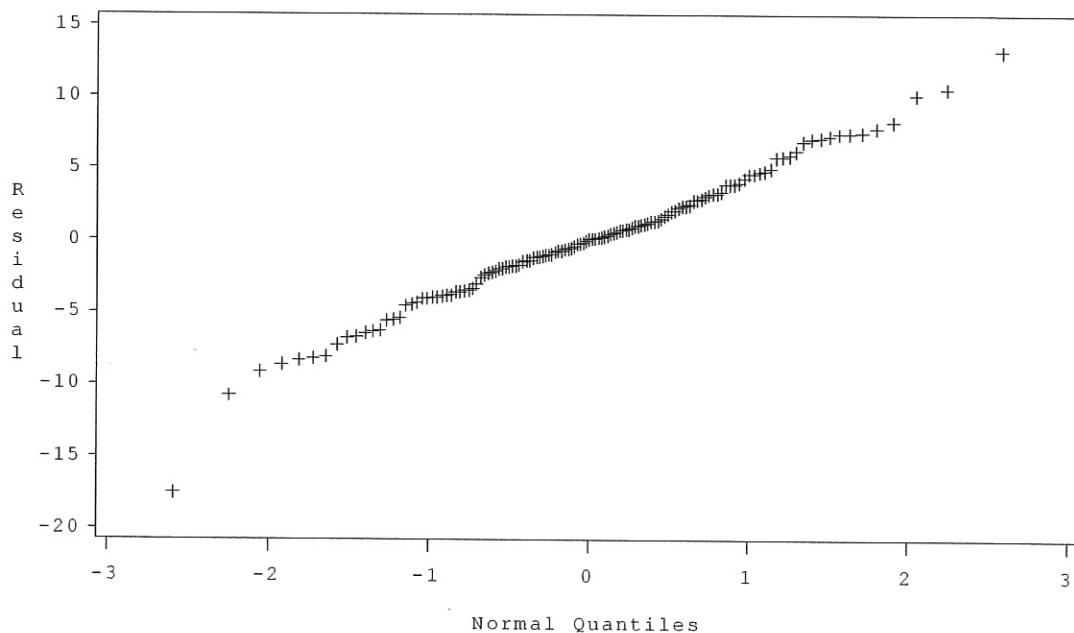
Tests for Normality				
Test		Statistic		p Value
Shapiro-Wilk	W	0.986802	Pr < W	0.240
Kolmogorov-Smirnov	D	0.054046	Pr > D	>0.150
Cramer-von Mises	W-Sq	0.075335	Pr > W-Sq	0.240
Anderson-Darling	A-Sq	0.426094	Pr > A-Sq	>0.250

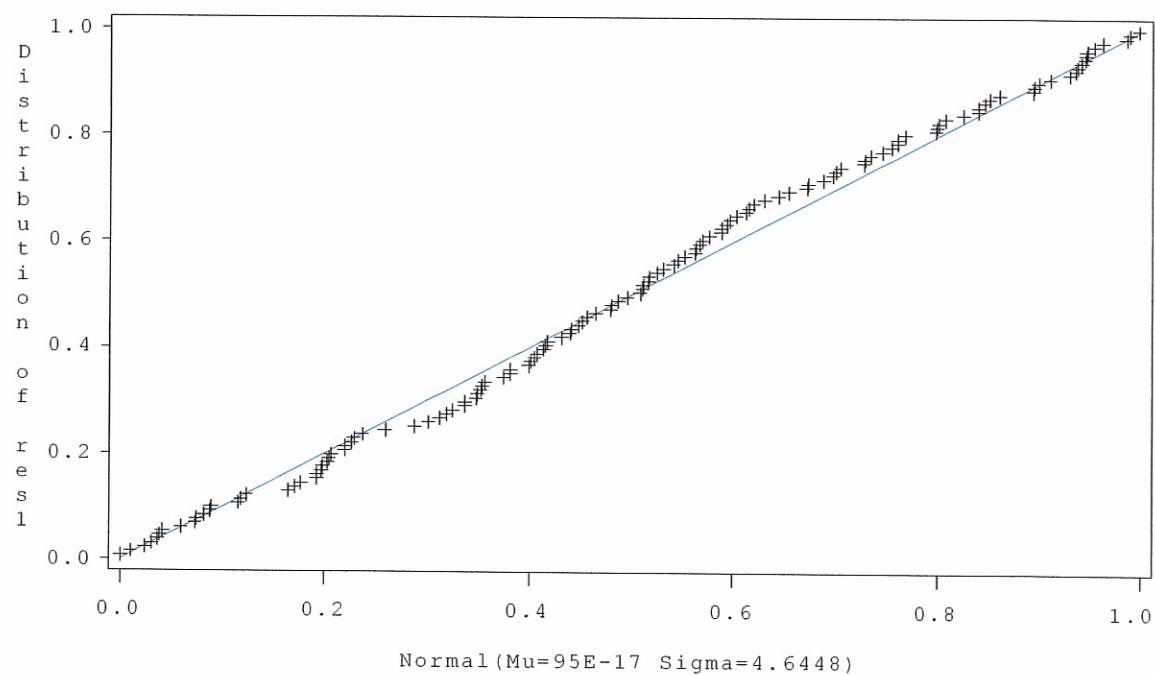
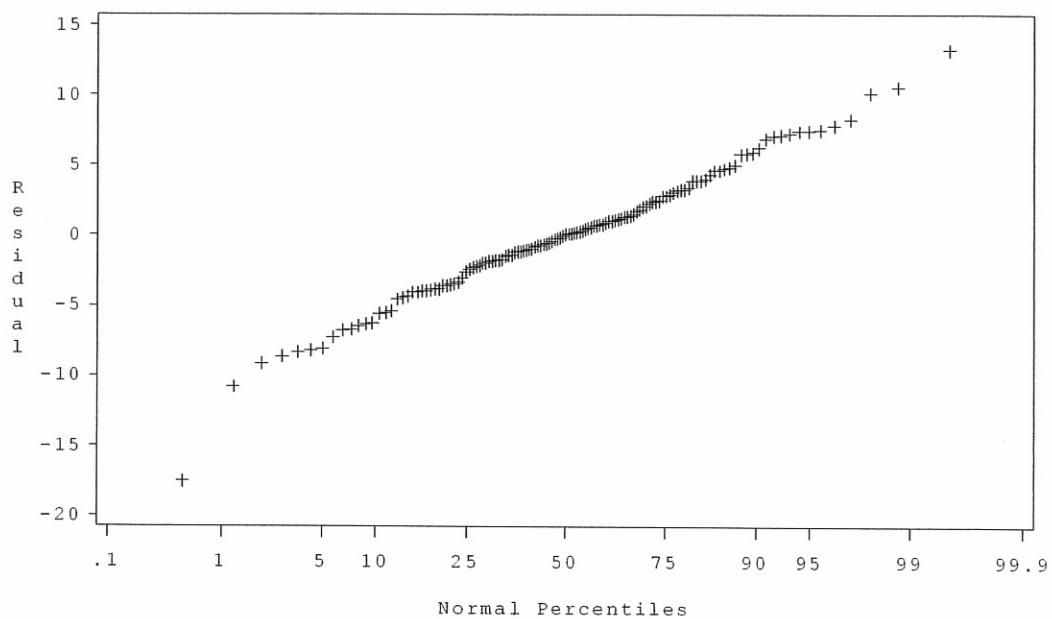
Quantiles (Definition 5)	
Quantile	Estimate
100% Max	13.243339075
99%	10.585837801
95%	7.488398727

*The SAS System**The CAPABILITY Procedure**Variable: res1 (Residual)*

Quantiles (Definition 5)	
Quantile	Estimate
90%	5.935949260
75% Q3	2.828960505
50% Median	0.110367162
25% Q1	-2.601116565
10%	-5.584366363
5%	-8.067130818
1%	-10.785284324
0% Min	-17.536730484

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-17.53673048	41	7.84826428	124
-10.78528432	74	8.26183988	44
-9.11897019	76	10.15023025	114
-8.65078037	15	10.58583780	4
-8.30518453	67	13.24333908	122





The SAS System

The REG Procedure

Model: MODEL1

Dependent Variable: PercentCollege

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	4756.33395	432.39400	15.00	<.0001
Error	123	3545.76976	28.82740		
Corrected Total	134	8302.10370			

Root MSE	5.36912	R-Square	0.5729
Dependent Mean	82.91852	Adj R-Sq	0.5347
Coeff Var	6.47517		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	-31.33748	34.49299	-0.91	0.3654
Enrollment	1	0.00029097	0.00110	0.27	0.7913
CostPupil	1	0.00014386	0.00049641	0.29	0.7725
AveTeach	1	-0.00002857	0.00012460	-0.23	0.8190
SATV	1	-0.00696	0.03809	-0.18	0.8553
SATM	1	-0.02647	0.03677	-0.72	0.4730
SATPartRate	1	33.97347	6.56502	5.17	<.0001
GMCASEng	1	0.05256	0.23520	0.22	0.8236
GMCASMth	1	0.35880	0.25677	1.40	0.1648
STRatio	1	0.35611	0.29446	1.21	0.2288
SCounselRatio	1	0.00021898	0.00981	0.02	0.9822
DropoutRate	1	-0.09372	0.33529	-0.28	0.7803

The SAS System

The REG Procedure

Model: MODEL1

Dependent Variable: Percent2YrPub

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	6954.57692	632.23427	24.65	<.0001
Error	123	3154.19346	25.64385		
Corrected Total	134	10109			

Root MSE	5.06398	R-Square	0.6880
Dependent Mean	13.41481	Adj R-Sq	0.6601
Coeff Var	37.74913		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	99.11358	32.53267	3.05	0.0028
Enrollment	1	0.00087215	0.00103	0.84	0.4009
CostPupil	1	-0.00094923	0.00046820	-2.03	0.0448
AveTeach	1	-0.00008638	0.00011752	-0.74	0.4637
SATV	1	0.05666	0.03593	1.58	0.1173
SATM	1	-0.13640	0.03468	-3.93	0.0001
SATPartRate	1	-25.21928	6.19191	-4.07	<.0001
GMCASEng	1	-0.58176	0.22183	-2.62	0.0098
GMCASMth	1	0.55049	0.24217	2.27	0.0248
STRatio	1	-0.03287	0.27772	-0.12	0.9060
SCounselRatio	1	-0.02267	0.00925	-2.45	0.0157
DropoutRate	1	0.08490	0.31623	0.27	0.7888

*The SAS System**The REG Procedure**Model: MODEL1**Dependent Variable: Percent4YrPub*

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	2433.40827	221.21893	4.78	<.0001
Error	123	5697.22877	46.31893		
Corrected Total	134	8130.63704			

Root MSE	6.80580	R-Square	0.2993
Dependent Mean	27.05185	Adj R-Sq	0.2366
Coeff Var	25.15836		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	17.35473	43.72274	0.40	0.6921
Enrollment	1	0.00333	0.00139	2.39	0.0182
CostPupil	1	-0.00154	0.00062924	-2.44	0.0161
AveTeach	1	-0.00050698	0.00015794	-3.21	0.0017
SATV	1	0.02092	0.04829	0.43	0.6655
SATM	1	-0.05342	0.04662	-1.15	0.2541
SATPartRate	1	24.89405	8.32170	2.99	0.0034
GMCASEng	1	-0.25084	0.29813	-0.84	0.4018
GMCASMth	1	0.40175	0.32547	1.23	0.2194
STRatio	1	0.18143	0.37325	0.49	0.6278
SCounselRatio	1	0.00214	0.01243	0.17	0.8637
DropoutRate	1	-0.66172	0.42500	-1.56	0.1220

*The SAS System**The REG Procedure**Model: MODEL1**Dependent Variable: Percent2YrPri*

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	543.41120	49.40102	3.03	0.0013
Error	123	2006.91473	16.31638		
Corrected Total	134	2550.32593			

Root MSE	4.03935	R-Square	0.2131
Dependent Mean	3.34074	Adj R-Sq	0.1427
Coeff Var	120.91192		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	16.92511	25.95016	0.65	0.5155
Enrollment	1	-0.00202	0.00082525	-2.44	0.0159
CostPupil	1	0.00057078	0.00037347	1.53	0.1290
AveTeach	1	0.00012681	0.00009374	1.35	0.1786
SATV	1	-0.03331	0.02866	-1.16	0.2473
SATM	1	0.01672	0.02767	0.60	0.5467
SATPartRate	1	0.54232	4.93907	0.11	0.9127
GMCASEng	1	0.03007	0.17695	0.17	0.8653
GMCASMth	1	-0.10844	0.19317	-0.56	0.5756
STRatio	1	0.02655	0.22153	0.12	0.9048
SCounselRatio	1	0.01799	0.00738	2.44	0.0162
DropoutRate	1	0.54416	0.25225	2.16	0.0329

The SAS System

The REG Procedure

Model: MODEL1

Dependent Variable: Percent4YrPri

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	21184	1925.79822	31.43	<.0001
Error	123	7536.32329	61.27092		
Corrected Total	134	28720			

Root MSE	7.82757	R-Square	0.7376
Dependent Mean	39.11852	Adj R-Sq	0.7141
Coeff Var	20.00989		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	-164.03210	50.28695	-3.26	0.0014
Enrollment	1	-0.00187	0.00160	-1.17	0.2451
CostPupil	1	0.00206	0.00072371	2.84	0.0053
AveTeach	1	0.00043320	0.00018165	2.38	0.0186
SATV	1	-0.05173	0.05553	-0.93	0.3534
SATM	1	0.14734	0.05361	2.75	0.0069
SATPartRate	1	33.90721	9.57106	3.54	0.0006
GMCASEng	1	0.85400	0.34289	2.49	0.0141
GMCASMth	1	-0.48706	0.37434	-1.30	0.1956
STRatio	1	0.18331	0.42929	0.43	0.6701
SCounselRatio	1	0.00288	0.01430	0.20	0.8405
DropoutRate	1	-0.06630	0.48881	-0.14	0.8923

The SAS System

The REG Procedure

Model: MODEL1

Dependent Variable: PercentMilitary

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	140.63941	12.78540	6.19	<.0001
Error	123	253.90873	2.06430		
Corrected Total	134	394.54815			

Root MSE	1.43677	R-Square	0.3565
Dependent Mean	2.10370	Adj R-Sq	0.2989
Coeff Var	68.29701		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	16.72067	9.23027	1.81	0.0725
Enrollment	1	-0.00034478	0.00029354	-1.17	0.2424
CostPupil	1	0.00023812	0.00013284	1.79	0.0755
AveTeach	1	-0.00002225	0.00003334	-0.67	0.5058
SATV	1	0.02561	0.01019	2.51	0.0133
SATM	1	-0.02070	0.00984	-2.10	0.0374
SATPartRate	1	-4.51568	1.75679	-2.57	0.0113
GMCASEng	1	-0.02547	0.06294	-0.40	0.6864
GMCASMth	1	-0.03556	0.06871	-0.52	0.6057
STRatio	1	0.06537	0.07880	0.83	0.4084
SCounselRatio	1	0.00037709	0.00262	0.14	0.8860
DropoutRate	1	0.10684	0.08972	1.19	0.2360

The SAS System

The REG Procedure

Model: MODEL1

Dependent Variable: PercentWork

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	2033.48512	184.86228	8.08	<.0001
Error	123	2815.28525	22.88850		
Corrected Total	134	4848.77037			

Root MSE	4.78419	R-Square	0.4194
Dependent Mean	9.21481	Adj R-Sq	0.3675
Coeff Var	51.91849		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	93.00080	30.73525	3.03	0.0030
Enrollment	1	0.00078853	0.00097743	0.81	0.4214
CostPupil	1	-0.00116	0.00044233	-2.62	0.0099
AveTeach	1	0.00000113	0.00011103	0.01	0.9919
SATV	1	0.02645	0.03394	0.78	0.4374
SATM	1	-0.00536	0.03277	-0.16	0.8702
SATPartRate	1	-14.96671	5.84981	-2.56	0.0117
GMCASEng	1	0.00680	0.20957	0.03	0.9742
GMCASMth	1	-0.26575	0.22879	-1.16	0.2477
STRatio	1	-0.86646	0.26238	-3.30	0.0013
SCounselRatio	1	-0.00821	0.00874	-0.94	0.3495
DropoutRate	1	0.32923	0.29876	1.10	0.2726

*The SAS System**The REG Procedure**Model: MODEL1**Dependent Variable: percentOther*

Number of Observations Read	135
Number of Observations Used	135

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	619.44682	56.31335	2.51	0.0070
Error	123	2764.15318	22.47279		
Corrected Total	134	3383.60000			

Root MSE	4.74055	R-Square	0.1831
Dependent Mean	5.80000	Adj R-Sq	0.1100
Coeff Var	81.73358		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	22.48171	30.45486	0.74	0.4618
Enrollment	1	-0.00073919	0.00096851	-0.76	0.4468
CostPupil	1	0.00077787	0.00043830	1.77	0.0784
AveTeach	1	0.00005470	0.00011001	0.50	0.6200
SATV	1	-0.04393	0.03363	-1.31	0.1940
SATM	1	0.05204	0.03247	1.60	0.1115
SATPartRate	1	-14.19278	5.79644	-2.45	0.0158
GMCASEng	1	-0.02509	0.20766	-0.12	0.9040
GMCASMth	1	-0.07306	0.22671	-0.32	0.7478
STRatio	1	0.43933	0.25999	1.69	0.0936
SCounselRatio	1	0.00774	0.00866	0.89	0.3729
DropoutRate	1	-0.33560	0.29603	-1.13	0.2591

*The SAS System**The CORR Procedure*

8 Variables:	PercentCollege	Percent2YrPub	Percent4YrPub	Percent2YrPri	Percent4YrPri	PercentMilitary	PercentWork
	percentOther						

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
PercentCollege	135	82.91852	7.87121	11194	59.00000	100.00000
Percent2YrPub	135	13.41481	8.68554	1811	0	40.00000
Percent4YrPub	135	27.05185	7.78951	3652	10.00000	56.00000
Percent2YrPri	135	3.34074	4.36260	451.00000	0	36.00000
Percent4YrPri	135	39.11852	14.63998	5281	11.00000	75.00000
PercentMilitary	135	2.10370	1.71592	284.00000	0	10.00000
PercentWork	135	9.21481	6.01538	1244	0	30.00000
percentOther	135	5.80000	5.02501	783.00000	0	33.00000

Pearson Correlation Coefficients, N = 135					
	Prob > r under H0: Rho=0				
	PercentCollege	Percent2YrPub	Percent4YrPub	Percent2YrPri	Percent4YrPri
PercentCollege	1.00000	-0.44083 <.0001	0.27819 0.0011	-0.22585 0.0084	0.71958 <.0001
Percent2YrPub	-0.44083 <.0001	1.00000	-0.17515 0.0422	0.00471 0.9568	-0.73835 <.0001
Percent4YrPub	0.27819 0.0011	-0.17515 0.0422	1.00000	-0.31170 0.0002	-0.18532 0.0314
Percent2YrPri	-0.22585 0.0084	0.00471 0.9568	-0.31170 0.0002	1.00000	-0.25594 0.0027
Percent4YrPri	0.71958 <.0001	-0.73835 <.0001	-0.18532 0.0314	-0.25594 0.0027	1.00000
PercentMilitary	-0.47399 <.0001	0.44374 <.0001	-0.21815 0.0110	0.24148 0.0048	-0.47461 <.0001
PercentWork	-0.73741 <.0001	0.45721 <.0001	-0.14708 0.0887	0.16412 0.0572	-0.63915 <.0001
percentOther	-0.51758 <.0001	-0.01296 0.8814	-0.18753 0.0294	0.09062 0.2959	-0.19840 0.0211

Pearson Correlation Coefficients, N = 135			
	Prob > r under H0: Rho=0		
	PercentMilitary	PercentWork	percentOther
PercentCollege	-0.47399 <.0001	-0.73741 <.0001	-0.51758 <.0001

*The SAS System**The CORR Procedure*

Pearson Correlation Coefficients, N = 135 Prob > r under H0: Rho=0			
	PercentMilitary	PercentWork	percentOther
Percent2YrPub	0.44374 <.0001	0.45721 <.0001	-0.01296 0.8814
Percent4YrPub	-0.21815 0.0110	-0.14708 0.0887	-0.18753 0.0294
Percent2YrPri	0.24148 0.0048	0.16412 0.0572	0.09062 0.2959
Percent4YrPri	-0.47461 <.0001	-0.63915 <.0001	-0.19840 0.0211
PercentMilitary	1.00000	0.34848 <.0001	-0.01316 0.8796
PercentWork	0.34848 <.0001	1.00000	-0.16028 0.0633
percentOther	-0.01316 0.8796	-0.16028 0.0633	1.00000