INTRODUCTION
Teachers for a New Era Data Mining newsletter will be developed weekly to address data issues, challenges and concerns as related to Learning Growth, Numeracy/Literacy, and Induction research activities. In addition, each newsletter will identify possible grant and foundation funding as related to TNE's sustainability efforts in using data to impact the radical redesign of teacher education.

LEARNING GROWTH
Learning Growth is a Teachers for A New Era (TNE) research study commissioned by the Carnegie Foundation. The primary goal of this study is to assess the effectiveness of K-12 teachers, who graduated from FAMU, on pupil learning outcomes. The study will compare FAMU teachers relative to non-FAMU graduates serving in selected Florida K-12 school districts.

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TNE Mission Statement
The Teachers for a New Era (TNE) Initiative aims to achieve radical re-design of teacher education and the improvement of teaching and learning across the entire campus of Florida A&M University. The Initiative fully embraces the University’s mission to “provide an enlightened and enriched academic, intellectual, moral, cultural and student-centered environment conducive to the development of highly qualified individuals who are prepared and capable of serving as leaders and contributors in our ever-evolving society.” TNE is further committed to the institution’s mission of “inspirational teaching, exemplary research, and meaningful public and community service through creative partnerships at the local, state, national and global levels”. Central to the operation of TNE are the University Core Values of scholarship, excellence, fiscal responsibility, accountability, collaboration, service, integrity, collegiality and ethics.
Learning Growth

Data Collection

To capture the effectiveness of FAMU graduates on pupil learning growth, the process was designed to collect data on pupils in Self-Contained-Classrooms (SCC), and pupils in Middle & High Schools who have taken math or reading courses taught by FAMU graduates. A Self-Contained-Classroom is an elementary school setting where pupils in a specific class, or grade level are taught all subjects by one teacher. We chose to include SCCs as part of the data matrix because it gives they can narrow pupil learning outcomes to a particular teacher. With this design, there is high degree of confidence that the results will reflect the values that FAMU graduates have added to pupils learning growth.

Site and Sample Selection Issues

Selection of school districts for the study was initially based on the concentration of FAMU teachers in Florida’s 67 counties. However, since there were some counties with more than one school district, the focus was shifted to FAMU teachers by school districts. Florida school district data between 2000 and 2005 were examined to identify school districts with the highest concentration of FAMU teachers. This is purposive sampling because it identifies specific groups and locations of interest to the study. Prior to examination of the district data, several manipulations were performed. The data were delineated by school level (elementary, middle or high) and were merged to form one data set. Some data series had string characters (which are non numeric observations) that were converted to numeric characters. The conversion of string to numeric characters was done to facilitate quantitative analysis with the STATA software. Several data series were also re-coded from alpha to numeric forms. For example, the variable “distteach” which represented the school districts where FAMU graduates taught was transformed from a string to a numeric variable - “distteach2”. Subsequently the observations in “distteach2” were assigned numeric values. For instance, Leon County school district has been assigned as school district 37, Dade County school district as district 13, Hillsborough school district as district 29, and so on.

After data manipulation, a brief description of the data was done. The descriptive statistics indicated that 20 or approxi-
mately 29% of the 70 school districts examined, had a minimum of 10 and a maximum of 200 FAMU graduates serving as teachers between 2000 and 2005 (See figure # 1). This in essence, initiated the district identification and selection process. In fact Figure 1 shows that 10 of the 20 school districts had concentrations of 50 or more FAMU teachers, while the remaining 12 had concentrations between 10 and 40 teachers. There were 10 highly concentrated school districts, four of them: Leon (#37), Broward (#6), Dade (#13), and Orange (#48), have employed more than 100 FAMU teachers between 2000 and 2005.

Once identification of these 20 school districts was completed, an issue of whether there were significant numbers of SCC in these districts emerged. To account for this concern, we examined school districts based on the number of pupil enrolled in SCC at elementary schools. The data on school districts were plotted against the number of pupils in SCC as shown in figure 2.

The data illustrated that there were significant numbers of pupils in SCC for the 20 school districts of interest. For instance, 7 of the 20 school districts of interest had at least 20,000 pupils in SCC between 2000 and 2005.

This means that by selecting self-contained classrooms, the analysis will not be hindered by inadequate numbers of observations from lower grade levels. This is important because the data also show that a majority of the observations are generated from pupils in grade levels 6 and higher (figure 3). In fact, figure 3 below shows that a majority of the observations or data points (over 1000, 000) in the sample were generate at grade level 6, followed by grade levels 7, 9, 8, and 10 respectively. The data also showed that there were a disproportionately smaller number of students in grades 3 through 5. The main reason is that during our data collection process, the focus was to collect FCAT data only on those pupils taught by FAMU graduates. The results showed that FAMU teachers were matched with small number of pupils at the 3-5 grade levels, but with large numbers for higher grade levels.
After addressing the teacher concentration rate and SCC criteria, efforts were then shifted to another district selection criterion. This criterion is concerned with whether or not teachers in the 20 identified districts taught math and, or reading at the elementary, middle, and high school levels. This task was accomplished by matching state defined course identification numbers to teacher identification numbers and district numbers. The process indicated that FAMU teachers taught math and reading across grade levels 3 to 10. Now that the three criteria for selecting school districts are met, the following school districts will be selected for studying the effects of FAMU graduates on the learning outcomes of pupils in Florida’s K-12 education system. The table below lists the school districts and their state defined numbers.

The two figures below are graphical representations of FAMU teachers teaching math and reading in the 20 school districts identified for the learning growth study.

**STATA: Data Analysis Statistical Software**

Dr. Anderson is the Coordinator for Statistical Research in TNE. At this time Dr. Anderson and the TNE team are focusing on the Learning Growth Study and has reached the Data Mining phase of the study. The primary statistical resource being used to facilitate the Data Mining process is the STATA statistical software. “Stata is a complete, integrated statistical package that provides everything you need for data analysis, data management, and graphics. Stata 10 adds many new features such as multilevel mixed models, exact logistic regression, multiple correspondence analysis, a graph editor, and time-and-date variables.”