Abstract

The overall goal of the Department of Mathematics, Computer & Information Sciences is to offer a relevant curriculum that will help prepare students to cope with and thrive in an ever-changing world. In order to see if the department was fulfilling this goal, we developed a questionnaire that was used to inform the department of the success the graduates from the MCIS department have had in the “Real World” and to determine how influential the MCIS department was in helping with this success. This study was conducted in the MCIS department for students who received undergraduate degrees from the department during the past five years. Using a questionnaire, data was collected and inputted into a database in ArcView software. This database is called Geographic Information System (GIS). It is a geographically referenced database that can be assessed or queried for a diversified set of data layers. By using surveys and ArcView GIS, the department was able to update the files and analyze data of recent and past graduates through a visual representation of the response provided by the graduates.

This project consisted of three components: the first being an exit survey for current graduates; the second, a survey for past graduates; and the third, the use of Geographic Information System (GIS) and ArcView to organize and display the data. The surveys were designed to gather information pertaining to the students’ current residences, current and past employment, participation in extracurricular activities, additional education endeavors, and the satisfaction of graduates with their education. This information was then input into ArcView GIS. GIS is a geographically referenced database that can be assessed or queried for a diversified set of data layers.

The four phases of GIS analysis are input of data, management of data, analysis/manipulation, and output process. In phase one of GIS, acquiring, cataloging, importing, and assigning of attributes takes place. In phase two, there is a combination of retrieving and storing data. Phase three consists of processing, analyzing, and manipulating. During phase four, layers are compiled into an output format. The data was then organized and manipulated in order to categorize the graduates according to their geographic locations and employment. ArcView was used to illustrate the results from this study. This software allows an individual to visualize and analyze information according to geographic locations and also reveals relationships, patterns, and trends.

Our results went on to show that the MCIS department is dedicated to assisting all students. This department provides services courses designed to adequately train its student for the “Real World”. It also aids in increasing the number of minorities in technical areas throughout the Mississippi Delta and the United States of America. This department is dedicated to being a positive force in the community.