Statistical analysis

The online degree programs are specifically designed for the professional who juggles a career, family and other commitments. Colleges are challenged with the task of designing and supporting a balanced program that fits the busy schedule of the students without sacrificing quality. Prospective students are always concerned if the program would take too much time and interfere with their professional and personal life.

At IU, on average, students are expected to spend about 1. 5 hours per day working on assignments. However, after the first 5-6 workshops in Statistical Analysis, I was under the impression that I spend on homework more than 2 hours every day. To test my hypothesis I started recording the actual time I work on assignments. I kept records for 3 consecutive workshops. The results are provided in the table that follows:

The results show that the computed t-value (0. 72) is less than the critical value (1. 725). Also, the p-value (. 24) is greater than the significance value (. 05). I cannot reject the null hypothesis. There is not sufficient proof that I spend more than 2 hours on homework every day. Based on this conclusion I would recommend this form of education to colleagues and friends. With good time management and self discipline professionals should be able to successfully participate in a quality online degree program.

Next, I tested if the program is well balanced. I wanted to see if I am equally busy throughout the week. For the analysis of the data I used the Analysis of Variance (ANOVA) technique. ANOVA tests simultaneously whether the means of several populations are equal. By simultaneously testing all

populations, error buildup is avoided. The ANOVA test follows the standard five-step hypothesis testing procedure too.

Step 1: The null hypothesis is that there is no difference between the mean numbers of hours I study every day of the week. The alternate hypothesis is that the means are not all the same for the seven days of the week. The computed value of F (3. 92) is greater than the critical value of F (2. 85). Also, the p-value (. 0165) is smaller than the level of significance (. 05). I have to reject the null hypothesis. At the . 05 level of significance there is a difference in the number of hours I study every day. The Post hoc analysis shows that on Thursdays and Sundays I spend more time on assignments than on Mondays and Tuesdays.

The time I study on Saturdays differs from the time I study on Mondays and Thursdays. The details of the Post hoc analysis are provided in the table below: The results show that I work longer on some days of the week. On such days most likely I use the Blackboard system more, call help desk if need be, and write the facilitator with questions. The implication this has on IU is that its staff and equipment have to be prepared and able to meet students' increased needs for support. This applies to class facilitations, help desk support, and administration. Before taking any specific measures, however, I would recommend that IU conducts a more extensive analysis that applies proper sampling techniques and more precise measuring tools.