Overview.

The intent of the study was to measure if the students in CIS 101 are actually learning the objectives listed in the curriculum. For this review, the basic tasks in Excel were chosen to be measured:

- Building and sorting a Table
- Using the Sum function
- Using the Average function
- Build a Pie Chart
- Build a Column Chart

It was also important that the assessment was done outside the CIS 101 classrooms, so the testing of the students' skills was done in CIS 150 (Advanced Office Applications). This was to avoid the methodological problems with using a pre/post test to measure learning without a control group in place.

CIS 101 is a pre-requisite for CIS 150, although there are students with sufficient professional experience to waive the requirement, and they enroll directly into 150.

Procedure

The students were asked to complete a short exam on Excel prior to the subject being taught in 150. It was voluntary, and it was explained that the data would be used in the assessment of CIS 101.

As mentioned, the questions addressed basic skills in Excel that should have been taught in CIS 101. The testing tool was Paradigm's SNAP program – a web-based tool that imitates Excel, and automatically grades responses to questions.

Results

A total of 19 students participated, six of whom did not take CIS 101.

These provided a control group, or at least a check on the level of difficulty of the exam.

The results are depicted on the next page.
Focusing only on the students who took CIS 101, as a group, they had the skills in Excel that CIS 101 strives to teach. This group averaged 9.29 out of a possible 10 on the test.

Those students who did not take CIS 101, did not perform as well – averaging 5.56 out of a possible 10.

Conclusions

While there are many design limitations in this study, the students who finish CIS 101 do have the skills in Excel at the Introductory level. In addition, they are able use them to complete the tasks delineated in the CIS 101 curriculum objectives.

In short, CIS 101 is meeting its objectives.

It is recommended that future assessments of CIS 101 include evaluation of the Introductory skills in Word, Access, and PowerPoint as well as the understanding of the terms and concepts of technology.
The CIS Assessment Process

CIS is not a "single program" but is actually four separate program-areas:

1) Office Applications
2) Programming
3) Networking
4) Web Technologies

In order to assess the department well, each program-area needs to be assessed to determine what Program Objectives are being attained. It is very possible for one program-area to not provide every Program Objective. It is presumed that, when examining all program-areas, all Program Objectives will be provided.

In order to assess the Department, to determine if CIS students are attaining the Program Objectives, each program area needs to be assessed.

All too often assessment is completed with a pre/post exam of some sort, and there are problems with such a design