

Report of Use of Assessment Results Integrated Science and Technology

ISAT program is still a relatively a new program, this is the second assessment report that responds to student exit surveys. Student exit surveys from 2005-2006 and 2006-2007 indicate improvement in quality of the ISAT program, demonstrate areas for future enhancement and require a renew efforts in recruitment. The program has not yet received results from the alumni and employer surveys.

Goals and Outcomes:

Goal 1

Students will acquire a common body of knowledge in mathematics, science, and technology appropriate to the needs of business and industry.

Expected Outcomes

1. At least 60% of the graduates surveyed in the exit survey will indicate they were satisfied or very satisfied that their graduate coursework developed their ability to see relationships, similarities, and distinctions among ideas.
2. At least 60% of the graduates surveyed in the Survey of Graduate Alumni will indicate they were satisfied or very satisfied that their graduate coursework developed their ability to see relationships, similarities, and distinctions among ideas.
3. At least 60% of the graduates surveyed in the Exit Survey will indicate they were satisfied or very satisfied that their graduate coursework developed their ability to effectively use mathematical thinking and mathematical reasoning skills.
4. At least 60% of the graduates surveyed in the Employers' Survey will indicate they were satisfied or very satisfied that ISAT graduate's ability to effectively use mathematical thinking and mathematical reasoning skills.

Assessment:

Of the respondents to the 2005-2006 survey, 67% were satisfied or very satisfied with the effectiveness of beginning courses in preparing them for advanced courses, while this number grew to 100% in 2006-2007.

Of the respondents to both of the 2005-2006 and 2006-2007 surveys, 100% were satisfied or very satisfied with the quality of instruction in advanced courses.

Of the respondents to both the 2005-2006 and the 2006-2007 surveys, 100% were satisfied or very satisfied with the opportunities for collaboration with other students on class projects.

Of the respondents to the 2005-2006 survey, 66.7% were satisfied or very satisfied with the use of appropriate technology in the classroom, while this number grew to 100% in 2006-2007.

Of the respondents to the 2005-2006 survey, 66.7% were satisfied or very satisfied with the facilities and equipment for courses, while this number grew to 100% in 2006-2007.

Students in both years commented on the lack of discipline-specific courses. The program is currently addressing this issue. We have developed ISAT 655 and made available the specialist track which will require students to take more discipline courses.

Goal 2

Graduates will be able to effectively apply their knowledge of mathematics, science, and technology to the problems of business and industry.

Expected Outcomes

1. At least 70% of the graduates surveyed in the Survey of Graduate Alumni will indicate they were satisfied or very satisfied their graduate coursework prepared them to apply mathematical, scientific, and technological knowledge in business and industry.
2. At least 70% of the graduates surveyed in the Employer Survey will indicate they were satisfied or very with ISAT graduate's ability to apply mathematical, scientific, and technological knowledge in business and industry.
3. At least 70% of the graduates surveyed in the Survey of Graduate Alumni will indicate they were satisfied or very satisfied their graduate coursework prepared them to collaborate with other professionals to identify problems, obtain relevant information, analyze alternatives, and implement appropriate solutions.
4. At least 60% of the graduates surveyed in the Employers' Survey will indicate they were satisfied or very satisfied with the ISAT graduate's ability them to collaborate with other professionals to identify problems, obtain relevant information, analyze alternatives, and implement appropriate solutions.

Assessment:

Assessment of this goal requires responses from alumni and employers. As the number of graduates increases, this information should become available.

Goal 3

Students will develop applied research skills in an interdisciplinary setting.

1. At least 75% of the graduates surveyed in the Alumni Survey will indicate they were satisfied or very satisfied that their graduate coursework improved their ability to find, analyze, organize, and present information in an effective manner.
2. At least 75% of the graduates surveyed in the Alumni Survey will indicate they were satisfied or very satisfied that their graduate coursework improved their ability to apply logic and critical thinking skills.
3. At least 75% of the graduates surveyed in the Alumni Survey will indicate they were satisfied or very satisfied that their graduate coursework prepared them to critically assess outcomes of research and incorporate findings into professional requirements.
4. At least 75% of the graduates surveyed in the Exit Survey will indicate they were satisfied or very satisfied that their graduate coursework prepared them for the completion of their thesis.

Assessment:

Assessment of objectives 1-3 requires responses from alumni and employers. As the number of graduates increases, this information should become available. Assessment of objective #4 indicates some improvement from 2005-2006 to 2006-2007 and suggests room for advancement.

Of the respondents to the 2005-2006 survey, 100% were satisfied or very satisfied with the opportunity for meaningful interaction with faculty in research or other scholarly activity, while this number dropped to 66.7% in 2006-2007.

Of the respondents to the 2005-2006 survey, 66.7% were satisfied or very satisfied with the relevance of courses, while this number grew to 83.3% in 2006-2007.

Of the respondents to the 2005-2006 survey, 66.7% were satisfied or very satisfied with the “real-world” experiences, exposure, examples, etc. in or out of the classroom, while this number grew to 100% in 2006-2007.

Of the respondents to the 2005-2006 survey, 66.7% were satisfied or very satisfied with the facilities and equipment for courses, while this number grew to 100% in 2006-2007.