

Information Science | 2015-2016 Assessment Report

1. Please give a brief overview of the assessment data you collected this year.

Since we are launching a new Information Science program, this year we did a basic assessment to provide a snapshot of student perceptions currently enrolled in the major. Students were asked to complete an online survey with approximately 20 questions focused on student perceptions of their skills and experiences with the program. The survey was sent out to all 27 majors, 15 completed the survey. The respondents include 6 seniors, 6 juniors and 3 sophomores.

Analysis of the data focused on perceptions overall, and looked for any differences between majors who are newly declared and those ready to graduate. The analysis also looked for differences between the two current tracks (1) Information Science and (2) Information Technology.

Table 1: Student Perceptions of IS graduates

		What is your current student status?			What is your	current emphasis?			
		Freshmen	Sophmore	Junior	Senior	Total	Info Tech	Info Science	Total
	Strongly Agree, Agree	0%	100%	100%	83%	93%	89%	100%	93%
Graduates can communicate professionally.	Neutral	0%	0%	0%	17%	7%	11%	0%	7%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	100%	100%	83%	93%	89%	100%	93%
Graduates can work effectively in teams.	Neutral	0%	0%	0%	17%	7%	11%	0%	7%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	100%	100%	83%	93%	89%	100%	93%
Graduates behave in a legal/ethical manner.	Neutral	0%	0%	0%	17%	7%	11%	0%	7%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
Graduates are good researchers.	Strongly Agree, Agree	0%	67%	83%	50%	67%	67%	67%	67%
	Neutral	0%	33%	17%	50%	33%	33%	33%	33%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	67%	67%	50%	60%	67%	50%	60%
Graduates are proud of their degree.	Neutral	0%	33%	33%	50%	40%	33%	50%	40%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	67%	83%	50%	67%	78%	50%	67%
Graduates are well-prepared for their future.	Neutral	0%	33%	17%	50%	33%	22%	50%	33%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	67%	67%	67%	67%	67%	67%	67%
Graduates are effective problem solvers.	Neutral	0%	33%	33%	33%	33%	33%	33%	33%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%

^{*} Due to sample size, none of these percentages are statistically significant.

The first category looks at perceptions of students graduating from the program. To summarize these data: All of the students on the Information Science track report that graduates can communicate professionally, work effectively in teams and behave ethically. Most (89 percent) students on the Information Technology track say that graduates can communicate professionally, work effectively in teams and behave ethically, while 11% are neutral. This means that among all students 93 percent say they agree or strongly agree with the aforementioned statements. Further, sophomores and juniors in the program universally agree with these statements. As for seniors, 83 percent agree or strongly agree while 17 percent are neutral.

While the program scores particularly high in areas of communication, team work and ethics, these data suggest that there is certainly opportunity for improvement in the areas of research, preparedness and problem solving. When asked if graduates are good researchers 67 percent of our students agreed or strongly agreed, 33 percent were neutral. The same pattern emerged when students were asked if graduates are well-prepared and whether graduates are effective problem solvers – 67 percent in agreement, 33 percent neutral. It is worth noting that sophomores and juniors are slightly more optimistic in these categories – half of the seniors were neutral about preparedness and research.

Program Experiences

In terms of student experience, the program scores very high in areas of student collaboration and professor involvement. Ninety-three percent of the respondents agreed or strongly agreed that "the program has prepared me to collaborate on projects in my career," all of the graduating seniors agreed with this statement. All of the graduating seniors also agreed that professors are committed to his/her success. It is also worth noting that all sophomores report having a better educational experience than friends with different majors.

Table 2: Program Experiences

		What is your current student status?				What is your current emphasis?			
		Freshmen	Sophmore	Junior	Senior	Total	Info Tech	Info Science	Total
	Strongly Agree, Agree	0%	100%	33%	50%	53%	56%	50%	53%
The program meets my expectations.	Neutral	0%	0%	67%	33%	40%	44%	33%	40%
	Disagree, Strongly Disagree	0%	0%	0%	17%	7%	0%	17%	7%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	67%	67%	50%	60%	67%	50%	60%
Courses in the program have prepared me for a job in my chosen career.	Neutral	0%	33%	33%	33%	33%	33%	33%	33%
	Disagree, Strongly Disagree	0%	0%	0%	17%	7%	0%	17%	7%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	67%	67%	33%	53%	67%	33%	53%
I took more difficult classes than students with other majors/minors.	Neutral	0%	33%	33%	50%	40%	33%	50%	40%
	Disagree, Strongly Disagree	0%	0%	0%	17%	7%	0%	17%	7%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	100%	83%	100%	93%	89%	100%	93%
The program has prepared me to collaborate on projects in my career.	Neutral	0%	0%	17%	0%	7%	11%	0%	7%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	100%	33%	100%	73%	67%	83%	73%
My professors are committed to making me successful.	Neutral	0%	0%	67%	0%	27%	33%	17%	27%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
	Strongly Agree, Agree	0%	100%	33%	33%	47%	56%	33%	47%
I have had a better educational experience than my friends with different majors/minors.	Neutral	0%	0%	50%	67%	47%	33%	67%	47%
	Disagree, Strongly Disagree	0%	0%	17%	0%	7%	11%	0%	7%
	Total	100%	100%	100%	100%	100%	100%	100%	100%

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Still, there are areas of improvement to be made in terms of program expectations and job preparedness. The data in the program experience category suggest that one graduating senior on the information science track felt that the program did not meet his/her expectations, did not prepare him/her for a career and did not offer courses that were more difficult than other majors.

Student Confidence

Students were asked how confident they are in the areas of research, computer science and communication. The data in this category suggests that the students with more time in the program feel more confident in all three areas. All of the graduating seniors in both tracks, and all of the information technology students are confident in their communication skills. However, more than half of the students in both tracks are neutral about their computer science skills. Students that are new to the program are neutral about their research and analysis skills, while most seniors – 83 percent - are confident in research and computer science skills.

Table 3: Student Confidence

		What is your current student status?				What is your current emphasis?			
		Freshmen	Sophmore	Junior	Senior	Total	Info Tech	Info Science	Total
I am confident in my computer science skills.	Strongly Agree, Agree	0%	33%	0%	83%	40%	33%	50%	40%
	Neutral	0%	67%	83%	17%	53%	56%	50%	53%
	Disagree, Strongly Disagree	0%	0%	17%	0%	7%	11%	0%	7%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
I am confident in my communicaton skills.	Strongly Agree, Agree	0%	67%	83%	100%	87%	100%	67%	87%
	Neutral	0%	33%	17%	0%	13%	0%	33%	13%
	Disagree, Strongly Disagree	0%	0%	0%	0%	0%	0%	0%	0%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
I am confident in my research and analysis skills.	Strongly Agree, Agree	0%	0%	33%	83%	47%	44%	50%	47%
	Neutral	0%	100%	17%	17%	33%	33%	33%	33%
	Disagree, Strongly Disagree	0%	0%	50%	0%	20%	22%	17%	20%
	Total	100%	100%	100%	100%	100%	100%	100%	100%

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Student Development

The following section deals with skills assessment as reported by Information Science majors. For this section students responded to the following prompt: Please assess your skills on a scale of 1 (underdeveloped) to 7 (fully-developed). Thus, a score of 5 or higher indicate developed or developing skill sets. A score of 4 or lower suggest ambivalence or under development.

After the prompt students were given a number of options in the areas of: Speaking, writing, research, visual communication, information strategy, personal management, meeting management and interpersonal. Mean scores for each of these areas suggest that students feel the most developed in areas of Interpersonal skills (m=5.5), personal management (m=5.5) and speaking (m=5.45). Students feel the least developed in areas of visual communication (m=4.86) and research (m=4.86).

Looking at specific items within each of these categories, students report the highest level of development in (1) Engaging in "small talk" (2) Treating others with respect (3) Properly evaluating all ideas (4) Spelling words correctly and (5) Organizing a presentation – each of these items had an average rating of 5.6 or above. Students reported the lowest levels of development (1) Preparing memos (2)

Organizing documents for high impact and (3) Presenting solutions to stakeholders – each of these items had an average rating of 4.5 or below.

Table 4: Student Development

Speaking	Mean	Information Strategy	Mean
Organizing a presentation	5.67	Creating communication strategy	5.08
	5.50	Gathering credible and relevant	5.40
Speaking with confidence	5.50	information	5.42
Speaking with clarity	5.42	Solving data problems Using proper problem solving	5.50
Being persuasive	5.33	techniques	5.58
Speaking with enthusiasm and	3.33	Selecting the appropriate information	3.30
vitality	5.33	channels	5.17
Telling the right stories	5.42	Becoming comfortable with uncertainty	5.08
	5.45	Analyzing stakeholder needs	4.58
Writing	Mean	Presenting solutions to stakeholders	4.50
Using proper grammar	5.58		5.11
Spelling words correctly	5.83	Research	Mean
Preparing written reports	5.00	Discerning underlying data problems	5.00
		Assessing information management	
Preparing memos	4.25	practices	4.75
Organizing documents for high impact	4.42	Understanding implications of new	4.75
•		technologies	
Proofreading and editing	4.83	Asking effective research questions	4.58
	4.99	Collecting & evaluating data	5.00
Meeting Management	Mean	Researching markets & consumers	5.00
Facilitating a meeting Leading brainstorming sessions	5.17 4.83	Assessing data or information gaps	4.92 4.86
Analyzing & commenting on the	4.03		4.00
direction of the group process	5.42	Interpersonal	Mean
Clarifying expectations of group			
members	5.42	Being appropriately assertive	5.33
Creating consensus	5.25	Providing corrective feedback	5.17
		Focusing on understanding rather than	
Properly evaluating all ideas	5.83	evaluating	5.58
D 114	5.32	Treating others with respect	5.92
Personal Management	Mean		5.50
Listening to corrective feedback	5.58	Visual	Mean
Taking action based on feedback	5.58	Creating infographics	4.83
Managing time and deadlines	5.50	Selecting the proper visual images	5.25
Meeting personal commitments	5.58	Creating proper visual images	4.83
Setting priorities	5.50	Managing information overload	4.58
Engaging in "small talk"	5.92	Developing visual stories	4.83
Networking	4.92		4.86
	5.51		

2. How will you use what you've learned from the data that was collected?

Lesson 1: Longitudinal data are necessary to implement meaningful change. This was not possible this year because of transitions and the unrolling of our new IS program and emphases in data science, information technology and gaming.

Lesson 2: Based on the qualitative data, it is clear that students are frustrated with cut backs and the lack of faculty available to teach courses. We will continue to advocate on behalf of our students and push for more investment in the growing area of IS. We will advocate for new hires to fill positions opened up by retirement and look for partnerships to support student needs for faculty guidance.

Lesson 3: These data highlight some areas that we should monitor closely, especially in terms of (1) meeting expectations of graduating students (2) developing student research skills and (3) preparing students for the workplace.