Information Access Self-Study

April 2012

Overview

Departmental/program mission statement and discussion of its linkage to the College Mission Statement and Strategic Plan

The Information Access (IA) program has a tersely described mission on the Juniata web site: IA *ensures competency in the use of computing, network and library technologies at Juniata College.*

The goals of the course are to verify and/or ensure that students have base line technology and library skills to function as a student academically at Juniata. Specifically, students are able to connect to the network, print, understand ethical use of technology and the internet, and use the Office suite for email, word processing, spreadsheets and presentations. Library skills include understanding the library facilities, electronic searching and proper use of citations. In addition, the course has also become a favorite venue for conducting surveys of the first year students over the years.

The course addresses the College Mission Statement in these areas:

- "…*to enable [student] to lead fulfilling and useful lives*", IA considers the technologies and library skills necessary to produce documents and presentations here at Juniata and in their professional lives. A minimal competence is demonstrated on a number of Office suite and related applications as well as usage of the Beeghly library and its resources.
- "…*to think analytically*." Working with varied technology in IA and searching and accessing library resources exercises this analytical thinking.
- "…*to realize their full potential as contributors to society*,…" Recognizing that in today's society one must demonstrate technology understanding, IA attempts to ensure a minimal competency in the current computer applications used in academia and most professions.

Development of IA

Some historical context is helpful. IA was originally designed as an integral part of CWS making a total of 5 credits when the current curriculum went into effect. The idea was that College Writing Seminar (CWS) instructors would integrate the technology topics covered in IA into the writing assignments for students. The course was, and still is, overseen by myself, with the help of 12-16 student assistants, the number of which depends on the freshmen class size. In the first years of the IA and CWS, I would supply grading information to the CWS instructor who would then factor that into the student's 5 credit grade ass 20% of the grade. After about 5 years or so (I can't remember the year, unfortunately), IA became a separate course to simplify this CWS grading and remove the burdensome coordination of IA and CWS. There were many cases of students just wanting to take IA but not CWS (especially from the local high schools), so the separation made sense.

Some changes have occurred over the years most in content, naturally, as a result of changing technologies as well as through the informal assessment from the assistants who help with the multitude of IA sections. As an example of a changing technology, we used to include web page development, but

have dropped that and replaced it with Publisher as encouraged by many assistants. Of course as Microsoft updates operating systems and Office applications, those changes must be incorporated into the course for the next year as these software modules will be bought by the incoming students.

Now that students bring their own laptops as a required resource, IA has become an important setting for students to initially resolve campus network connectivity issues for both PCs and Macs.

IA has also become a venue to conduct 2 or 3 surveys for other campus departments since all incoming students have to take IA. This has become somewhat of a burden to ensure the surveys are conducted and/or part of the Moodle activities. To encourage participation, some IA points are awarded for simply doing these surveys. Since the entire course is in Moodle, this also gives the students an understanding of course management systems that are used across campus in other courses.

General Enrollment data

In the fall semester we generally offer 30-35 sections and in the spring semester there are 2-3 sections. Each section is limited to 16 students. Of course the fall semester enrollment in IA follows closely the campus enrollment numbers. Not all International Exchange students take IA: in most cases, if an exchange student is only here for one semester, IEC does not require it. When an international student is here for both semester, then IA is required, and of course, if the student is degree seeking IA is required. We offer sections specifically for International students and try to identify an IA assistant who may be more sensitive to the issues of working with them. We also have a designated PAR section.

Academic Year	Fall Semester	Spring Semester
2001-02	391	14 + 1 Summer 2002
2002-03	424	17
2003-04	426	18
2004-05	440	19
2005-06	421	27
2006-07	418	16
2007-08	411	14
2008-09	485	20
2009-10	407	17
2010-11	465	41
2011-12	406	21*

*The Spring 12 semester is not included in the demographics information following.

Over the 11 years of data, here is a breakdown of the different types of students taking IA. These data were supplied by the Registrar's office. The full definitions of the codes were not provided, but not sure there is any further information to be gleaned here.

Alumni	ALU	18
	BCA	33
High school	DHS	11
	EXC	182
High school	HIS	38
	IEP	16

PAR	PAR	1
Completers	RCP	2
ND to Current	RCU	67
	REXC	4
High school	RHS	1
Non Degree	RND	5
Partner Degree	RPD	3
Plus	RPL	17
PAR	RPR	87
Children	RTC	16
Employees	RTE	4
Spouses	RTS	2
Veterans	RVA	31
Certification	TEC	16
Regular degree FR and transfers	(blank)	4314
	Grand Total	4868

Modules of Competency in IA

Readings for these modules have been made available in the past as a printed guide, printed at the college print shop and sold at the bookstore as the "IA Guide". This guide has grown to a document of 110-125 pages. Each year the guide is updated with the latest versions of operating systems and the Office suite, as well as changes made by TLT and CNS. Unfortunately we have never been able to reuse a guide from previous years.

The following modules are the current ones in the course. When new

- PC Basics Eaglenet connectivity and Security
- Netiquette and Eaglenet policies
- Microsoft Outlook 2010 (+Mac version)
- Microsoft Word 2010 (+Mac version)
- Microsoft Excel 2010 (+Mac version)
- Microsoft PowerPoint 2010 (+Mac version)
- Windows Live Movie Maker (or iMovie)
- Windows Publisher 2010
- Understanding Information Literacy and using the Beeghly Library
- Juniata College Resources Sustainability review and survey.

Materials

The guide has been produced in e-book for the past two years. We continue to print a few paper copies for students who insist on the hardcopy version. It was intended for students to become accustomed to using e-books and as a cost effective distribution of the course content. The price for the e-book version is half of the printed copy but assistants note few students reading and referring to the materials contained within.

Assessment

We have gathered course evaluations in the past as a last course activity but the focus was on the evaluation of the student assistants.

I receive significant, but informal, anecdotal feedback during IA assistant interviews in the spring and staff meetings during the fall semester. While the assistants are clearly a self-selected group of interested students who understand the purpose of the IA course, they give valuable input on what are appropriate levels of competencies in each of the areas and the areas of competencies themselves. Returning assistants also provide useful observations in how the competencies are evaluated. There are similar conversations held during the interview process for IA assistants each spring. Useful reactions from their IA experiences are noted at those times and help us know what students are thinking as valuable, especially after as semester or a year since they took the course. This feedback, for instance, guided us to drop Dreamweaver as a module a few years ago, and then added Publisher as a new module this year. There is not a sense among the assistants that we need to modify the current set of modules in any significant way.

The library activities and major project have also gone through various changes, some guided by the library's own assessment tools, but confirmed by the assistants. It appears this academic year 2011-12, for the first time, we did not feel the need to change the library activity from last year; the assistants made it clear that we have found a good project that the students do not mind doing, can be fairly evaluated by the assistants, and the students feel is valuable. Again this is anecdotal from my standpoint.

Last year I attempted a pre-survey and post-survey assessment of the modules, but some glitches in using quizzes instead of surveys within Moodle for the data rendered the data collection useless. We tried again this year and successfully have some appropriate assessment data for the modules. Some preliminary results are found as an appendix to this document. Only raw counts are provided and no interpretations have been applied. I hope this information will be presented as a Brown Bag Lunch event.

I expect that IA continues to have a place in the near future to ensure a base level competency and a venue to help students achieve that base level competency. Assessment needs to continue to verify that the base level is generally achieved by all students as well as to determine what elemental skills compose that base level.

Self-study respectfully submitted,

Loren Rhodes, Chair of Information Technology and Computer Science

Appendix 1

Fall 2011 Preliminary Assessment Data

The numbers represent raw counts from surveys taken at the beginning of the semester (PRE) and a similar survey taken when they completed the competencies (POST). DELTA represents the simple differences between PRE and POST counts. No statistical significance tests have been applied. Responses with yellow backgroundor gray (if printed in black and white) background indicate the best answer.

Web Browsing

PRE	POST	DELTA	
37	50	13	1 : Expert
174	197	23	2 : Very Competent
123	94	-29	3 : Competent
17	8	-9	4 : Some Competence
0	2	2	5 : Minimal Use/Familiarity
1	0	-1	6 : No Familiarity

Email

PRE	POST	DELTA	
31	44	13	1 : Expert
181	189	8	2 : Very Competent
121	111	-10	3 : Competent
16	6	-10	4 : Some Competence
3	1	-2	5 : Minimal Use/Familiarity
0	0	0	6 : No Familiarity

Email--return edited word attachment

PRE	POST	DELTA	
25	28	3	1 : Open the attachment in Word, print it and make corrections by hand, then hand in the paper at the professor's office.
145	137	-8	2 : Open the attachment in Word, make corrections, save the document to desktop and simply reply the email back to the professor.
156	153	-3	3 : Forward the email back to the professor, but before sending, open the attachment in Word, make corrections, save the document, and finally send the email to the professor.
26	33	7	4 : Save the attachment to the desktop, make corrections, save the document, reply that the corrections are done.

Word

PRE	POST	DELTA	
22	46	24	1 : Expert
167	204	37	2 : Very Competent
142	95	-47	3 : Competent
21	6	-15	4 : Some Competence
0	0	0	5 : Minimal Use/Familiarity
0	0	0	6 : No Familiarity

Word -- page break insertion

PRE	POST	DELTA	
143	186	43	1 : Pressing the Control-Enter (or Control-Return) key combination
162	124	-38	2 : Pressing enough Enter (or Return) keystrokes so that the text falls on the next page
20	20	0	3 : Clicking on the Page Layout tab and changing the margins
14	14	0	4 : Changing the spacing of the paragraph to have extra lines precede it
13	7	-6	5 : Clicking on the Insert tab and choose Header

Word -- text box insertion

PRE	POST	DELTA	
37	25	-12	1 : Turning the document text into columns.
10	13	3	2 : Placing the image in an expanded header or footer area.
61	47	-14	3 : Creating a separate section for the figure.
21	16	-5	4 : Inserting a table with two cells.
223	250	27	5 : Inserting a text box in the desired location.

Excel

PRE	POST	DELTA	
2	16	14	1 : Expert
40	71	31	2 : Very Competent
115	163	48	3 : Competent
109	81	-28	4 : Some Competence
74	18	-56	5 : Minimal Use/Familiarity
12	2	-10	6 : No Familiarity

Excel-- Simple formula interpretation

PRE	POST	DELTA	
27	0	-27	"1 : =B4+C4*2"
33	0	-33	2 : "20+5*2"
162	219	57	3 : 30
117	84	-33	4 : 50
13	7	-6	5 : #ERROR

Excel -- formula copy

PRE	POST	DELTA	
193	156	-37	1 : =B4 + C4 * 2
62	65	3	2 : =B5 + C4 * 2
32	39	7	3 : =B4 + C5 * 2
51	75	24	4 : =B5 + C5 * 2
14	16	2	5 : =B5 + D5 * 2

Excel -- cell insertion

PRE	POST	DELTA	
40	27	-13	1 : =SUM(B5:B15)/10
152	183	31	2 : =AVERAGE(B5:B15)
70	65	-5	3 : =AVERAGE(B5:K5)
28	10	-18	4 : =(B5+B6+B7+B8+B9+B10+B11+B12+B13+B14)/10
62	66	4	5 : = AVERAGE(B5:B14)

Excel -- sorting

PRE	POST	DELTA	
81	92	11	1 : All 5 columns across the column letters.
135	150	15	2 : Cells A1 through E100
26	28	2	3 : All 100 rows across the row numbers
84	68	-16	4 : Just column A, rows 1- 100
26	13	-13	5 : Nothing needs to be highlighted

PowerPoint

PRE	POST	DELTA	
13	25	12	1 : Expert
105	154	49	2 : Very Competent
160	148	-12	3 : Competent
53	20	-33	4 : Some Competence
17	3	-14	5 : Minimal Use/Familiarity
4	1	-3	6 : No Familiarity

PowerPoint-- Slide Sorter

PRE	POST	DELTA	
8	6	-2	1 : Put the slides back to the original order of creation in one click
153	142	-11	2 : Rearrange the slides to desired order by dragging them to other positions among the slides
6	8	2	3 : Set transition effects to the slides
2	2	0	4 : Hide certain slide for an upcoming presentation
117	109	-8	5 : A, B and D
66	84	18	6 : B, C and D

PowerPoint-- Look and Feel

PRE	POST	DELTA	
30	29	-1	1 : Animations
20	18	-2	2 : Page Setup options
93	87	-6	3 : Insert all one slide layout
2	2	0	4 : Add Notes Pages
207	215	8	5 : Design themes and/or background images

MovieMaker/iMovie

PRE	POST	DELTA	
3	19	16	1 : Expert
17	63	46	2 : Very Competent
60	153	93	3 : Competent
68	75	7	4 : Some Competence
102	36	-66	5 : Minimal Use/Familiarity
102	5	-97	6 : No Familiarity

Publisher

PRE	POST	DELTA	
1	9	8	1 : Expert
11	61	50	2 : Very Competent
52	160	108	3 : Competent
56	73	17	4 : Some Competence
121	38	-83	5 : Minimal Use/Familiarity
111	9	-102	6 : No Familiarity

Network Drives

PRE	POST	DELTA	
5	19	14	1 : Expert
36	92	56	2 : Very Competent
86	152	66	3 : Competent
126	60	-66	4 : Some Competence
81	25	-56	5 : Minimal Use/Familiarity
18	3	-15	6 : No Familiarity

Confidence in using PCs

PRE	POST	DELTA	
84	124	40	1 : Strongly Agree
174	188	14	2 : Agree
84	30	-54	3 : Mildly Agree
7	8	1	4 : Mildly Disagree
2	1	-1	5 : Disagree
1	0	-1	6 : Strongly Disagree

Enjoy discovering how to use applications

PRE	POST	DELTA	
56	54	-2	1 : Strongly Agree
135	139	4	2 : Agree
111	108	-3	3 : Mildly Agree
34	33	-1	4 : Mildly Disagree
11	16	5	5 : Disagree
5	1	-4	6 : Strongly Disagree

Anxious about using technology

PRE	POST	DELTA	
16	9	-7	1 : Strongly Agree
60	41	-19	2 : Agree
116	115	-1	3 : Mildly Agree
73	86	13	4 : Mildly Disagree
67	78	11	5 : Disagree
20	22	2	6 : Strongly Disagree

I know the technology needed for my work at Juniata

PRE	POST	DELTA	
7	22	15	1 : Strongly Agree
52	104	52	2 : Agree
122	143	21	3 : Mildly Agree
83	51	-32	4 : Mildly Disagree
69	27	-42	5 : Disagree
19	4	-15	6 : Strongly Disagree

All of the information I need is on the Internet

PRE	POST	DELTA	
15	15	0	1 : Strongly Agree
68	74	6	2 : Agree
97	108	11	3 : Mildly Agree
76	84	8	4 : Mildly Disagree
75	59	-16	5 : Disagree
21	11	-10	6 : Strongly Disagree