

## How Can Institutional Research and Assessment Help With Faculty Student Learning Outcomes Assessment Needs?

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Carleton's Assess We Can! Workshop December 2009

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## Who Are We? What Does IRA Do?

**Jim Fergerson, Director** (x4292, jfergers)

- Coordinator, key indicators, comparative data, data warehouse, Assessment Team, Higher Education Act reauthorization, Excel, etc.

**Cherry Danielson, Assoc. Dir.** (x5740, cdaniels)

- Primary assessment coordinator, support for Writing Program, Assessment Team, Survey questions, SPSS

**Jody Friedow, Assoc. Dir.** (x4284, jfriedow)

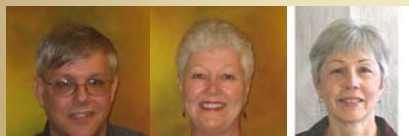
- Colleague/Cognos expert, Federal IPEDS reporting coordinator, data integration, Excel, quick questions



Hoppin House (2<sup>nd</sup> and Winona)

### IRA's Multiple Missions

Internal/External Reporting  
 Provide official Carleton Data  
 Assessment/Institutional  
 Effectiveness  
 Planning/Analysis Support



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### **A Word of Caution: Data from IRA are Best Used to Supplement What You Need to Know to Address Department/Program Level Student Learning Outcomes**

- **There are many levels of assessment, ALL of which are important.** At the departmental/program level, the primary emphasis is on formative and developmental evaluation of teaching and learning. Much of IRA's work must focus on summative institution-level analysis (reporting) with a greater emphasis on accountability issues.
- **Most surveys available from IRA ask broad "generic" questions.** They are better for providing context at the institutional/divisional levels or for providing cross-institutional comparisons than for addressing specific department/program level questions. "Drilling down" to the major level may not be particularly useful or valid.
- Most survey results are self-reported, and tend to be indirect measures.
- IRA can drill down to the department/program level from administrative databases, but many of these measures (grades, course enrollments, etc.) are also indirect.
- **With regard to learning outcomes, IRA may be the best source of multiple graduate and alumni outcomes measures,** but the available indicators are incomplete and should be interpreted with caution.

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## **Institution-level Survey Resources**

### **Regular or Periodic Consortial Surveys:**

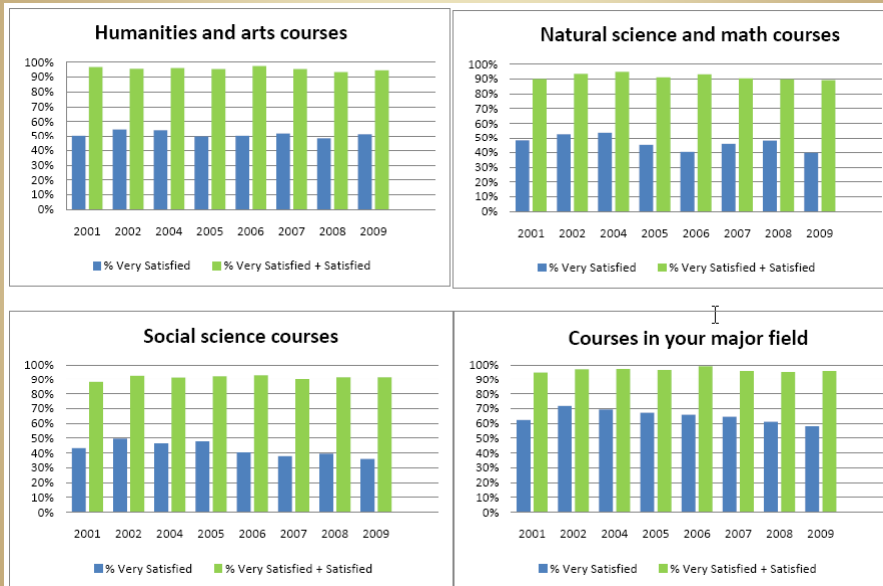
- Admitted Student Questionnaire (annual)
- CIRP First-Year Survey (annual)
- COFHE Enrolled Student Survey and similar surveys (2006-07)
- COFHE and/or Career Center / IRA Senior Survey (most years)
- COFHE Alumni Surveys (2009--Classes of 1939 to 2005)
- HERI Faculty Survey (usually every 3rd year)

### **Occasional/Grant-related:**

- Wabash National Study of Liberal Education (2008-2013)
- National Survey of Student Engagement (NSSE; 2009 & 2013)
- Collegiate Learning Assessment (CLA) (Cohort graduating 2009)
- **In 2009-10:** HEDS Research Practices Survey; Off-campus studies survey; Academic Support/Visuality survey (Andrea Nixon); Residence Life Survey
- And many more! **ASK!**

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## Senior Survey Satisfaction Trends



## What if I want to do a survey?

1. **Do you really need a new survey?** PLEASE Check with IRA to see what data may already be available (surveys, administrative data, alternatives such as focus groups, etc.)
2. Coordinate with IRA far in advance about scheduling, to discuss questions, and levels of support.
3. Get Institutional Review Board approval, as required.  
(See: [http://apps.carleton.edu/governance/institutional\\_review\\_board/](http://apps.carleton.edu/governance/institutional_review_board/))
4. IRA has three SurveyMonkey licenses that it can loan out on a temporary basis, but these need to be rationed to prevent conflicts with scheduled institution-level surveys, and over-surveying students.
5. Sampling: IRA can pull targeted or random samples.
6. An Institutional Research Advisory Committee exists to address issues of priority, timing, etc.

The logo for Carleton College, featuring the name "Carleton College" in a white serif font on a dark blue background with a silhouette of a building.

## Carleton Administrative Data

Recruitment Plus (Admissions)  
Datatel Colleague (Current students,  
Administrative data)  
Advance (Alumni data)  
Carleton Data Warehouse (under construction)

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## IRA Web

(<http://apps.carleton.edu/campus/ira/>)

The IRA Web is under construction, but will contain a growing amount current and trend data about Carleton. Most will be public, but some may be restricted to on-campus use:

- Basic Carleton Data (Current year or most recent)
- Common Data Set (Core college guidebook information with a decade of trends)
- Enrollment trends
- Survey summary results
- Assessment Resources (soon)

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**Institutional Research and Assessment**

[Institutional Research and Assessment Home](#)

[Basic Carleton Data](#)  
[Common Data Set \(CDS\)](#)

**Survey Research**

[CIRP Freshman Survey](#)  
[Wabash National Study of Liberal Arts Education](#)  
[HERI Faculty Survey 2007-08](#)  
[Senior Surveys](#)  
[Campus Climate Survey 2007-08](#)  
[Assessment Resources](#)  
[New Race and Ethnicity Category FAQ](#)  
[IRA Staff](#)

[Text Only/ Printer-Friendly](#)

**Survey Research**

This page provides links to both narrative or summary graphic summaries of a variety of Carleton's surveys. While some results are available to the general public, others may be restricted to limited use on campus.

Institutional Research and Assessment has archives of original data files and much more detail than can be shown here. Please contact an IRA staff member to discuss what may be available.

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**CIRP Freshman Survey**  
 Links to Carleton's CIRP graphs

**Wabash National Study of Liberal Arts Education**  
 Carleton joined the Wabash National Study of Liberal Arts Education (WNSLAE) in 2008. The Wabash Study focuses on the development of seven outcomes associated with undergraduate liberal arts education and the educational conditions and experiences that foster these outcomes. The selected outcomes include: \* Critical thinking \* Need for cognition \* Interest in and attitudes about diversity \* Leadership \* Moral reasoning \* Well-being First-year students repeated the Wabash study instruments in the Spring of 2009, and they will be asked to do a final exit study four years later.

**HERI Faculty Survey 2007-08**  
 Results from 2007-08 triennial administration of nation survey of college faculty members. Provides comparison data for Carleton faculty responses over time and various user norms. (Restricted to Carleton use only)

**Senior Surveys**  
 The Senior Survey is administered to Carleton seniors during their last term in college. It includes about students' satisfaction, college activities and future plans. Carleton has participated in the survey for most years since 1998. Below are summary results from the most recent surveys. Additional detail can be pulled by IRA as necessary

**Campus Climate Survey 2007-08**  
 Summary results of the 2007-08 Campus Climate Survey conducted by Sue Rankin and Associates. [From the Community, Equity and Diversity Initiative (CEDI) site.]

**Institutional Research and Assessment**

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[Survey Research](#)

**Assessment Resources**

[New Race and Ethnicity Category FAQ](#)  
[IRA Staff](#)

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**Assessment Resources**

**References and resources to support assessment activities**

**Resources from Carleton College**

- [How Can Institutional Research and Assessment Help with Faculty Student Learning Outcomes Assessment Needs? \(IRA, powerpoint\)](#)
- [Perlman Center for Learning and Teaching](#)
- [Science Education Research Center \(SERC\)](#)

**External Resources:**

[Middle States Commission on Higher Education assessment publications](#) (list of downloadable publications)

Highly recommended:

- [Student Learning Assessment: Options and Resources \(2nd Edition, 2007\)](#), **MSCHE** (an excellent introduction to student learning assessment, with many examples. c. 100 pages)
- [Examples of Evidence of Student Learning](#), by MSCHE VP Linda Suskie (one-page handout)

[Internet Resources for Higher Education Outcomes Assessment](#), (an extensive collection of references and examples maintained by North Carolina University Office of Planning and Analysis)

[American Association of Colleges and Universities \(AAC&U\) Assessment Resources](#)

## Level of Detail That IRA Can Provide

The degree of detail that IRA can provide or share may be limited due to:

- **Privacy requirements**
  - Family Education Rights and Privacy Act (FERPA)
    - Educational Records: “Need to Know” and “Directory Information” vs. educational and evaluation research needs (Registrar is the final authority on FERPA issues)
  - Institutional Review Board (IRB) requirements
  - Release restrictions on certain surveys
- **Proprietary nature of some shared data** (COFHE, HEDS, Wabash)
- **Nature of data itself**
  - Difficulty of integrating across time, multiple data sources
  - Will what is available be relevant to the question at hand? (Survey data for a small department may not be useful, but there might be enough cases for a large department or divisional analysis)
- **Conflicts with other IRA projects/deadlines**
  - Mandatory reporting must be our first priority
- IRA is more likely to be able to provide summary data than person-level data; but sometimes we can give you unit-record detail for your own analysis by stripping personally identifiable information or by summarizing sensitive fields.
- **ASK US**—we know what fields are available, reasonably obtainable, and we may suggest alternatives that you may not have considered

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## Student Enrollment Census Extracts

- Summary “snapshot” extract of c. 150 fields for official reporting
- Personal demographics
- Key admissions indicators
- Anticipated and actual majors
- Course credits, previous term GPA, cumulative GPA

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## Course Enrollment Extracts

- Data extracts from Datatel Colleague (to 1993) can provide multiple “dimensions”
  - Course-level enrollments by faculty member/department
  - Class and section size information
  - Course grades, cumulative GPA and credits information (indirect measures!)
  - Courses taken by a student cohort or group
  - Unofficial “transcript” of courses taken by a particular student
  - Eventually, enrollments data about new curricular requirements

Example: Five years of Transcript Grades from one Chemistry 200-level course

Count of N	Final Grade	A-	B	B+	B+	C	C+	C+	CR*	D	D+	DRP	F	S*	(blank)	Grand Total
A CHEM 200 course	A															
2005		19	21	17	12	21	10	6	4	1	1	1	2	1		117
2006		17	25	18	10	26	7	3	7				3			116
2007		19	13	27	16	26	14	2	4		3	1	7	2	3	137
2008		19	23	36	19	23	2	1	2		1		1		3	130
<b>Grand Total</b>		<b>74</b>	<b>82</b>	<b>98</b>	<b>57</b>	<b>96</b>	<b>33</b>	<b>12</b>	<b>17</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>13</b>	<b>3</b>	<b>6</b>	<b>500</b>

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## Faculty Extracts

- Faculty demographics
- FTE loads (HR, Teaching, Non-teaching FTE)
- Departmental summaries
- FT/PT status
- Rank, Tenure Status
- Leave information

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## Alumni Database Extracts

Field of Work – Economics Majors (Major 1)	
Row Labels	N
1415 Teacher	69
1780 Other Finance	63
1760 Investment/Market Analyst	59
2550 Attorney - Other	54
4800 Student	48
1670 Manager	39
1680 Other Business Career	38
4310 Analyst/Associate	37
1260 Consultant, other area	32
2100 Homemaker	30
1720 Banker	28
0100 Accounting/Auditing/Bookkeeping	27
8000 Other Not Listed	27
1750 Financial Market Analyst	26
2515 Attorney - Corporate	26
4340 Economist	24
2900 Marketing/Sales	23
1235 Consulting - Management	20
1600 Entrepreneur	20

Top Employers of Economics Majors (Major 1)	N
Self-employed	101
University of Minnesota	10
Target Corporation	8
Self	7
Wells Fargo	7
Towers Perrin	6
Wells Fargo Bank	5
Goldman, Sachs & Co.	5
Carleton College	5
University of Michigan	4
Citigroup	4
Bank of America	4
General Mills, Inc.	4
RBC Dain Rauscher	4
Mayo Clinic	4
3M	3
Fidelity Investments	3
PricewaterhouseCoopers	3
Cargill, Inc.	3

*As known/reported:* post-Carleton study and degrees, employer and field, location, etc.

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## External Data Sources

IRA can help to obtain data from a variety of external sources

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# Peer Data

## Primary Reference Colleges

Amherst College  
 Bowdoin College  
 Bryn Mawr College  
 (Carleton College)  
 Colorado College  
 Grinnell College  
 Haverford College  
 Macalester College  
 Middlebury College  
 Oberlin College  
 Pomona College  
 Reed College  
 Smith College  
 Swarthmore College  
 Wellesley College  
 Wesleyan University (CT)  
 Williams College

## COFHE Colleges

Amherst College  
 Barnard College  
 Bryn Mawr College  
 (Carleton College)  
 Mt. Holyoke College  
 Oberlin College  
 Pomona College  
 Smith College  
 Swarthmore College  
 Trinity College (CT)  
 Wellesley College  
 Wesleyan University (CT)  
 Williams College

IRA can pull limited types of data about various peer groups/institutional types from national or consortial databases. (Enrollment demographics, graduation by major, graduation and retention rates, Ph.D. completions, etc.)

# Dept. of Education (IPEDS) Data Center

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 RANK INSTITUTIONS ON ONE VARIABLE  
 VIEW TREND FOR ONE VARIABLE  
 CREATE GROUP STATISTICS  
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 DOWNLOAD SURVEY DATA FILES  
 DOWNLOAD CUSTOM DATA FILES  
 DATA ANALYSIS SYSTEM  
 EXECUTIVE PEER TOOL

The Data Center allows users to retrieve IPEDS data using the functions listed on the main menu to the left. As you mouse over each function, the function will be described in this bubble. Find the function you wish to use and click on the function to begin. Once inside the Data Center, use the Main Menu to switch between functions without losing the information you have already selected.

**Shortcuts...**

- ▶ [Upload a previously saved session](#)
- ▶ [Create/Download a list of variables](#)
- ▶ [Create/Download an institution group](#)

### College Navigator (Most recent statistics as provided to U.S. Department of Education)

**ies NATIONAL CENTER FOR EDUCATION STATISTICS**

Publications & Programs | Surveys & Programs | Data Tools | Tables & Figures | Fast Facts | School, College, & Library Search | Annual Reports | What's New | About Us

**COLLEGE Navigator**

Name of School:

States (use map for more than 1 state):

ZIP Code:  Miles from:

Programs/Majors:  Items:

Level of Award:  Certificate  Bachelor's  Associate's  Advanced

Institution Type:  Public  Private  4-year  2-year or less

**Carleton College**  
One North College Street, Northfield, Minnesota 55057-4001

General information: (507) 222-4000  
Website: [www.carleton.edu](http://www.carleton.edu)

Type: 4-year, Private not-for-profit  
Awards offered: Bachelor's degree  
Campus setting: Town: Fringe  
Campus housing: Yes  
Student population: 1,902 (all undergraduate)  
Student-to-faculty ratio: 9 to 1

Expand All | Collapse All

- GENERAL INFORMATION
- ESTIMATED STUDENT EXPENSES (BEFORE AID)
- FINANCIAL AID
- ENROLLMENT
- ADMISSIONS
- RETENTION AND GRADUATION RATES
- PROGRAMS/MAJORS

COMPLETIONS 2007-2008

PROGRAM	BACHELOR
Area, ethnic, cultural, and gender studies	
American/United States Studies/Civiliation	12
Area Studies, Other	2
Asian Studies/Civiliation	1
Ethnic, Cultural/Memory, and Gender Studies, Other	1
Latin American Studies	4

IPEDS ID: 172388  
OPE ID: 00234000

U.S. Department of Education: <http://nces.ed.gov/collegenavigator/>

### National Science Foundation WebCaspar Databases <http://webcaspar.nsf.gov/>

## WebCASPAR

Integrated Science and Engineering Resources Data System

The WebCASPAR database provides easy access to a large body of statistical data resources for science and engineering (S&E) at U.S. academic institutions. WebCASPAR emphasizes S&E, but its data resources also provide information on non-S&E fields and higher education in general.

Username:  Password:

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#### Table Builder: create a data table

To begin creating a table, check one or more boxes beside the desired data source name(s) below, then click *Select Data Source(s)*.

**National Science Foundation (NSF) Data Sources**

- NSF Survey of Earned Doctorates/Doctorate Records File [Info](#)  
(Years Available:1966-2006)
- NSF Survey of Federal Funds for Research and Development [Info](#)  
(Years Available:1951-2008)
- NSF Survey of Federal S&E Support to Universities, Colleges, and Nonprofit Institutions [Info](#)  
(Years Available:1971-2006)
- NSF Survey of R&D Expenditures at Universities and Colleges [Info](#)  
(Years Available:1972-2008)
- NSF-NIH Survey of Graduate Students & Postdoctorates in S&E [Info](#)  
(Years Available:1972-2007)
- NSF Survey of Science and Engineering Research Facilities (Not Weighted or Imputed) [Info](#)  
(Years Available:2003)
- NSF Survey of Science and Engineering Research Facilities (Weighted and Imputed) [Info](#)  
(Years Available:2003)

**National Center for Education Statistics (NCES) Data Sources**

- IPEDS Completions Survey [Info](#)  
(Years Available:1966-2007)
- IPEDS Completions Survey by Race [Info](#)  
(Years Available:1977-2007)
- IPEDS Enrollment Survey [Info](#)  
(Years Available:1967-2007)
- IPEDS Institutional Characteristics Survey Tuition Data [Info](#)  
(Years Available:1969-2001)
- IPEDS Salaries, Tenure, and Fringe Benefits Survey [Info](#)  
(Years Available:1971-1999)

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## Baccalaureate Origins of Doctoral Recipients (NSF Survey of Earned Doctorates)

Academic Doctoral Degrees Awarded to Carleton Graduates, 1996-2005  
(Sorted by number of Carleton degrees)

NSF Broad Academic Discipline	Carleton doctorates, 1996-2005	% of Carleton degrees	Carleton rank among schools whose highest degree is a bachelor's
Humanities	152	19%	5
Life Sciences	143	18%	3
Physical Sciences	106	14%	1
Social Sciences	106	14%	4
Psychology	66	8%	10
Geosciences	62	8%	1
Education	40	5%	15
Arts and Music	33	4%	7
Math and Computer Sciences	24	3%	7
Engineering	16	2%	8
Religion and Theology	15	2%	9
Business and Management	10	1%	3
Communication and Librarianship	5	1%	5
All other fields	4	1%	NA
Total doctoral degrees	782	100%	3

Source: National Science Foundation, Survey of Earned Doctorates. <http://webcaspar.nsf.gov>.



National Student Clearinghouse®

The nation's trusted source for student degree and enrollment verification

Best source of basic post-Carleton enrollment information.

Reports are available by institution attended, or by individual student enrollments.

SCHOOL NAME	PUB/ST		% OF STUDENTS	# OF STUDENTS
	PVT	ST		
U OF MN-TWIN C	Public	MN	9.63%	613
U OF WI MADISON	Public	WI	3.52%	224
U OF WASHINGTON	Public	WA	1.93%	123
NWEST U	Private	IL	1.90%	121
U CAL BERKELEY	Public	CA	1.68%	107
U OF MN-TC GRAD	Public	MN	1.62%	103
COLUMBIA	Private	NY	1.51%	96
U OF MICHIGAN	Public	MI	1.49%	95
NYU	Private	NY	1.35%	86
U OF MN-TC LAW	Public	MN	1.30%	83
U OF CHICAGO	Private	IL	1.27%	81
YALE UNIVERSITY	Private	CT	1.23%	78
U OF ST THOMAS	Private	MN	1.12%	71
U OF CO BOULDER	Public	CO	1.04%	66
CORNELL-GRADS	Public	NY	0.96%	61
HARVARD CONT ED	Private	MA	0.88%	56
UVA	Public	VA	0.86%	55
U OF PA	Private	PA	0.86%	55
U OF NC-CHAPEL	Public	NC	0.77%	49
U OF IL URBANA	Public	IL	0.74%	47
STANFORD	Private	CA	0.74%	47
U OF ARIZONA	Public	AZ	0.72%	46

<http://www.studentclearinghouse.org/> (IRA has an access license.)