

The Nuts & Bolts of Supplemental Instruction

Georgia College

P2P + FACULTY = SI

Purpose of SI

1. To increase retention within targeted historically difficult courses
2. To improve student grades in targeted historically difficult courses
3. To increase the graduation rates of students

UMKC website

What is SI?

- Non-remedial, peer-guided study sessions for all students in a given class
- Free service, voluntary participation
- Regularly scheduled, informal review sessions
- Dedicated time for students to build content knowledge in collaboration with peers
- Integrating new/improved study skills
- Opportunity to build confidence, leadership and communication skills
- Unique program for building horizontal and vertical relationships

Where Are You?

- Think – Pair – Share
- Turn to a Partner
- Short Group Discussion

“...In summation, the SI program at Georgia College **changed the course of my professional life by molding me into a leader and a mentor** and has undoubtedly done the same for others. This particular program is outstanding because it is not only growing **to meet the needs of the student body** and **implements innovative practice**, but also because it **builds a strong network among students** that both **increases student retention and creates a culture of student involvement and skill building**. The SI program at Georgia College benefits the student body because of the **resources** it provides but also benefits the SI leaders by allowing insight into **how academia works**, providing the opportunity to build **relationships with professors**, other SI Leaders, and the students who come to SI sessions; and providing the opportunity for SI leaders to **grow and strengthen their interpersonal, leadership skills. ..”**

L. Pace

Discovering the Value of SI

The more obvious:

- Retention
- Course perseverance
- Better content clarity
- Community
- Campus need & climate assessment
- Cost Effective
- Data Mining
- Increased academic support
- Better learners

The hidden potential:

- Mentoring
- Developing the SI Leader
- Possible paradigm shift in learning
- Platform student/faculty partnership
- Research projects for faculty/students
- Career clarity for SI Leaders
- Developing leadership skills
- Uniquely links academic departments
- Campus wide buy-in
- Teaching Circle

Necessary Steps

Assessing Institutional Needs & Current Academic Support

- Top 3 concerns?
- SI Model a good fit?
- Is restructuring required?
- Is it time for a change?
- Do current programs cross disciplines?
- Centralized or decentralized?
- Quality control assessments?
- Evaluation tools?

Assessing current programs for direct academic support

- Broad reaching?
- Students utilizing?
- Convenient?
- Cost effective?
- Delivering desired results?
- Assessment and evaluation in place?
- Are they effective?

Confirmed Need and Funds: What next?

- Program Location (Academic or Student Affairs?)
- Select SI Supervisor
 - Allocate time and funds for UMKC SI Supervisor Training
 - Allocate time and funds to research/visit successful programs
 - Determine budget restraints (including admin support)
 - Identify targeted courses/parameters (target courses not students)
 - Insure ability to collect grades (deeper data if professors provide test scores)
- Physical Space: forecast need and confirm space(s) for sessions
- Determine department/faculty lines of communication
- Develop working timeline

Criteria for Georgia College

SI Supported Courses:

(how we made our decisions)

- **Core Curriculum**
 - historically-challenging courses
- **Course Level**
 - predominately lower level, heavily populated by first-year and sophomore students
- **Gateway Course**
 - required as pre-requisites for upper-level courses and professional graduate programs
- **Course Enrollment** (potential # of students to be served)
- **DWF History**
- **GPA Improvement**
 - historically with SI support
 - Prior utilization of academic support

SI Supervisor: the Nuts

Before & Beginning Term

- Set division/program goals
- Determine support structure
- Establish reporting needs
- Create reporting guidelines
- Administrative protocol
- HR protocol
- ID courses
- Department Cooperation
- Faculty Partners
- Facilities
- Hire and train leaders
- ID campus resources
- Establish data collection protocol
- PR/marketing the program
- Establish admin network

During the Term

- Ongoing training & leader support
- Maintain Time sheets and Payroll reports
- Budget reports
- Amend reporting issues
- Collect participation data
- Collect and review Session plans
- Observations of sessions
- Provide feedback of observations
- Consider mid-term student survey
- Ongoing marketing
- ID courses/SI support for next semester
- ID leaders
- Priority Registration helps

End of Term

- Distribute Student Surveys
- Final Grade reports
- Data analysis
- SI Leader survey
- Faculty Survey
- Reporting lines
- Budget amendments
- Recognitions
- Evaluate and adjust
- Professional Development

Criteria for Georgia College SI Leader



SI's meet with faculty during
prep time

- **SI qualifications**
 - Employable, Full time enrolled student
 - Successfully completed the course (with an “A” or high “B”)
 - Good communication skills, “soft skills”
 - Recommendations
- **Models of SI-embedded courses**
 - Traditional lecture courses
 - Collaboration-based courses
 - Studio-lab (lecture/lab) hybrid courses
- **Basic responsibilities of the SIs (8 hour/week model):**
 - 3 hours - auditing class
 - 2 hours - personal prep time and/or with professor
 - 3 hours - facilitate SI Sessions

Assessment and Evaluation: the Bolts

Assessment of SI Program

- Effectiveness, met goals
- Training & support
- Evaluate data:
 - Grade distribution as it correlates to SI visits
 - GPA gains/loss
 - DFW rates before and after implementing SI program
 - DWF rates students attending SI vs non-attending, same course
- Value
- Cost

Assessment of SI Leaders

- SI surveys and self-reporting
- SI Reflections
- On-going Training
- Performance review with faculty

Student Satisfaction

- Survey students (mid-term-online Qualtrics, end – paper)
- Repeat Attendance
- Student Assessment of Learning Gains (SALG)

Assessment of Faculty

- Surveys

Who We Are

Georgia College is the state's designated
Public Liberal Arts institution

Student population (Fall 2015)

- 6,036 Undergraduates
- 853 Graduates

Demographics (Fall 2015)

- Freshman: 1,714
 - Combined Mean SAT: 1164
 - AVG high school GPA: 3.5

Campus Wide

- 60% female; 84% white/non-Hispanic
- metro-Atlanta, increased out of state and international students
- 337 fulltime faculty; 75% with a terminal degree
- student to faculty ratio is 17:1



A bit of our SI history:

Pre-2000s: scattered peer-facilitated learning on campus

Early 2000s: coordinated peer-facilitated learning through the campus learning center

Mid-2000s: first SI models implemented, decentralized

2007: infusion of state funds – USG STEM Initiative: Mini-Grants – increased demand for SI

2012: birth and coordination of centralized and formalized SI Program

Hired full-time coordinator for Learning Center
USG STEM Initiative Phase II, 3 years' support

2016: USG STEM Education Improvement Plan



Georgia College Center for Student Success Organizational Chart

Provost

Associate Provost
Director, Center for
Student Success

Executive Assistant

Director
Academic
Advising

Director
Testing

Director
Honors
Program

Director
Learning
Center

Director
Leadership
Programs

Director
Bridge
Scholars

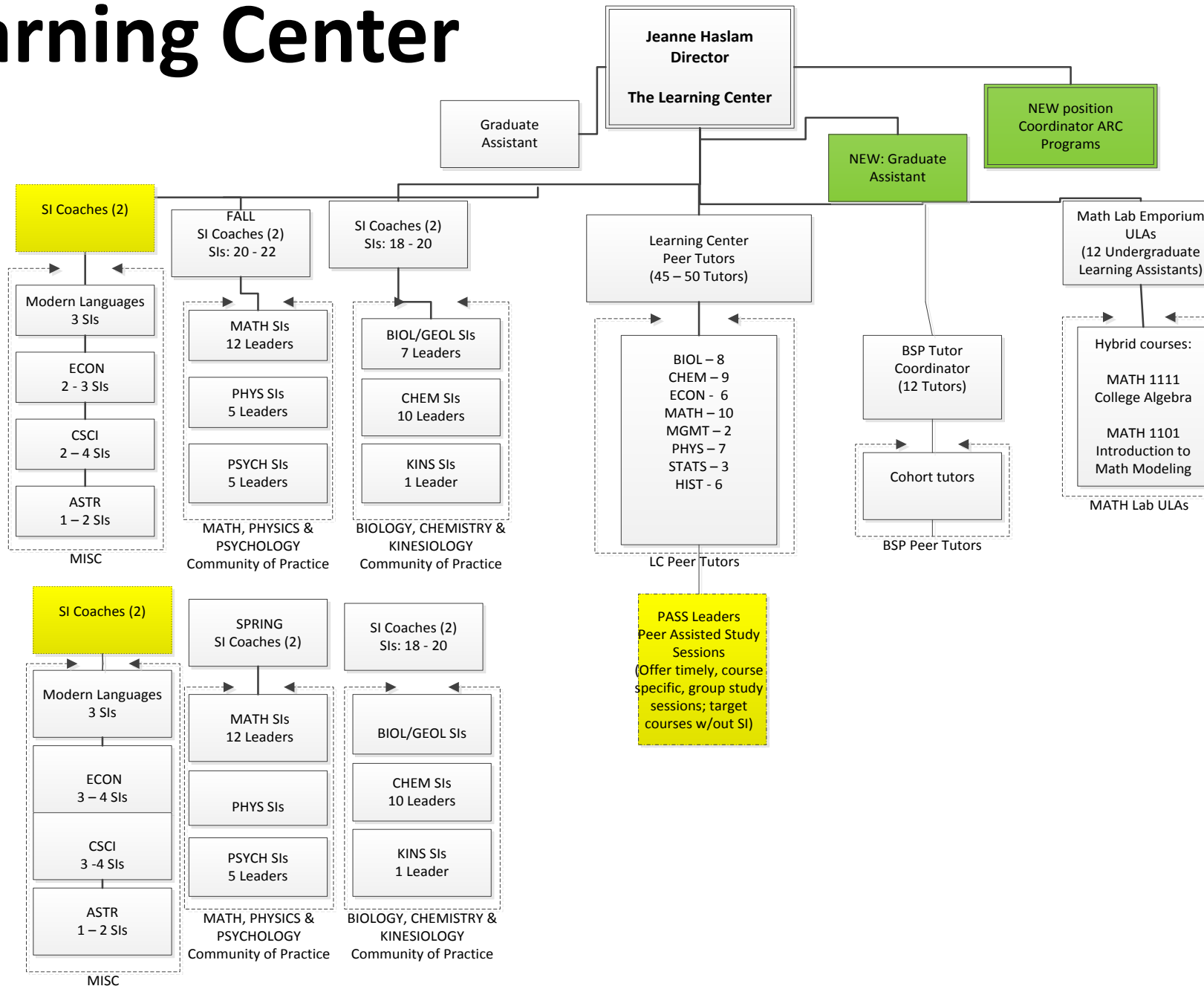
SI

Peer
Tutor

ULA

PASS

GC Learning Center



Growth in Requests for SI Support

Semester	Total Request	STEM funded	Total Funded
Fall 2012	48	23	43
Spring 2013	53	22	44
Fall 2013	62	26	46
Spring 2014	61	31	49
Fall 2014	71	21	47
Spring 2015	68	16	45
Fall 2015	56	44	50
Spring 2016	72	62	68
Fall 2016	76	40	72

Programs at GC

Impacted by Supplemental Instruction

Accounting	Astronomy	Computer Science
ACCT 3101: Intermediate Acct I ACCT 3101: Intermediate Acct II	ASTR 1000 & Lab: Intro to the Universe	CSCI 1301: Computer Science I CSCI 1302: Computer Science II
Biology	Chemistry	Math
BIOL 1100: Biological Processes BIOL 1107: Principles of Biology I BIOL 2100: Genetics BIOL 2160: A&P I BIOL 2170: A&P II BIOL 2800: Ecology	CHEM 1151: Survey of Chem I CHEM 1152: Survey of Chem II CHEM 1211: Principles of Chem I CHEM 1212: Principles of Chem II CHEM 3310: Inorganic Chemistry CHEM 3361: Organic Chem I CHEM 3362: Organic Chem II	MATH 1113: Precalculus MATH 1261: Calculus I MATH 1262: Calculus II MATH 2263: Calculus III MATH 2600: Probability & Statistics
Economics	Modern Languages	Physics/Physical Science
ECON 2105: Principles of Macroeconomics ECON 2106: Principles of Microeconomics	FREN 1001: Intro to French Lang and Culture I SPAN 1001: Intro to Spanish Lang and Culture III SPAN 2001: Interm Span Lang & Cultu	PHYS 1111: Intro Physics I PHYS 1112: Intro Physics II PHYS 2211: Principles of Physics I PHYS 2212: Principles of Physics II
Health Sciences	Kinesiology	Psychology
GEOL 1211: Physical Geology GEOL 1122: Historical Geology HSCS 2823: Psych of Human Movmt	KINS 2200: Intro to Exercise BioChem KINS 3203: Physiology of Exercise	PSYC 2700: Stats Applied to Behav Sci PSYC 2800: Research Methods in Psych

Supporting Growth: SI Coach

Candidates:

- Dedicated SI Leader for minimum 2 terms
- Great communication skills
- Respected by peers
- Administrative skills

Basic Responsibilities:

- Provide early and intentional support
- Assist in recruiting and training SI leaders
- Hold weekly Coaching hours
- Host monthly Community of Practice Leader Meetings (COPL)
- Observe SI Leaders' Sessions (2-3/semester)
- Mentor COPL team of SI Leaders



Enhancing our Training & Skills:

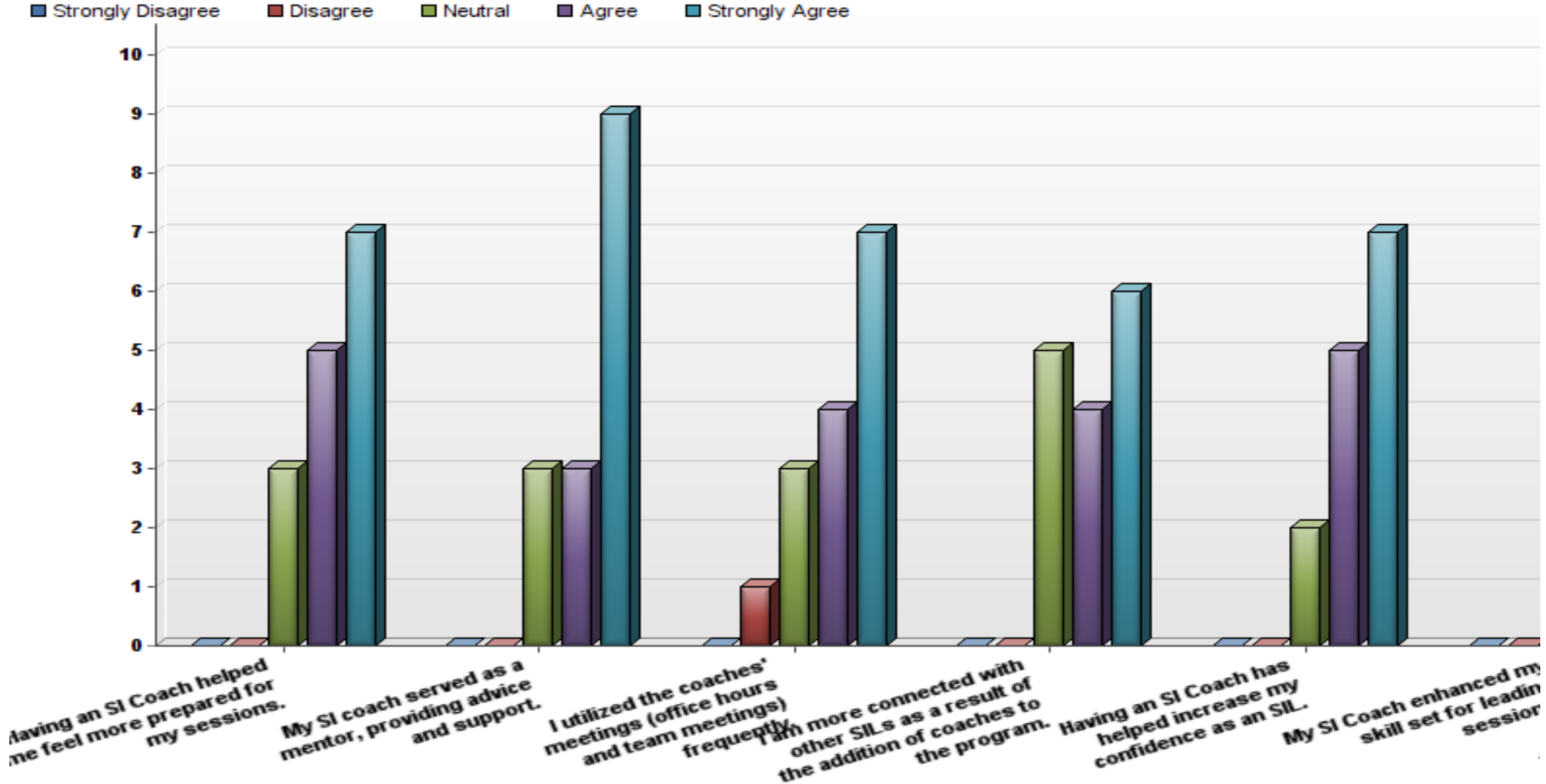
CoPL Meetings (Community of Practice)

- Sharing Ideas
- Building Community
- Developing Skills
- Enhancing our Practice
- Collaboration
- Using Technology
- Finding Apps



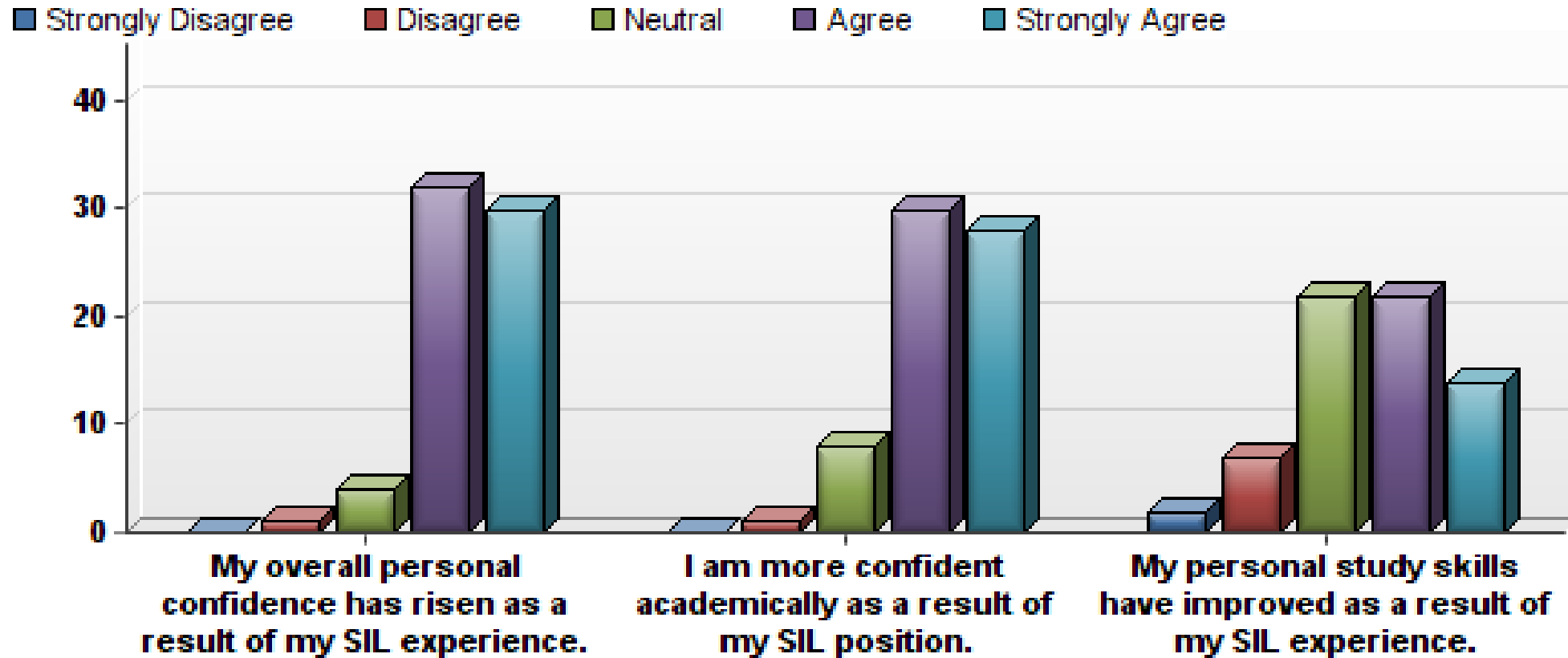
SI Leader Survey: Spring 2016

*New Leaders anonymously surveyed at mid-term



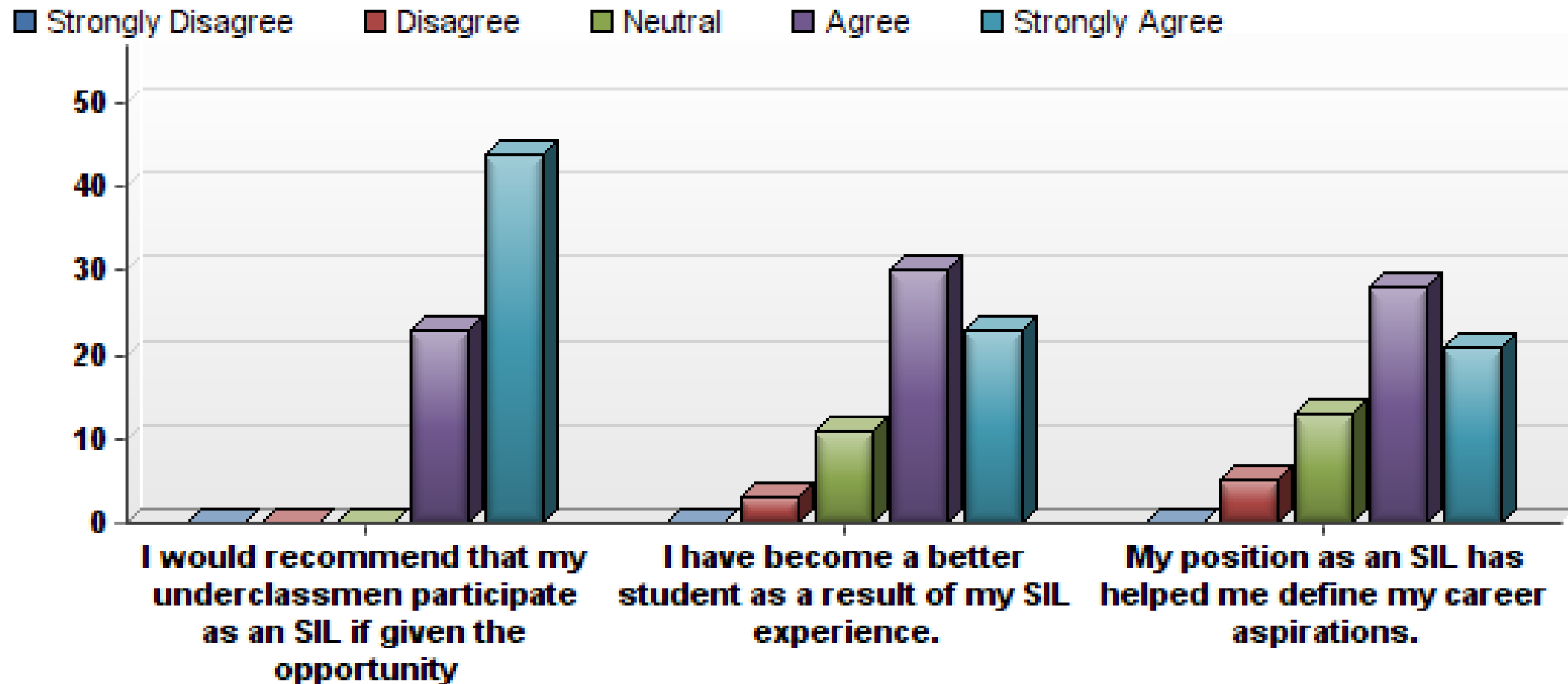
SI Leaders' Personal Gains

* Taken from the SI Leader end of semester survey



SI Leader Insights

* Taken from the SI Leader end of semester survey



Ongoing Assessments

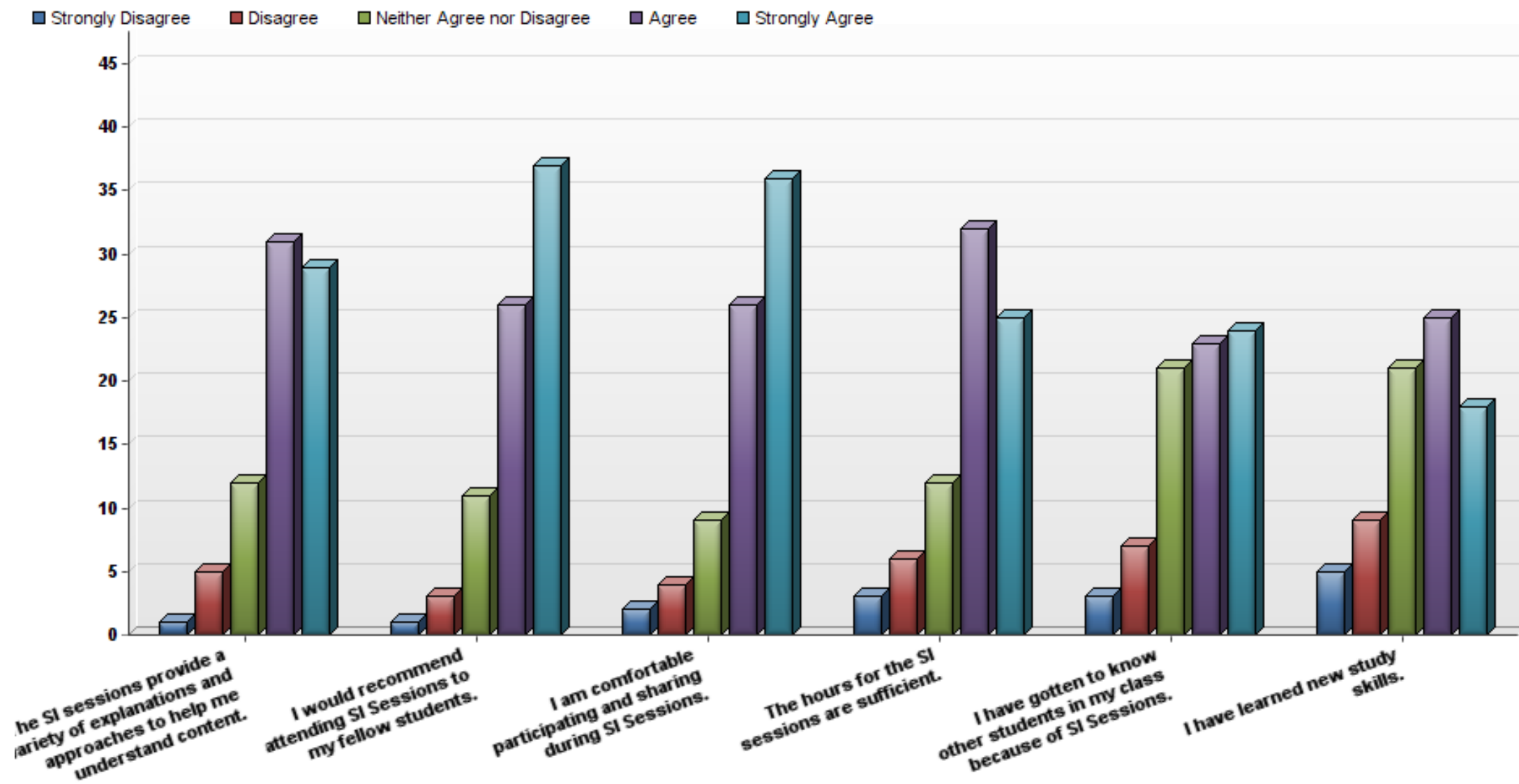
- Coaches Meetings
- Self Reflections
- Observations
- Session Plans
- Mid-term Surveys to Enrolled Students
- Utilizing the Feedback Loop
- Peer Observations
- End Of Semester Surveys
 - Students
 - Leaders
 - Professors



Taken from mid-semester surveys

Chemistry Students

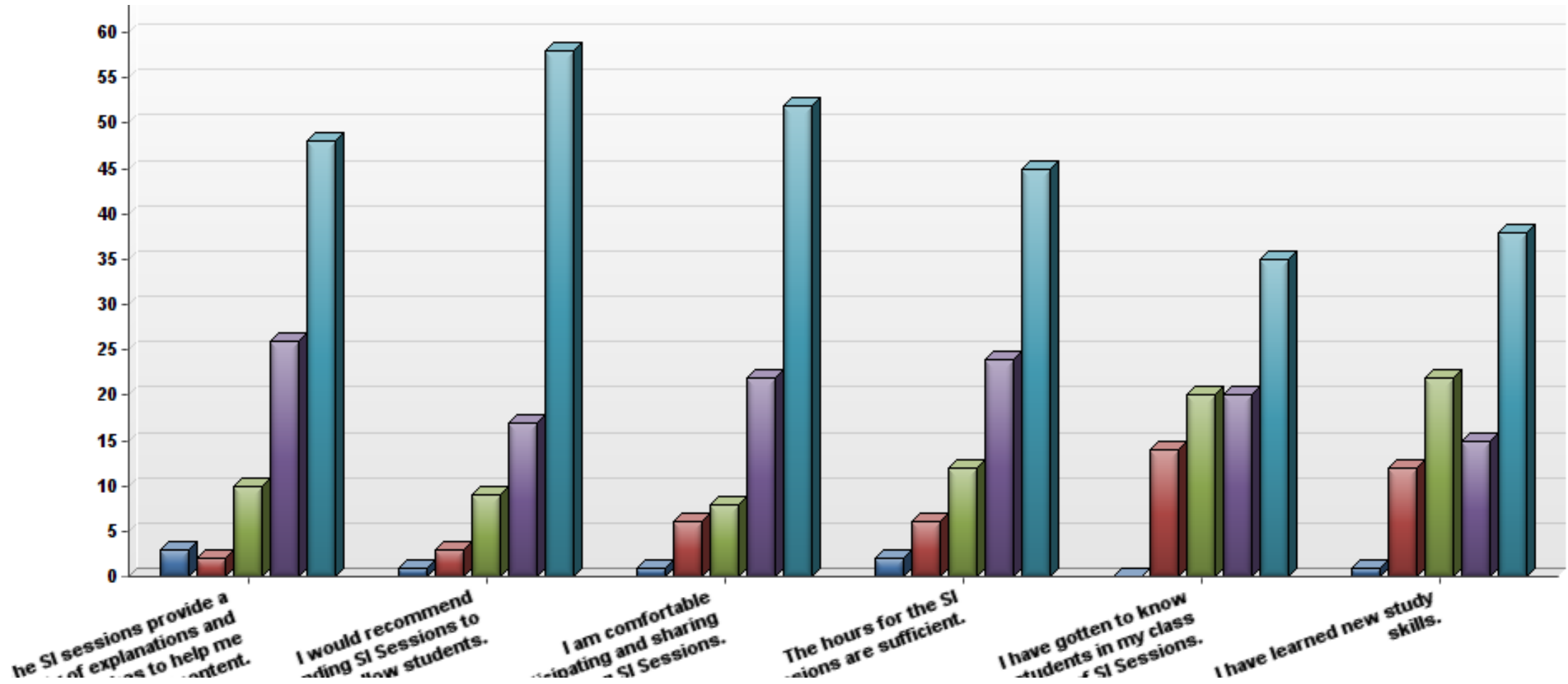
*78 Responses



Taken from mid-semester surveys

Biology Students

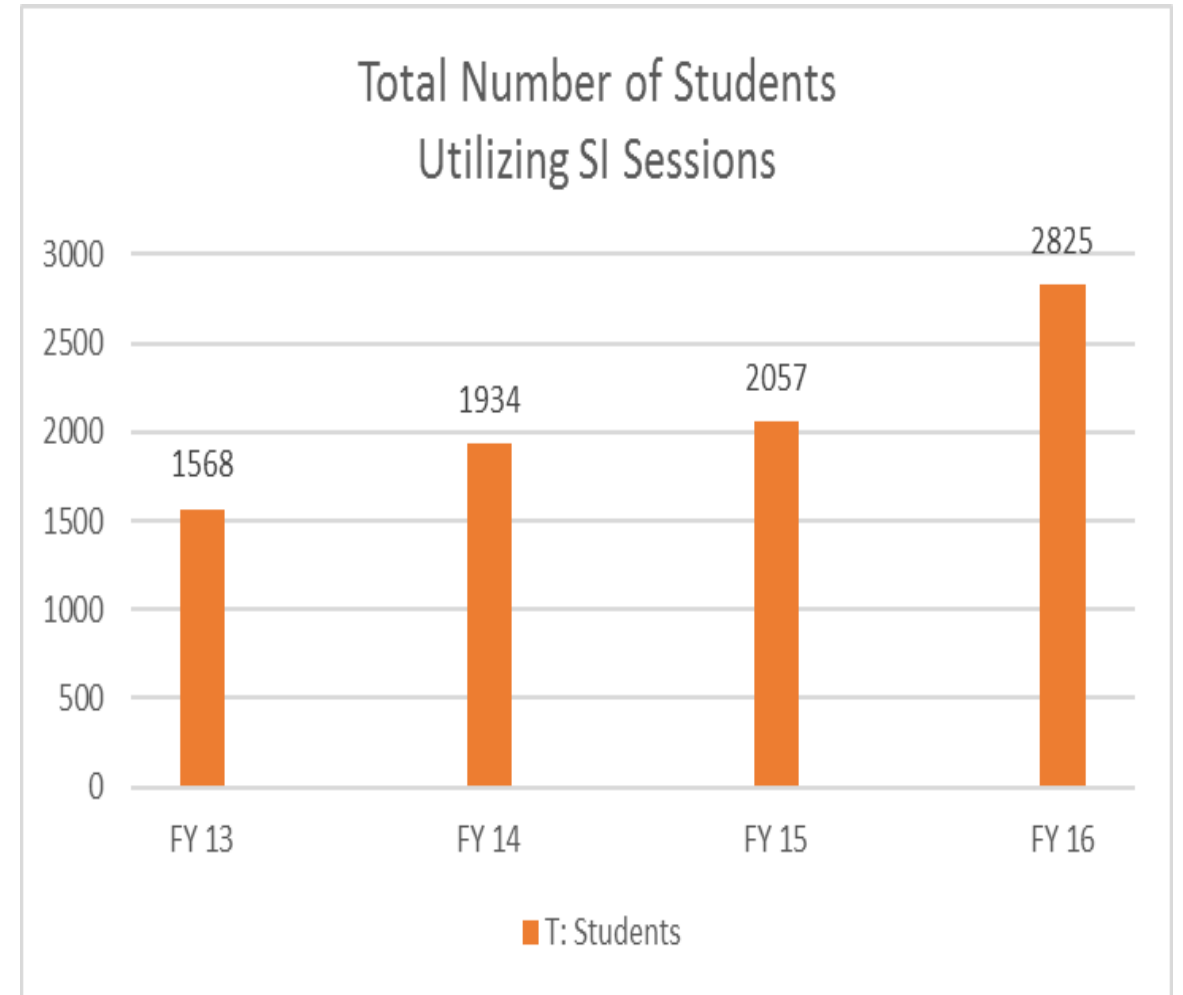
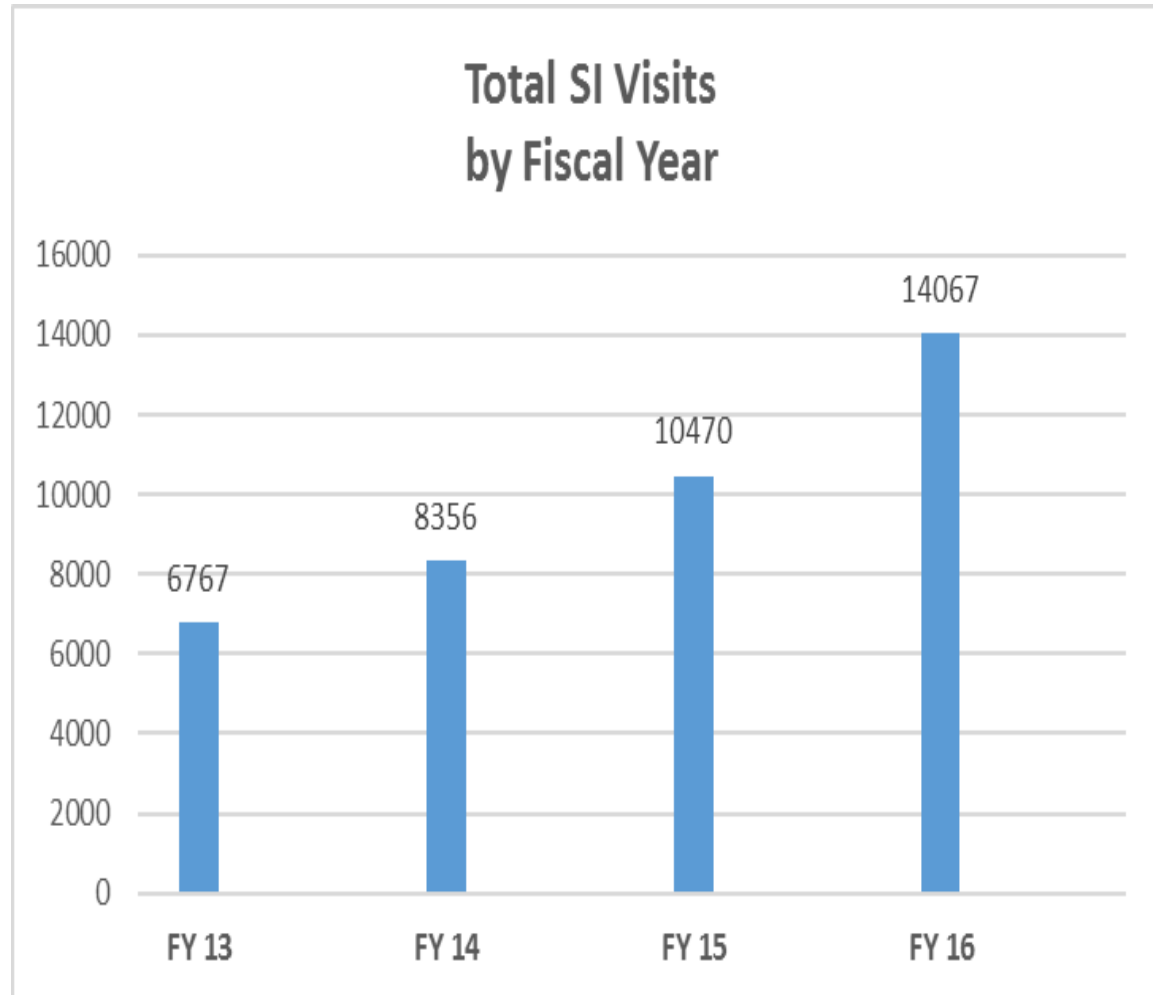
*89 Responses



Student Survey

	Question	Average
1	SI was well-prepared and capable.	4.83
2	The SI treated the other students and me with respect.	4.93
3	The SI made him/herself available to students in class.	4.83
4	My grade improved because of SI.	4.69
5	SI sessions were helpful for me.	4.72
6	Due to the skills I have gained from SI sessions I am now more confident about doing well at the university than I was at the beginning of the course.	4.69
	Averages below represent the percentage of yes respondents.	
7	I will use SI for future classes.	100.0%
8	I would recommend SI to a friend.	100.0%
9	The SI leader checked my understanding by:	
	Asking me questions	96.6%
	Having me work problems	100.0%
	Listening to my explanations	96.6%
***	26 of 28 students responded who attended SI Sessions	92.9%
	Tracie Self	
	<i>If the response rate is above 100%. Then a student may have failed to sign in or they filled out the wrong portion of our survey questionnaire.</i>	

The Numbers



Course Evaluation top portion

GRADE DISTRIBUTION SHEET

SI Leader(s):

Nathan Anisko

Course:

CHEM 3361- O Chem I

Term:

Fall 2015

Instructor:

Mills

Sections:

2

CRN(s):

80412

	A	B	C	D	F	W	
0	0	2	2	2	4	1	
1-3	1	3	2	0	0	2	
4-6	1	1	0	0	0	0	
7-10	1	4	1	0	0	0	
11+	10	3	5	1	1	0	SUM
Total	13	13	10	3	5	3	47
Attended	13	11	8	1	1	2	36

Overall GPA	2.59
Attending GPA	3.00
Non-attending GPA	1.20
GPA difference	1.80
DWF Rate	23.40%
% attended	77.27%

Of the 47 student(s) represented in the 2 section(s) of this course, 44 student(s) completed the course, and 81.82% (36) earned a grade of A, B, or C. Of those that earned a grade of A, B, or C, 88.89% (32) of those students attended at least one SI Session.

Course Evaluation continued

Our statistics are based on the students who completed the course.

Overall, 100% (13) of all students who earned an A in this course attended at least one SI Session.

- 7.69% (1 student[s]) attended 1 to 3 sessions.
- 15.38% (2 student[s]) attended 4 to 10 sessions.
- 76.92% (10 student[s]) attended more than 10 sessions.
- 0% (0 student[s]) did not attend any SI Sessions.

Overall, 84.62% (11) of all students who earned a B in this course attended at least one SI Session.

- 23.08% (3 student[s]) attended 1 to 3 sessions.
- 38.46% (5 student[s]) attended 4 to 10 sessions.
- 23.08% (3 student[s]) attended more than 10 sessions.
- 15.38% (2 student[s]) did not attend any SI Sessions.

Overall, 80% (8) of all students who earned a C in this course attended at least one SI Session.

- 20% (2 student[s]) attended 1 to 3 sessions.
- 10% (1 student[s]) attended 4 to 10 sessions.
- 50% (5 student[s]) attended more than 10 sessions.
- 20% (2 student[s]) did not attend any SI Sessions.

Overall, 33.33% (1) of all students who earned a D in this course attended at least one SI Session.

- 0% (0 student[s]) attended 1 to 3 sessions.
- 0% (0 student[s]) attended 4 to 10 sessions.
- 33.33% (1 student[s]) attended more than 10 sessions.
- 66.67% (2 student[s]) did not attend any SI Sessions.

Overall, 20% (1) of all students who earned an F in this course attended at least one SI Session.

- 0% (0 student[s]) attended 1 to 3 sessions.
- 0% (0 student[s]) attended 4 to 10 sessions.
- 20% (1 student[s]) attended more than 10 sessions.
- 80% (4 student[s]) did not attend any SI Sessions.

Supplemental Instruction Summary Report - Fall 2015

Course	Section(s)	Class Enrollment	Number Attended (Completed Course)	Percent Attended	Number of Session Hours Offered	Student Contact Hours	Mean Grade SI	Mean Grade non-SI	Diff in Mean Grade SI/Non	SI Attendee DWF Rate	Non-SI DWF Rate
ASTR 1000	1, 2, & 3	186	91	49%	54	515	3.33	3.13	0.20	4%	16%
Astronomy Total	3	186	91	49%	54	515				4%	16%
BIOL 1100	1 & 2	117	69	59%	47	293.75	3.15	2.51	0.64	14%	23%
BIOL 1100	4 & 5	119	85	71%	48	473.75	2.59	2.07	0.52	23%	45%
BIOL 1107	4	26	13	50%	50	110	2.53	2.43	0.10	19%	50%
BIOL 2100	1 & 2	40	26	65%	48	341.25	2.63	2.33	0.30	24%	0%
BIOL 2100	3 & 4	39	28	72%	48	109.25	2.97	2.50	0.47	10%	25%
BIOL 2160	1, 2, & 3	66	32	48%	42	212.5	2.20	1.50	0.70	33%	67%
Biological Sciences Total	18	426	234	55%	380	1,708				22%	35%
CHEM 1151	1 & 2	117	93	79%	48	495	2.94	3.00	-0.06	5%	26%
CHEM 1211	1 & 3	126	85	67%	46	478.75	3.29	3.03	0.26	5%	25%
CHEM 1211	4	63	46	73%	48	257.5	3.00	2.69	0.31	2%	18%
CHEM 1212	1	62	37	60%	49	232.5	2.76	1.83	0.93	21%	53%
CHEM 1311	1	32	17	53%	48	147.5	2.71	2.50	0.21	38%	38%
CHEM 3361	1	48	37	77%	48	443.75	2.35	1.00	1.35	33%	100%
Chemistry Total	11	560	388	69%	431	2,795				15%	40%
Computer Science Total	4	128	54	42%	144	478.75				36%	43%
Geology Total	2	64	47	73%	96	171.25				4%	13%
KINS 2200	1	72	62	86%	48	571.25	2.97	2.63	0.34	8%	13%
Health Science Total	1	72	62	86%	48	571.25				8%	13%
MATH 1113	4, 5, & 7	104	25	24%	48	50	2.76	2.57	0.19	17%	43%
MATH 1113	6, 8, & 9	85	47	55%	48	353.75	2.81	2.59	0.22	22%	50%
MATH 1261	4, 5, & 6	72	57	79%	48	521.25	2.91	2.80	0.11	13%	17%
MATH 1261	7	24	19	79%	48	137.5	3.42	3.25	0.17	10%	0%
MATH 1262	1 & 3	50	29	58%	48	447.5	1.83	0.63	1.20	54%	82%
MATH 1262	2	15	10	67%	48	47.5	3.20	1.67	1.53	0%	60%
MATH 2600	1	38	31	82%	48	238.75	2.29	2.00	0.29	28%	33%
MATH 2600	2	39	22	56%	48	160	2.55	2.08	0.47	20%	43%
Math Total	15	427	240	56%	384	1,956.25				23%	44%
Physics Total	3	145	56	39%	144	207.5				13%	28%
Psychology Total	5	100	63	63%	240	267.5				11%	27%
Grand Total	67	2,316	1,332	58%	2,064	9,285.5					

Not Just the GPA

Potential and Realized Gains for Students

Student Gains



- Focused content sessions
- Collaborative learning
- Frequent interaction with content language
- Variety of content communication
- Community and social interaction
- Study skills
- Applying knowledge

SI Leader Gains



- Partnership with faculty
- Confidence
- Develops Leadership Skills
- Communication skills
- Strong content knowledge
- Insight into higher education
- Insight into the professor's role
- Work experience
- Career clarity

SI Coaches Gain



- Leadership skills
- Mentoring skills
- Big Picture perspective
- Importance of reflection
- Understanding intentional and meaningful support
- Appreciation for different disciplines and learning styles
- Deeper understanding of higher education

EVERYONE GAINS



Forward Thinking



- Digging deeper with assessments
- Improvement of recruitment and selection process
- Longitudinal Study - opportunity
- Building a culture of learning
- Best courses for SI Support
- Identify SI-supported courses concurrent with registration
- Institutional funding
- Logistical challenges

Thank you!

Questions?

Improving the Program: Broadening the Hiring Pool

- Potential SI Leaders identified early:
 - GPA, “A” in course, ? transfer/AP credit
 - Recommendation (faculty, Advisor, SI Leader, Tutor)
 - Response to preliminary tasks
- Candidates invited to info session
 - Discussion with Coaches, submit application, forecast schedule
- Candidates and returning leaders matched to available courses
- Short list of matches shared with professors for consideration
- Professors interview and weigh-in

Our Goals:

- Raise the standard of the program
- Identify "coachable" leaders
- Competition
- Retention strategy with sophomores
- Interview practice
- Larger candidate pool
- Reflection from professor(s)
- Less work for the professor
- Uniform process
- Elevate assessment of “soft skills”
- Collaborative effort

Role of GC Director:

- Develop training materials and necessary paperwork
- Determine additional funding sources
- Offer SI positions to Departments
- Review and allocate positions (with SI Program Committee)
- Work with faculty to identify potential SIs
- Hire, train, and provide ongoing materials to SI Leaders
- Market SI sessions
- Supervise Coaches and SIs throughout semester
- Survey students from SI-supported classes
- Collect data from SIs; tabulate data, statistics
- Collaborative tracking, assessment and retention predictions
- **Shared responsibilities**
 - Identifying SIs
 - Training and co-mentoring
- **Support Working Liaisons**
 - Between Coaches and SI Leaders (within Communities of Practice)
 - Between faculty and student
 - Between SI and student



**SI Coordinator
leading a hiring/training
session**