



TABLE OF CONTENTS

What is Supplemental Instruction?	
Definition	2
Mission Statement	2
Vision	3
Goal & Objectives	3
SI History	
General History	4
LUSI History	4
Why Use SI?	5
SI Model and Basic Design	
SI Administration	6
SI Faculty	7
SI Leaders	8
Students	8
Role of the SI Leader	9
Responsibilities	9
SI Leader Recruitment	10
SI Leader Training & Certification	10
Technology in SI	12
Frequently Asked Questions	12
SI Leader Job Description	14
SI Leader Job Application	15
SI Leader Survey	16
SI Participant Consent Form	18
SI Participant Survey	19
SI Faculty Consent Form	21
SI Faculty Survey	22



What is Supplemental Instruction?

Definition

Supplemental Instruction (SI) is a peer-mediated academic program that provides guaranteed study time and assistance to students enrolled in traditionally difficult courses. Traditionally difficult courses are those with high unsuccessful completion rates that students either withdraw from or obtain a grade below a C, regardless of the faculty member that instructs the course. The Lincoln University Supplemental Instruction (LUSI) program currently services traditionally difficult courses in the School of Natural Sciences and Mathematics.

The program allows students to work jointly with peer students in a facilitated environment and obtain support from a trained SI Leader. Each SI Leader can choose the manner in which they conduct sessions but all sessions are done using collaborative learning methods. SI sessions are held 2-3 times per week for a total of three hours of SI per week on campus in a designated classroom. During a typical SI session, students have the opportunity to compare and contrast lecture information and notes, review textbook readings, and discuss key concepts being covered in the course. SI also provides numerous opportunities to enhance the student's ability to effectively study by providing challenging critical thinking activities, which have been proven to improve the efficiency of the student's skills specific to each course.

Although participation in SI is voluntary, all students are encouraged to attend sessions and not only those who are struggling in the course. It is important to understand that the SI is not a remedial program and it supports high-risk courses rather than high-risk students.

Mission Statement

The mission of the Lincoln University Supplemental Instruction program is to provide peer-assisted learning services to undergraduates in high risk science, technology, engineering and mathematics (STEM) courses as they matriculate at Lincoln University. The collaborative learning techniques employed by the Supplemental Instruction program will equip students with the inquisitive and analytical mind that is necessary to succeed in a STEM career and other related post-graduate opportunities. We are committed to using the SI program as a tool address the underlying problems regarding low graduation and retention rate with declared STEM majors.



Vision

The vision of the Lincoln University Supplemental Instruction program is to foster an environment for our undergraduates to engage one another in order to master understanding mathematics, biology, physics, chemistry, and computer science concepts. We are focused on conducting peer-assisted learning, which will enable our students to communicate effectively in writing and speech about the science content necessary for success in high-risk courses. Our effort is anchored on improving the graduation and retention rates in STEM programs at Lincoln University by positively changing their perception of science careers, incorporating relevant technological tools and improving the grades of students enrolled in traditionally difficult courses.

Goal and Objectives

The main goal of LUSI is to make our STEM students better critical thinking learners by using these specific objectives:

- Increase student understanding of the content in traditionally difficult courses.
- Enhance the grades of students enrolled in traditionally difficult courses.
- Increase the rate of science, technology, engineering and mathematics graduates at Lincoln University.

The LUSI program is geared towards improving students' class standing by one-half to a full letter grade by doing the following:

- Train SI Leaders to professionally hold a SI session with the appropriate narrating, counseling techniques and SI fundamentals such as redirecting a question and activities like "think, pair, share".
- Get faculty trained and updated on the progress of implementing the LUSI program. Utilize the faculty support to market SI to students in class.
- Assist SI Leaders with designing activities that get students to critically think about class material..
- Help SI Leaders incorporate technological devices, like smartboards, iPads and cellular phone applications, for enhanced visual understanding to benefit each student.
- Utilize the online website, facebook, email, brochures and other marketing tools to create a web of communication for SI Leaders, students and faculty regarding the benefits of the program.



Supplemental Instruction History

General History

In 1973 Dr. Deanna Martin from the University of Missouri-Kansas City (UMKC) created Supplemental Instruction due to her concern for the university's dramatic change in the demographics of the student body and the sudden rise in high failure at the institution. UMKC, much like other institutions across the United States, was experiencing financial difficultly and it became problematic to recruit highly qualified students. Dr. Martin devised the SI Model to help cut the cost of tutoring services and to provide a service for students to develop their learning skills at a faster rate. The initial SI evaluations were remarkably impressive and word about the program quickly spread to the other health professional schools across the campus and the entire university. After observing the success rate at UMKC, other institutions of higher learning began implementing the SI program. Supplemental Instruction was named an Exemplary Education Program in 1981 by the US Department of Education. Supplemental Instruction is held at high distinction, has been implemented on campuses in over 27 countries and is being practiced in more than 1800 institutions in the United States today.

Lincoln University SI History

The Lincoln University Supplemental Instruction (LUSI) program was initially implemented as a pilot in 2010 at Lincoln University under the Lincoln's Excellent Academic Program in Science: Forward (LEAPS: F) National Science Foundation (NSF) grant. The main focus of the grant was to "consolidate and sustain the efforts of the previous awards to significantly increase the pool of minority students pursuing degrees and careers in the sciences." The fundamental goal of the SI program is "to improve students' learning and study skills and their commitment to succeed in college, and thereby increase retention and graduation rate of STEM majors." The Supplemental Instruction program has been steadily growing and improving since its inception at Lincoln University with the cooperation of the faculty and staff within the School of Natural Sciences and Mathematics. The LUSI program has been proven successful thus far and remains a high demand from both students and faculty. The Supplemental Instruction program is currently funded by the LEAPS: Forward March NSF grant with the same goal as the previous grants but with a tailored focus on incorporating technological advances, such as iPads and smart-board software, to teach the students.



Why use Supplemental Instruction instead of tutoring?

Supplemental Instruction has a unique approach to learning. By utilizing peer-assisted study sessions, students engage one another to learn the course information. The structure of the SI session is designed to create an environment for the students to interact during learning activities as they collaboratively solve problems. The collaborative learning environment allows each student to be a part of answering work assignments, while reinforcing the course information in an enjoyable manner. Distinctively different from tutoring in which a tutor is paired with one or more students, during SI sessions each student has the opportunity to support the group and aid others to master the information. Although it has been shown that tutoring did improve participating students' grades, most students with low pass rates did not elicit tutoring services. It was also found that tutors benefitted the most from this structure because they repeatedly overviewed the information while tutoring. In the Supplemental Instruction program every participating student becomes a tutor by asking questions and simply communicating during sessions. This gives the students time outside of class to practice basic concepts using their own language, understanding and critical thinking skills.

	TUTORING	LUSI
SUPPORT	Certain Programs for example Biology, Math or both	Specific classes for example BIO-103-01, each section gets an SI Leader
SIZE	One on One	Groups vary by class and sessions from 3-30+
COURSE EXPERIENCE	Tutor does not need course or class experience	Must have taken the class and showed competency
COURSE ATTENDANCE	Tutors do not have to attend classes they tutor for.	Mandatory for SI Leaders to attend assigned class.
COURSE APPROVAL	Does not required faculty approval to get tutored.	Faculty recommendations and approval for SI to be held in their class is required
LOCATION	Held in offices or Learning centers.	Held in the assigned class location as well as library and computer labs.
LEARNING STYLE	Passive Learning usually tutor doing most of talking and teaching with paper and notebook.	Collaborative learning with students mostly talking and using the smartboard to save their work.
TRAINING	No training required	Mandatory certified training



The SI Model and Basic Design

Following are the key personnel that make up the Supplemental Instruction Model:

- SI Administration
- SI Faculty
- SI Leaders
- Students

SI Administration

The administration of the SI program is responsible for maintaining a rapport with the administration of the university that is acquiring the program, while ensuring they have the proper individuals to successfully execute the program. It is comprised of a team of trained professionals who have spent a good deal of time in academia and have demonstrated their knowledge and application of understanding a student population. They have the daunting task of not only understanding the culture of the university in question, but also identifying the courses that have been historically challenging to minority students and adding these courses to the program. The administration is responsible for building a relationship with the professors of these courses to gain in depth knowledge regarding the material, study patterns that are recommended, the necessary steps to staying progressive out of class, and also imperative coverage areas for SI sessions. These steps will undoubtedly produce the framework for a successful after class program, which addresses the needs of students who struggle immensely in these courses.

The administration of the SI program is also responsible for the selection of the SI Leaders. The identification of these students is very important because they should proficient in the course, support the mission of the program and want the students involved to be successful in the program. This can involve a rigorous screening process to obtain the role of SI leader and also designing a series of guidelines for the SI leader in question to abide for their duration of time spent with the program. Once the SI Leaders have been chosen to represent the program, a thorough yet efficient training program must commence to ensure the SI leader will be putting the students in the best position to succeed. The SI administrators will monitor their progress. The administration must continue to supervise the program providing the necessary training and resources to the SI Leaders and offering the best assistance possible to the students while they are enrolled. The administrators must also continue to monitor the statistics of the program on a bi-annual basis to ensure the core goals are being met such as student's improvements in grades, the application of the acquired study habits, improve the



retention of students in these courses and ultimately improve the graduation rate. Lastly, the administration of the SI program is required to travel and publicize the LUSI program. They must attend conferences that target SI implementation.

SI Faculty

The faculty of the SI program acts as an indirect liaison between the SI administration and the SI Leaders. They are responsible for ensuring that the students enrolled in the program are receiving the correct information towards achieving higher grades in the course. The faculty members are aware of the goals of the SI program and take a proactive stance towards creating a relationship with the program. Involved faculty must view and approve of the support for their classes. This process includes the instructors meeting the administration of the program, approving the SI leaders who will provide the support for their course and providing valuable information to the SI program on how to construct the sessions. The administration requires that the professor and SI Leaders have weekly meetings to foster a competent relationship that will ensure success of the students.

The SI Faculty begins the semester by ensuring that students are aware of the services being provided by LUSI. The instructor, along with the SI Leader, provides the class with information regarding the details of the SI program, the availability of the sessions and SI Leader who will be immense help outside the classroom. The faculty members must show their full support for the program and inform the class of the progress that can be made in the course by getting involved. Throughout the duration of the semester they must continue to inform the class of the program and any announcements that may be important to the material they are currently studying. The instructors have the very important task of informing the students that sessions are not simply for students who struggle but also for students who are currently doing well in the program to create an environment where everyone can work to achieve the highest grade possible in the course. The SI program works with the faculty to create a session, which aids in the understanding of the difficult task and not reducing the requirements of the course nor making the course load easier. A monthly training session is provided for the faculty members to keep them aware of the intentions of the program, to get feedback on the progress of students and suggestions on how the program can be improved. The expectations for the Faculty are as follows:

- Raise awareness about the SI program
- Work with the SI leader and allow the leader to speak to the class in session (announcements, tutoring, emails)



- Make one visit to the SI session per semester and discuss the session in class
- Have mandatory weekly meetings with the SI Leaders to discuss course materials and progress of students (finding ways to constantly improve the program)
- Attend meetings and trainings held by the SI Administrators regarding the progress and advancements of the program.

SI Leaders

LUSI Leaders are students enrolled in Lincoln University who show above average competency in a course that has historically plagued students. LUSI Leaders play an intricate role in the overall success SI program as they are responsible for the implementation and construction of SI sessions as well as the knowledge gained by the students who participate in the program. Their training in proactive learning and the application of a unique set of study skills will assist in ending low graduation rates, high withdrawal statistics and the overall success of students in targeted courses.

The following requirements must be met:

- S.T.E.M or School of Natural Sciences and Mathematics major
- Cumulative GPA of 3.33 and above
- Received an B or better for the LUSI course they are looking to support
- Be able to attend an assigned SI class at least twice a week.
- Have a positive attitude and good communication skills.
- Please see LUSI Leader Job Description sample for more.

Students

The students are the most important element of the Supplemental Instruction program as they are responsible for determining what courses the program implements on a bi-annual basis. The SI program has made an effort to view the progress of students in historically difficult courses and designed a prospectus which tailors to the needs of the students; enhance study habits, and produces higher understanding and marking grades in the course. The program coordinators understands that the academic background of each student differs in respect to what courses were offered in high school and also the outlying factors, which may have prevented the students from receiving the best education available. They also understand that students may not be prepared for the rigors of college life and the difficulty of the courses therefore this program creates an environment that will not threaten them. Instead it allows students to embrace the difficulty of the classes and teaches them valuable skills that will prepare them for each semester and propel them towards graduation.



The program does a great job of not deterring any level of student but encourages all students that are enrolled in traditionally difficult courses to get involved with the SI program. Students are charged with the responsibility of taking advantage of the resources available from the program as they aspire to acquire a more profound understanding of the course and achieve a higher letter grade for the semester. Students enrolled in the SI courses are required to complete a set of surveys after signing a consent form. This allows the program directors to assess the progress of the students as well as analyze the services provided by the SI Leaders and the program.

Role of the SI Leader

Supplemental Instruction Leaders are considered to be the first line of defense from the opening of the term until the last session of the semester. It is important for the success of our program that LUSI Leaders keep proper attendance records and well as regular communication between SI administrators and faculty. LUSI Leaders will work with the students to ensure understanding and planning for the rigors of these courses as well as; teaching students the critical thinking skills needed through multiple stages of trial and error, learn to work efficiently and effectively while enrolled in the course and overall gain effectual skills, which focus on the how and what of the material. The role of the LUSI Leader begins before the actual session, as a thorough knowledge of the course is expected to ensure maximum efficiency in the study session.

Responsibilities

The top 10 responsibilities required of the SI Leader are as follows:

- 1. Be present from the first day (week) of class to introduce oneself, talk about the LUSI program and set up your SI sessions for the class as well as distribute initial survey.
- 2. Keep attendance of each session and email the results to faculty and coordinator every other week.
- 3. Conduct yourself in a manner conducive to high marking grades while attending class (taking notes, asking questions, speaking with professor etc.)
- 4. Read all assigned readings and text in concordance with the course material.
- 5. Organize and design study sessions at the minimum 2-3 hours per week while enrolled in the course.
- 6. Be present on for tests, acquire dialogue from participating students after the test for review and understanding of material.
- 7. Communicate with students to create a comfortable environment and breed a mindset of success going forward



- 8. Attend weekly SI training sessions with the SI Supervisor and schedule weekly meetings with the professor of the assigned SI course.
- 9. Stay in constant contact with students via email, facebook, groupme or other technologically advanced ways throughout the entire course to encourage attendance and participation with the program.
- 10. At the end of the course distribute and collect data for the final survey in order to measure and track progress of the program.

SI Leader Recruitment

To become a Supplemental Instruction Leader for the LUSI program you are required to apply, satisfy all of the requirements for the program, complete the interview process, be appropriately matched with an SI course and attend the LUSI program training prior to the beginning of the semester. Lincoln University SI Leaders are some of the best and promising students and are recruited if they meet the requirements. Faculty members may also recommend exceptional students that have excelled in their course.

SI Leader Training and Certification

Lincoln University Supplemental Instruction Leaders are required to attend a mandatory 2-day training prior to the beginning of the assigned SI course as well as weekly for their term in the program. The initial 2-day training includes:

- Collect schedules and assign SI Leaders to the course they can attend.
- Collect a brief handout about SI and some FAQS
- Overview the benefits of the program for both SI Leaders and students.
- Review job requirements, sign the position agreement and other employment documents.
- Observe a role play SI session by fellow SI Leaders and coordinators showing strategies and activities that can be used during a session.
- List study strategies and activities that students can benefit from as well as showing how they can be used for different subjects.
- Collect attendance forms, study session planning and student data information.
- SI Leaders must practice their introduction speech by going through FAQs and provide examples of how they intend to market the program.
- Watch a training video that illustrates how to properly handle uncooperative students during SI sessions.
- Review appropriate student data collection (email addresses and available study times) to schedule the best time for sessions that will meet student needs.



One of the major points emphasized during training is familiarizing LUSI Leaders with study skills, techniques and creative ways of getting students to study without knowing they are actually studying. This method is usually exercised through interactive game (crossword puzzles, jeopardy etc.), visual aids (flashcards, charts etc.) and online videos/movie clips (khan academy). Previous LUSI Leaders must also attend the training to reinforce the strategies and activities used during an SI session. Training sessions are to ensure that the SI Leaders are holding proper SI sessions and also to make sure scheduling and SI session locations are properly conducted. During training sessions the SI Leaders and Administrators also devise new ways of engaging our students as well as maintaining attendance.

LUSI leaders are also trained on how to communicate with faculty members as well as students in the program. In order to improve faculty-SI Leader relationship, there is also a mandatory pre-semester training with faculty and SI Leaders to discuss the goals and expectations of the program. It is imperative that they address the necessary questions and cover the important details during the weekly meetings with the professors so that our students will always receive the desired services. Forms are provided to the SI Leaders for their students at the beginning of the semester consisting of their contact information such as email, phone and available times. The SI leaders are then encouraged to create facebook groups or email groups to keep in contact with students. The LUSI Leaders must constantly provide students with reminders of session times and locations as well as the various topics covered weekly.

At the beginning of each week the SI Leader, along with the SI administrator must prepare a folder consisting of attendance sheets and planned SI activities for the week. These folders are collected at the end of each week and updated for the following week. This allows the SI administration and SI faculty to monitor the progress of the program and to make changes and adjustments as necessary.

LUSI Leaders make an hourly wage working 12 hours per week and are hired on a semester basis. Past LUSI Leaders do not need to reapply and will be rehired if their services were deemed satisfactory by the SI administration and faculty. Each LUSI Leader must hand in attendance to show that they are keeping up with their schedule.

- The 12 hours are disbursed as follows:
 - 3 hours of attending class and meeting with faculty
 - 3 hours of sessions
 - 5 hours of office hours and preparing for sessions
 - 1 hour training session



Technology in Supplemental Instruction

In just a few decades, the Internet and wireless technology have changed the way we live and critically think. Professors no longer have to physically attend class because they can show a video or use a telecommunication system. Similarly students may not feel the need to come to class or participate because the information can be found on the Internet. One of the biggest issues we face today within the classrooms is that students find it hard to disconnect from their gadgets and give the lecturers their full attention. Their improper use of technology as a means of communication during class sessions and study time has become a concern at our institution. Our aim is to incorporate a way that will allow students to stay connected with their devices but in an appropriate and acceptable manner within the classroom. Apple iPads were issued in a few SI courses to the students, with specified applications installed that were related to the course. Based on the successful results of the iPad implementation, students were very motivated and higher grades were achieved. The SI administration will continue using the iPad within SI courses.

The SI administration has found that the use of the internet (SI webpage), twitter, facebook as well as smartphone applications have been very effective in getting students to attend sessions and disseminating information from the sessions. SI Leaders are encouraged to create a groupme chat and a facebook group page for their students. This allows for regular group discussions about what is currently taking place in the course as well as study approaches to understanding the course material. The SI Coordinator links all the SI Leaders' academic facebook pages to the LUSI Program webpage and also uploads the weekly sessions for students who may have missed a session.

Frequently Asked Questions

What courses are selected for SI?

SI targets traditionally difficult courses. In other words, this course contains content that students consider to be challenging. SI is designed to support faculty teaching and is assigned to a subject because of *what* is being taught, *not* because of the manner in which it is being taught.

How will I know what courses offer SI?

The SI faculty and SI leader will make an announcement about sessions on the first day of class. There will also be a listing of available SI courses and their designated SI leader on the SI webpage http://www.lincoln.edu/supplemental/



When do SI sessions start?

SI sessions start between the first and second week of class. SI leaders will pass out a brief survey and ask students to mark their available times on the first day class. After reviewing the survey, the SI leader will announce the time and location for sessions.

What happens at an SI session?

SI Leaders will help you develop better study skills, answer your questions, and share with you the strategies and skills to succeed in the course. More importantly, they will help you learn how to approach the course material and prepare effectively for assignments and exams.

What are the limitations of an SI leader?

An SI leader's role is to support student learning and they are trained to kept student grades confidential. SI leaders are not responsible for assessing or evaluating students. They may not submit coursework, write exam questions or record grades on the behalf of a student. SI leaders must focus on course content.

Does SI work?

Students have been surveyed at hundreds of other universities across the USA in SI classes and the performance of students who attend SI sessions and those who do not has been analyzed. The data consistently show the same results. Students who attend SI:

- Get better grades
- Do not withdraw as frequently
- Have higher rates of persistence to graduate

How much does SI cost?

SI sessions are free. Students are encouraged to come as often as they like, however, the statistics show that the more students attend, the better the grade they receive.

How much work will it be for me to have SI support?

The SI program is coordinated by the SI administration in the School of Natural Sciences and Mathematics. SI-supported faculty are only required to provide a few minutes at the beginning of each class for the SI Leader to make relevant SI announcements. Also time to meet with the SI Leader and SI administration to discuss the progress of the program.

How can I contact the SI Coordinator?

Contact the SI Coordinator in the Nelson Center for the Sciences Room 202 by phone: (484) 365-7570 or email: uchikwem@lincoln.edu



LINCOLN UNIVERSITY SUPPLEMENTAL INSTRUCTION LEADER JOB DESCRIPTION

Position Summary:

The Lincoln University Supplemental Instruction (LUSI) Leader is our best example undergraduate, with an A or better in the class assigned to, who instructs, at least three hours a week, peer-group study sessions for students who are enrolled in a Science, Technology, Engineering and Mathematics (S.T.E.M.) undergraduate courses of a historically difficult or high failure and withdrawal rate. LUSI Leaders are not your ordinary TA or tutor but instead play an important role as "model students" who attend every class, take notes, and lead at least three hours of SI sessions each week. SI sessions offer a different approach of learning, using proven peer-assisted activities where students teach other students just through simple interactions.

LUSI Leaders take on an important role in revamping Lincoln's Legacy by improving the retention and graduation rate of undergraduates in S.T.E.M.

Requirements:

- Recommendation letter or email from faculty.
- Taken the class with an A- or better final Grade.
- Cumulative GPA of 3.33 and above.
- Agreement to attend Mandatory Certification Training meetings, early before semester starts.

Responsibilities:

- Attend ALL classes for the assigned course section, or at least three hours per week.
- Plan and facilitate, at least three hours per week, SI sessions, free to all students enrolled in the SI course.
- Keep good attendance records of all SI sessions and Office hours for faculty incentives and grant data.
- Attend mandatory weekly LUSI Leader training.
- Proper *USE* of technology, like email, Ipads, or Facebook, to communicate clearly with
 not only the enrolled students but also the SI Assistant Coordinator and assigned faculty
 member about plans for SI sessions times and activities.

Qualifications:

- S.T.E.M. or School of Natural Sciences and Mathematics, Major.
- Good Speaking, Listening, Questioning and Counseling skills.
- Proven record of attendance and supporting S.T.E.M. events.
- Excellent relationship with faculty and students.
- Sign-up, or existing user, to apps like *GroupMe*, *Dropbox*, *Facebook*, *Twitter*.
- Positive attitude towards helping and being a role model.

An ideal candidate for the LUSI Leader position has to be a Lincoln University undergraduate student who has received an A or B at LU for the LUSI course they are looking to support. LUSI Leaders must have excellent role model skills, with good record of outstanding class attendance and GPA, and the ability to communicate effectively with peers, staff, and faculty.



<u>LINCOLN UNIVERSITY</u>
SUPPLEMENTAL INSTRUCTION EMPLOYMENT APPLICATION
Please submit to Uzoma Chikwem at NCS 202 or Dana Wallace, NCS 342, or scan and email to uchikwem@lincoln,edu

Name:			
(Last)		(First)	(MI)
Major:	LU Student ID:		LU Email:
Phone#:	How did yo	u hear about S	31?
☐ Yes, Please ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	essions before or participa	tutoring:	
Year? Freshma	n Sophomore	Junior	Senior
What courses and faready to Lead?	aculty members are yo	u confident t	that you are academically
1			
2			
3			
Questions: (Please	write or type on anothe	er piece of pa	aper if you need more room)
Why do you want to be	a LUSI Leader?		
What qualities do you l	nave that qualify you to be	a "model stud	lent"?
What advice might you	give freshmen students to	help them be	successful in the S.T.E.M. field?
How might being an SI development?	Leader contribute to your	own personal	l, academic or professional
I herby attest that all in	nformation contained in th	is application	is truthful and accurate.
(Signature)			(Date)



LINCOLN UNIVERSITY SUPPLEMENTAL INSTRUCTION LEADERS SURVEY

This brief survey is for the semester Supplemental Instruction (SI) Leaders at Lincoln University. This survey is part of the external evaluation for the National Science Foundation (NSF) awarded to Lincoln University, which supports the SI program. Since SI is relatively new at Lincoln University, survey information will be used as data for program improvement. Please remember your answers will be kept strictly confidential as results will be reported only in the aggregate. Individual answers associated with the identity of survey respondents will not be shared or released. MERAssociates, an independent evaluator to Lincoln University, is fully responsible for survey administration and analyses. This survey is voluntary and you are free to choose not to participate. However, your participation will contribute to continuing efforts to improve undergraduate education in mathematics and science at Lincoln University as well as ensure Lincoln University meets federal requirements to complete an independent evaluation of program services.

Please print the following information:

Name:	Stude	nt ID#:		Date:
Year of Study: Freshman	Sophomore	Junior	Senior	
Major:				
I was a SI Leader during Seme	ester for:			
Course		Professor _		
Had you already taken the course f Yes No If No, skip to Que	•	assigned as a	SI Leader?	
2. When you took the course, what v	was your final grad	le? A E	3 C	_Below a C
3. How often did you attend class this I attended every class I regularly attended classes I occasionally attended classes I rarely attended classes I never attended any classes		course you wer	e assigned	as SI Leader?
4. How often did you attend training I attended every SI training I regularly attended SI traini I occasionally attended SI training I rarely attended SI training I never attended SI training	session ng sessions aining sessions sessions	ester for SI Le	eaders?	



5. Please respond to the following statements in relationship to the course you were assigned as SI Leader. "My course" means the course you were assigned as SI Leader and "the instructor" means the professor who taught the course. For each statement, indicate the extent of your agreement. Please answer honestly and to the best of your ability.

, , ,			Neither	,		
Statement	Strongly		Agree nor	D:	Strongly	Not
Most students in my course knew SI sessions were offered.	Agree	Agree	Disagree	Disagree	Disagree	Applicable
The instructor encouraged students to attend SI.						
The instructor gave extra credit for attending SI.						
The instructor shared information and material from the course						
with me.						
Students were informed in advance if there were any changes to						
the SI schedule (e.g., location change, canceled session).						
I posted SI materials and information online for my SI students.						
My SI sessions were well attended.						
Students do not see a need for attending SI sessions.						
Most students come to SI when tests are scheduled in their classes.						
I made sure the material covered in my SI sessions was connected to what was being taught in class.						
Training sessions for SI leaders were scheduled when I could attend.						
Training sessions for SI leaders were held in convenient locations.						
The SI training sessions helped prepare me to be an effective						
SI Leader.						
The SI training sessions helped me learn how to manage						
SI sessions.						
The SI training sessions helped me learn how to explain course concepts clearly.						
The SI training sessions helped me learn how to foster						
independent thinking in students.						
The SI training sessions helped me learn how to use a variety of different activities in the SI sessions.						
The SI training sessions helped me learn how to create a						
meaningful learning environment for students.						
The SI training session helped me learn how to interact and						
communicate with faculty.						
The SI Coordinator provided the resources and support I needed to						
be a successful SI leader.						
The SI Coordinator was accessible to SI leaders.						
Overall I enjoyed being a SI leader						
I would be an SI leader again.						

- 6. What was most effective about SI during the spring semester?
- 7. What was least effective about SI during the spring semester?
- 8. What improvements are needed to make SI more effective? (please use back if more space is needed.)



LINCOLN UNIVERSITY SUPPLEMENTAL INSTRUCTION PARTICIPANT CONSENT FORM

Dear Lincoln University Student,

You have been invited to take part in a research evaluation study that examines effective practices to support student success in science and mathematics courses at Lincoln University. This study serves as the external evaluation for the Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) at Lincoln University supported by the National Science Foundation. MER*Associates* (<u>www.merassociates.com</u>), an independent, minority-owned and operated research and evaluation consultancy specializing in science, technology, engineering, and mathematics (STEM) education, is responsible for conducting the study. If you agree to participate in this study, you may be asked to do the following during the academic school year:

- (1) Complete surveys each semester,
- (2) Participate in periodic focus groups on campus no more than twice yearly (if selected), and
- (3) The possibility of participating in a phone interview (if selected) no more than once a year.

Participation in the study will involve no more than 2 hours during any semester, including approximately 20 minutes to complete each questionnaire and about 1 hour for the focus group. Any focus group or phone interview will be audio-taped. You may review the tape and request that any portion of the tape that includes your participation be destroyed.

Your participation is completely voluntary and is not a course requirement. Completing or not completing the survey does not have any bearing on your grades in any of your courses. Your responses will be kept strictly confidential by MERAssociates as the sole authorized evaluator for the Lincoln HBCU-UP project.

The survey and participation in the focus group or interviews pose no risk to you, and there is no penalty for refusal to participate. You may withdraw from the study simply by returning the questionnaire without completing it, without penalty or loss of services or benefits to which you would otherwise be entitled.

You are encouraged to complete all survey items, but if you are uncomfortable with any item on the survey, feel free to move on to the next one. If you have any questions about participating in this study, please feel free to contact Dr. Monica Mitchell directly at mmitchell@merassociates.com or (877) 855-1596.

It is expected that the results of the study will contribute to improved teaching and learning of STEM at Lincoln University. Because this is a longitudinal study (comparing results over time), we do need your contact information so we can reach you in the future as needed to keep track of your academic progress at Lincoln as well as your career after graduation. We will contact you only if absolutely necessary to complete our study requirements.

		the above participant consent information and ow. I further understand that I can withdraw at
Signature:		Date:
Student ID:	Lincoln University email address:	
Permanent Fmail Address:		Phone #:



SUPPLEMENTAL INSTRUCTION PARTICIPANT SURVEY

You were enrolled in a mathematics and/or science course this spring semester with Supplemental Instruction (SI) as a separate section. This brief survey asks about your experience with SI this semester. Since SI is relatively new at Lincoln University, your answers will be used to improve the SI experience. Please remember that your answers will be kept strictly confidential as results will be reported only in the aggregate. (Individual answers associated with students' identity will not be shared or released.) The survey is being conducted and analyzed by MERAssociates, an independent evaluator to Lincoln University. This survey is voluntary and you are free to choose not to participate. However, your participation will contribute to continuing efforts to improve undergraduate education in mathematics and science at Lincoln University as well as ensuring the program meets its obligation to the federal government in completing an evaluation of services provided.

Please print the following information:

•	J		
Course:		Professor:	Date:
Name of Students			Student ID#
Name of Student.			Student ID#:
	(First)	(Last)	
Are you retaking t	his course?		
O Yes O	No		
How often do you	attend classes fo	or this course?	
O I never miss a cl	ass	O I miss cla	ass once a week
O I miss class once	e or twice a montl	n O I miss cla	ass more often than once a week
How often do you	attend SI session	ns for this course?	
O I attend every s	ession	O I attend before to	ests are scheduled in the course
O I attend most se	essions	O I almost never at	tend
O I did not attend	SI this semester		

In this next section, indicate the extent of your agreement to each statement. Answer each question honestly and to the best of your ability.

LINCOLN UNIVERSITY
SUPPLEMENTAL

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not Applicable
SI was well publicized in my class.						
My professor encouraged students to attend SI.						
Extra credit was offered in my class for attending SI.						
SI is for students who are not good in mathematics and						
science.						
SI is for students who want to learn all they can to do						
well in class.						
SI sessions were scheduled at times when I could attend.						
SI sessions were held in convenient locations.						
I was informed in advance when changes were made to the						
SI schedule (e.g., location change, canceled session).						
I made use of SI materials and information that were posted online.						
The material covered in my SI sessions was connected to						
what was being taught in class.						
My SI leader was well prepared and capable.						
My SI leader explained course concepts clearly.						
My SI leader treated me and the other students with						
respect.						
My SI leader encouraged independent thinking.						
My SI Leader used a variety of different activities in the SI						
sessions.						
As a result of attending SI, I am a better student now						
than I was at the beginning of the semester.						
SI sessions have helped me organize my course material.						
SI sessions have helped me understand my course						
material.						
SI sessions have helped me focus on important aspects of the course material.						
SI sessions have made me a better problem solver.						
SI sessions have improved my note taking skills.						
SI sessions have improved my student habits.						
SI sessions have improved my grade in the course.						
SI helped me complete the course.						
I am more confident now about doing well in my college						
mathematics and/or science courses than I was at the						
beginning of the course.						
I am more confident now about doing well in college						
than I was at the beginning of the course.						
I will use SI again.						
I would recommend SI to other students.						



LINCOLN UNIVERSITY SUPPLEMENTAL INSTRUCTION FACULTY CONSENT FORM

Dear Lincoln University Faculty,

You are asked to take part in an evaluation study that examines effective practices to support student success in science and mathematics courses at Lincoln University. This study serves as the external evaluation for the Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) at Lincoln University, the LEAPS Forward: March project, supported by the National Science Foundation. MER Associates (www.merassociates.com), an independent, minority-owned and operated research and evaluation consultancy specializing in science, technology, engineering, and mathematics (STEM) education, is conducting the study.

If you agree to participate in this study, you may be asked at most to do the following:

- (1) Complete surveys each semester,
- (2) Participate in an annual focus groups on campus during evaluator site visits, and
- (3) Possibly participating in one or two phone interviews each year.

Participation in the study will involve no more than 4 hours in any given year, including approximately 30-45 minutes to complete questionnaires, about 1 hour for focus groups, and no more than 45 minutes for a phone interview. Any focus group or phone interview will be audio-taped. You may review the tape and request that any portion of the tape that includes your participation be destroyed.

Your participation is completely voluntary. Completing or not completing the survey does not have any bearing on your faculty position and review at Lincoln. Your responses will be kept <u>strictly confidential</u> by MERAssociates as the sole authorized evaluator for the Lincoln HBCU-UP project.

The survey and participation in focus groups and/or interviews pose no risk to you, and there is no penalty for refusal to participate. You may withdraw from the study simply by returning the questionnaire without completing it, without penalty or loss of services or benefits to which you would otherwise be entitled.

You are encouraged to complete the entire, but if you are uncomfortable with any item on the survey, feel free to move on to the next question. If you need more information about participating in this study, please feel free to contact Dr. Monica Mitchell directly at mmitchell@merassociates.com or (877) 855-1596.

information and voluntarily consent can withdraw at any time without po	to participate in the study as indicated by my signature below. I further uncensity.	let
Signature:	Date:	_
Department:	Lincoln University email address:	
Permanent Email Address:	Phone #:	



LINCOLN UNIVERSITY SUPPLEMENTAL INSTRUCTION FACULTY SURVEY

During the 2011-12 academic year at Lincoln University, you had at least one course with Supplemental Instruction (SI) to provide additional learning opportunities for your students. The separate SI sections for your course(s) were led by a trained SI leader(s). Your feedback as a faculty member is an integral part of the SI program evaluation. Please remember that your answers will be kept strictly confidential as results will be reported only in the aggregate. (Individual answers associated with the identity of faculty respondents will not be shared or released.) The survey is being conducted and analyzed by MER*Associates*, an independent evaluator for Lincoln University's NSF grant awarded by the Historically Black Colleges and Universities Undergraduate Program (HBCU-UP). This survey is voluntary and you are free to choose not to participate. However, your participation will contribute towards fulfilling NSF grant stipulations requiring the conduct of a comprehensive and reliable evaluation of the HBCU-UP project

I. General Information: Please **print** the following information:

Your Name:	Date:
Department:	Title:
•	
Email Address:	Phone #:
Disease list the services you to rely and services	black ways decisionated as CT.
Please list the courses you taught each semester	that were designated as SI:
Fall	Spring



II. Likert Statements. In this section, indicate the extent of your agreement to each statement.

			Neither			Not
Statement	Strongly Agree	Agree	Agree nor Disagree	Disagree	Strongly Disagree	Not Applicable
My understanding of SI was adequate at the start of the semester						
I was provided sufficient information to feel comfortable with the use of SI for my course.						
I attended meetings on the SI that were held for faculty.						
A sufficient number of meetings were held for faculty to learn more about the SI program						
I understand the purpose for offering SI in the STEM courses at Lincoln.						
I support the use of SI in STEM courses at Lincoln.						
SI was well publicized in my class.						
I encouraged students to attend SI.						
I offered extra credit to students for attending SI.						
Most students in my class went to SI sessions.						
SI is for students who are not good in mathematics and science.						
SI is for students who want to learn all they can to do well in class.						
SI sessions were scheduled at times when students could attend.						
SI sessions were held in convenient locations.						
I felt like my communication with the SI Program						
Coordinators was sufficient enough to allow success in my						
classroom.						
I was presented with the opportunity to meet my assigned						
SI leader prior to the start of classes.						
My assigned SI leader was well prepared and capable.						
My assigned SI leader met with me regularly.						
My assigned SI leader attended class regularly.						
I was made aware in advance if my assigned SI leader had to miss class.						
I was made aware of cancelled and/or rescheduled SI sessions.						
Based on what I have heard, my students overall opinion of SI has been positive.						
Considering the structure of my course and the goal of the program, SI has been helpful to my students.						
I will use SI for courses in the next academic year.						
SI should be permanently offered as a part of STEM lower-level courses at Lincoln.						
Most STEM faculty at Lincoln support using SI.						
						I



III. Additional Feedback

1. What do you feel the SI Leader needs to do to better help you and/or the students in the class?
2. If your SI leader offered any online assistance, please give comments on this mode of support?
3. Would you like to work with the same SI Leader again? YES NO No Preference
4. Would you recommend this student to work as an SI Leader for another term? Yes NO
5. If you indicated NO, on either question #3 or #4, please explain.
6. Please recommend students who may meet the criteria to be an SI Leader for your course or an others by indicating their names below:
7. Even though attendance in SI is voluntary, students often discuss their perceptions of SI with th instructor. Please share any student comments you may have heard:
8. What strategies do you think would be helpful in improving student attendance to SI sessions?
9. Please share any additional comments you may have about the SI program below.