Strategic Learning Course at the University of Texas, Austin
Claire Ellen Weinstein, Ph.D., University of Texas, Austin

Student-Purchased LASSIs
Heather Schoffstall, M.Ed., Liberty University

A Learning Strategies and Skills Course at the University of Alabama
Richard L. Livingston, Ph.D., University of Alabama

Learning Strategies Course Leads to Improvement in LASSI Content Areas
Shirley Mandy Sexton, Ph.D., Roane State Community College

Semester Reboot: A Study Skills Course to Help Students Take Charge and Finish Strong
Tara L. Petty, University of North Texas
The strategic learning course under my direction at the University of Texas, Austin, is a 3-credit class for students who enter the University of Texas under special circumstances or who experience academic difficulty after entry. The course is based upon my Model of Strategic Learning which involves four major components:

- **Skills** to learn successfully such as using cognitive learning strategies, identifying important information for further study and preparing for tests.
- **Will** or wanting to use these skills and processes. This component includes goal setting and using, motivation and generating positive attitudes and beliefs about learning.
- **Self-Regulation** to take responsibility for managing one’s own studying and learning. This component includes time management and dealing with procrastination, controlling stress and concentration.
- **Knowledge of the Academic Environment** in which studies are taking place. This component includes knowing about teachers’ expectations and types of resources available to help reach academic goals.

Throughout the course, students are taught declarative and procedural knowledge about strategic and self-regulated learning with the objective of developing conditional knowledge to determine when and under what conditions to apply a given skill or strategy. The course uses direct instruction, modeling, and guided practice with feedback. To help facilitate transfer, the content is always related back to the Model of Strategic Learning, a variety of tasks from many content areas are used, and students must apply what they are learning to other classes they are taking.
The course begins with every student taking the LASSI. This helps the students identify their individual learning strengths and weaknesses and also introduces the content that will be studied. LASSI results, combined with results from a reading comprehension measure, help instructors to individualize many assignments and determine priorities over the course of the semester. These measures are used only for diagnostic/prescriptive purposes and have no effect on course grades. The topics covered in the course include, but are not limited to, the following areas: goals, attitudes, motivation, identifying important ideas, knowledge acquisition strategies, pre-, during-, and post-reading strategies, time management, procrastination, attention, concentration; note-taking and listening skills, development and use of study aids, comprehension monitoring, preparing for and taking tests, the relationship between understanding and long-term memory, and dealing with academic stress. Much of the work expected of students outside of class is accomplished using the online instructional program, Becoming a Strategic Learner, LASSI Instructional Modules. These ten modules were specifically written to address student weaknesses in the areas where instructional interventions are most likely to bring about significant student improvement. Each module is associated with a scale on the
LASSI and provides instruction, activities and feedback to the students. By using these online modules in place of a traditional text, the instructors can focus on individual needs. This frees up class time for guided practice and feedback on the material in the modules — selected activities from the online modules are often completed in class individually or in groups. This allows instructors to integrate the content of the modules with their own class discussions. In addition, a variety of study skills for reading, listening and other academic tasks are also presented and practiced in class.

During the final week of the class, students complete the post-assessment measures, including the LASSI, and can see where their weaknesses have been strengthened or eliminated. Students also receive feedback about areas where further improvements might be gained through the university’s learning skills center or other special help programs.

Students taking our course at the University of Texas at Austin have consistently demonstrated improvements in academic achievement and highly significant differences in retention to graduation compared to students not taking the course or statistically-matched control students.
The LASSI is utilized in the study skills classes (CLST 101–College Learning Strategies) of the Bruckner Learning Center. The students purchase the LASSI packet from the university bookstore. The LASSI pre-test is completed at the onset of the course. Once the post-test is completed at the conclusion of the course, the students will compare the pre- and post-test scores. As a culminating activity for the course, the students participate in a group discussion and write a reflection paper in which they determine their strengths and weaknesses based on the test scores. It has been noted that the students generally improve in most areas and are pleased with the results.
The Center for Teaching and Learning at The University of Alabama, in collaboration with the university Career Center, and library staff implemented a learning strategies course during the spring semester of 2003. This course was modeled on a similar course developed at the University of Texas at Austin by Dr. Claire Ellen Weinstein. Dr. Weinstein has also developed the internationally popular Learning and Study Strategies Inventory (LASSI) that serves as a foundational component of the course. Students are required to critically evaluate their own learning in each of ten study skills areas covered in the course and develop new behavior patterns that are conducive to academic success.

The students purchase the LASSI and Module packets from the university bookstore. Students take the LASSI study skills inventory twice during the course, once at the beginning and again at the end. Their scores on the pretest LASSI are then used to identify areas of weaknesses that the students are expected to work on through the course of the semester. The course is partially internet based. Instead of a textbook, students complete online modules (Becoming a Strategic Learner, also authored by Weinstein) corresponding to each of the ten areas assessed by the LASSI. These ten areas are Attitude, Motivation, Time Management, Anxiety, Concentration, Information Processing, Selecting the Main Idea, Study Aids, Self-testing, and Test Strategies. The learning modules, completed online, require the
students to critically evaluate their own study behaviors and then set learning goals based on new strategies that they have learned. Students are expected to become strategic learners by applying what they have learned and by developing new and more appropriate time management and study behaviors. Students are also required to complete a teaching project by researching a particular study skills area and present their findings to the class.

The learning strategies course requires that students examine their own behavior patterns and develop new behaviors that are conducive to academic success. Students are expected to attend and actively participate in every class. Out-of-class assignments, in the form of internet computer modules, are given weekly.

Receiving a good grade in the course is dependent upon regular class attendance, active participation, completion of all assignments, and satisfactory grades on tests and assignments. In addition to study skills, students enrolled in the course also receive instruction in library skills and career exploration. The course is recommended for students who may have experienced difficulty in adjusting to the demands and study requirements of university-level academics. The course is particularly beneficial for freshmen who have been placed on Academic Warning or Suspension.

Follow-up research from the initial pilot course in 2003 showed the grade point averages (GPA’s) of students completing the course increased, on average, from below a 2.0 to
above a 2.0. Students’ comments about the course were overwhelmingly positive. Because of this initial success, the course has been offered regularly since 2003. On-going research has shown that students successfully completing the course consistently improve their grade point averages. Research has also demonstrated that the GPA’s of students successfully completing the course are significantly higher that the GPA’s of students who withdraw from the course or who fail to attend. Retention and graduation rates of students completing the course have also been higher than those students who withdrew or failed to attend.

Student evaluations of the course are overwhelmingly positive. Following are a few of the end-of-course comments from students enrolled in 2005.

1. The information from the LASSI programs was very helpful.
2. This class has really helped me improve in my classes this semester.
3. This course has helped me learn a lot of new skills to use in my future courses.
4. I feel that in many ways this course has overall helped me as a person, in school, and in work.
5. The information was very helpful and easy to understand. The teacher was understanding and approachable.
6. It helps students improve study skills needed for college. It makes you realize how important these skills are.
7. This class helped me understand how important good study habits are, which allows for a less stressful environment.
8. This class gives good ideas to help you study. It showed me my weak points and what I needed to improve in.
9. The modules did help put my concerns into words.
10. The small class size is good for the subject.
The Learning and Study Skills Inventory (LASSI) is currently being administered to students in a three-credit-hour course (COLS 1010 SOS: Study-Organize-Succeed) being offered at Roane State Community College in Harriman, Tennessee, as part of a program called Students Achieving Improved Learning Strategies (SAILS). The course has been funded primarily through a two-year grant awarded in 2009 from the Fund for the Improvement of Postsecondary Education (FIPSE). The course has been offered since Fall 2010, starting out with two sections and expanding each semester to the current offering of nine sections for Spring 2012.

Students enrolled in the COLS 1010 course take the LASSI during the first week before they receive instruction in any of the content areas addressed by the LASSI. Students take the LASSI again in their last week of the course to assess their level of improvement in each LASSI content area after having received instruction in these areas. The identification of the deficiencies of the students enrolled in the COLS1010 class using the LASSI is immediately followed by the goal of remedying these weaknesses during the course. The LASSI assists Roane State educators in assessing the effectiveness of the COLS 1010 premise that direct instruction of learning strategies, coupled with a strong curriculum related to student attitudes and behaviors, can lead to the growth of student learning and the overall potential for success.

The COLS 1010 course uses as its textbook, *On Course: Strategies*
for Creating Success in College and in Life (6th ed.), by Skip Downing (2011). This textbook, along with the accompanying activities in the Facilitator's Manual (Downing, 2011), introduces the students to many of the LASSI concepts in an interactive way that aids their learning process. For example, the text directly addresses time management and provides students with a model for evaluating how they spend their time. This is paired with a time management project in the course. In the first two semesters COLS 1010 was taught, 76% of students taking the course and the LASSI had a positive change in their scores on time management from pre-test (mean=33.03) to post-test (mean=56.71). The average percentile change of 23.68 shows the value of teaching students a time management system and guiding them in its implementation using direct instructional techniques.

Another aspect of the COLS 1010 course that directly implements several LASSI categories is instruction in the area of three specific learning strategies: concept cards (a type of graphic representation), two-column note-taking, and organized notebook. Concept cards are index cards on which the student places a word or phrase in the center front of the card and the definition on the back of the card in the center. The back of the card is then divided into four quadrants where additional information about the word or phrase can be entered. The additional information (such as examples, synonyms, word parts, memory
tips, etc.) helps build a concept that yields a more complete understanding of the word beyond a mere definition. Concept cards can be used with any subject matter, can assist students with improving their test-taking strategies, and make good study aids. Students in COLS 1010 learn how to create concept cards for other college courses they are taking, which helps them study and remember material in those courses. In the first two semesters COLS 1010 was taught, 71% of students taking the course and the LASSI had a positive change in their scores on test strategies from pre-test (mean=35.98) to post-test (mean=53.48), 70% had a positive change in their scores on self-testing from pre-test (mean=46.50) to post-test (mean=64.97), and 70% had a positive change in their scores on study aids from pre-test (mean=46.03) to post-test (mean=61.95). The two-column note-taking strategy is taught to students as an efficient method to take notes from a lecture by recognizing and understanding signal words, transitions, and other clue words that provide the foundation for them to record main ideas and supporting details. Students learn to organize notes by recording main ideas, key words, ideas, people, or events in the left-hand column, while the right-hand column is used for explanations, descriptions, definitions, examples, etc. Once students master this technique, their notes can then serve as active review tools for understanding and processing the information. This strategy also helps students to write
concentrate during the lecture by giving them something to listen for and something to write down. The strategy helps them become more engaged with the lecture material and can aid the student in self-testing at a later date. In the first two semesters COLS 1010 was taught, 68% of students taking the course and the LASSI had a positive change in their scores on information processing from pre-test (mean=48.55) to post-test (mean=65.17), 73% had a positive change in their scores on concentration from pre-test (mean=37.15) to post-test (mean=55.70), and 67% had a positive change in their scores on selecting main ideas from pre-test (mean=38.30) to post-test (mean=54.06).

The COLS 1010 course is unique in its motivational style of instruction by teaching students specific strategies to help them succeed in their courses, exploring their strengths and weaknesses through the use of instruments such as the LASSI, and assisting each student in developing educational goals on an individual level. The course addresses the LASSI topics of motivation, attitude, and anxiety using textbook material and engaging activities from the accompanying Facilitator's Manual. In the first two semesters COLS 1010 was taught, 65% of students taking the course and the LASSI had a positive change in their scores on anxiety from pre-test (mean=33.96) to post-test (mean=50.63), 53% had a positive change in their scores on attitude from pre-test (mean=36.96) to post-test
(mean=50.63), 53% had a positive change in their scores on attitude from pre-test (mean=36.96) to post-test (mean=47.46), and 64% had a positive change in their scores on motivation from pre-test (mean=48.00) to post-test (mean=61.04).

In the context of the community college environment, the LASSI has been a useful tool for the individual student. It has assisted Roane State personnel in investigating the impact that the COLS 1010 course is having upon students in terms of being able to address their weaknesses in the LASSI content areas. The first year results from COLS 1010 classes show that on average, 68% of students scored higher on the post-test than on the pre-test. The results are based on student perceptions of how well they are doing in regards to each of the ten LASSI content areas. Students are using the LASSI as a self-report measure or self-evaluation of their strengths and/or weaknesses in these ten areas both before and after participating in the COLS1010 course and receiving instruction in the ten content areas addressed by the LASSI. Thus, the preliminary data suggest that Roane State students are being impacted by COLS 1010 in a positive way as measured by the LASSI content areas.

References


The University of North Texas Learning Center provides academic support to students. One support service provided is the Semester Reboot: Study Skills Lab. Semester Reboot is a five week, non-credit bearing, interactive course designed to help students improve their study methods, study habits, academic skills, and academic self-efficacy. Students meet for sixty minute sessions once a week.

**Course Design**

Semester Reboot sessions are limited to six students in order to keep the course individualized, interactive, and effective. Each semester we have offered three to four sessions (two during summer sessions). Sessions are built around the LASSI (Learning and Study Strategies Inventory) and each week builds on different success skills. The topics of the five weeks include:

1. Goal Setting and Motivation
2. Time Management and Concentration
3. Test Taking, Note Taking and Learning Styles
4. Anxiety and Stress Management
5. Wrap up, student's choice

The LASSI pre-test is administered in the first week of the course, and the post-test is administered in the fifth week. The course is offered mid-semester, after the students are aware of their academic shortcomings for the semester and have the Ah-Ha moment that they need to work on their academic skills. Semester Reboot is
unique in that it combines both skill development and self-efficacy building. It is important that through this course students not only learn how to succeed academically, but also believe that they can succeed. The program has three objectives:

1. Help participants identify and practice a variety of skills and techniques across a variety of academic success topics.
2. Help participants feel comfortable and confident in their ability to succeed academically
3. Provide participants with tailored instruction, and help them to create a small network of peers who can support their academic success.

**Course Outcomes**

Over the last five semesters (four long semesters, one summer semester), the Semester Reboot program has seen 72 students in a total of 18 available sessions. Of the 72 participants who started the course, 56 students completed all five weeks and the post-test. Sixteen students started the course, but did not complete the post-test.

Of the fifty-six participants who completed the course, we were able to collect GPA and enrollment information for fifty-two of the students. Eighty-six percent of these 52 students were retained or graduated after completing the program. Additionally, semester reboot has participants at all levels of their education: 20 freshman, 5 sophomores, 15 juniors, 10 seniors and 2 unknown. Lastly, we did see a GPA difference for students who completed the course from the semester before they took the course, to the semester that they
were enrolled in the course (see Table 1). It should be noted that 22 students took the course in their first semester at the university and one student took the course in a semester where they were not enrolled in any classes.

Table 1: GPA Averages:

<table>
<thead>
<tr>
<th>AVERAGE GPA SEMESTER BEFORE COURSE</th>
<th>AVERAGE GPA IN SEMESTER ENROLLED IN COURSE</th>
<th>AVERAGE CUMULATIVE GPA</th>
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<tr>
<td>2.532</td>
<td>2.708</td>
<td>2.624</td>
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</table>

Additionally, a matched-samples t-test showed the results of the LASSI pre- and post-test scores shows a statistically significant increase for the post test scores, with a moderate, significant correlation between pre- and post-test scores (see Tables 2 and 3). During each semester that Semester reboot was offered, there was an average improvement from the pre-test to the post-test LASSI (see Graph 1).

Table 2: Pre-Post Test Average and Standard Deviation:

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<thead>
<tr>
<th></th>
<th>MEAN</th>
<th>N</th>
<th>STD. DEVIATION</th>
<th>STD. ERROR MEAN</th>
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<tbody>
<tr>
<td>Pre-Avg.</td>
<td>28.8214</td>
<td>56</td>
<td>14.97881</td>
<td>2.00163</td>
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<tr>
<td>Post-Avg.</td>
<td>52.5429</td>
<td>56</td>
<td>18.17687</td>
<td>2.42899</td>
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</table>
Graph 1: Average Pre and Post Test LASSI by Semester

Table 3: Correlation and Significance

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<th></th>
<th>N</th>
<th>CORRELATION</th>
<th>SIG.</th>
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<tbody>
<tr>
<td>Pre-Avg &amp; Post-Avg</td>
<td>56</td>
<td>0.557</td>
<td>0.000</td>
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</tbody>
</table>
Conclusion and Further Considerations

The results from the pre- and post-test show that the intervention is successful in increasing students' average LASSI scores. The difference in GPA is small and not significant, but it is encouraging that, on average, students are doing slightly better in the semester they enroll in Semester Reboot. The most impressive result is the retention rate, in that 85% of students who complete the program are retained up to the current semester, or have graduated.

The Learning Center intends to continue to use the LASSI as a starting point for the Semester Reboot program, as it allows the students to have an open dialogue about their current academic concerns. This allows the instructor to focus the course to the students' needs, helping students develop the specific skills they need in order to grow in their areas of concern. The LASSI post-test allows students to reflect on their personal growth, and how the new skills and new mindset they have can propel them to success.

Further considerations for the program will include how to focus on best practices for academic success. The Learning Center plans to continue to evolve this program by continually incorporating best study strategies and new information on mindset theories like growth mindset, metacognition, and academic grit.