

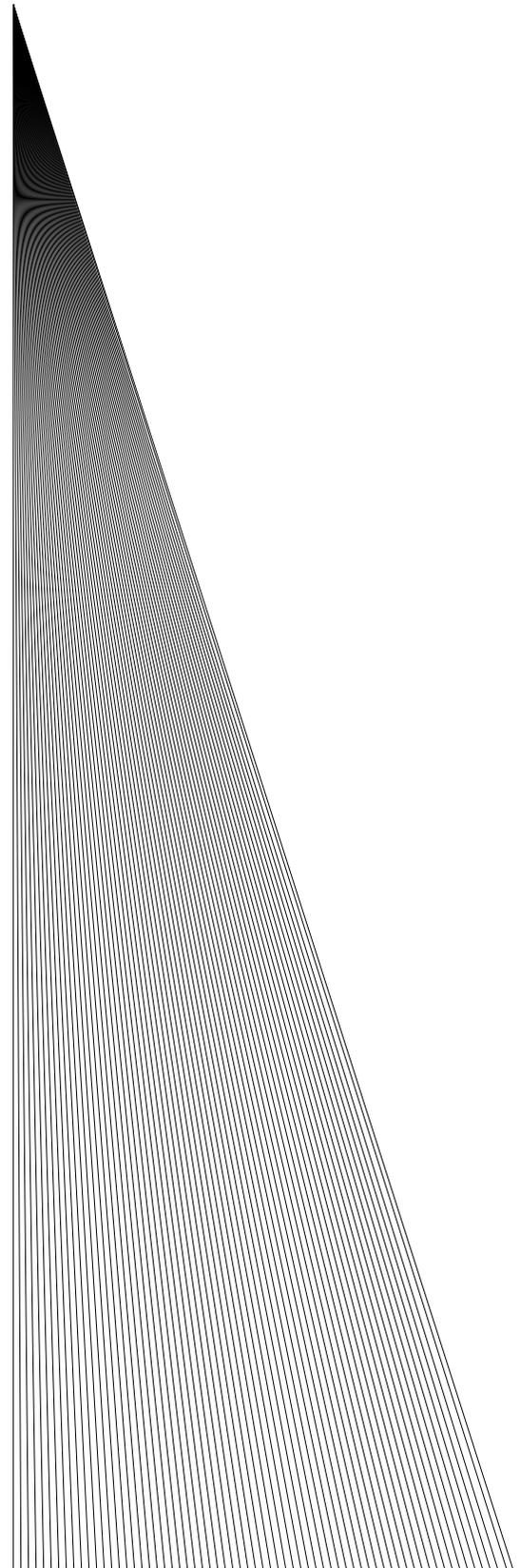
# **LASSI-HS USER'S MANUAL**

**for those  
administering  
the Learning and  
Study Strategies  
Inventory-  
High School  
Version**

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# **LASSI-HS**

**Learning And Study Strategies  
Inventory - High School Version**

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1497 Main Street, Suite 261  
Dunedin, Florida 33765

## **User's Manual**

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### **Table of Contents**

<b>Part 1: Overview of the LASSI-HS</b>	<b>pg. 5</b>
<b>Part 2: Administration and Scoring</b>	<b>pg. 8</b>
<b>Part 3: Description of the LASSI-HS Scales</b>	<b>pg. 15</b>
<b>Part 4: The Development of the LASSI-HS</b>	<b>pg. 20</b>

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It is impossible to thank the large number of individuals who have contributed to the development of the LASSI-HS. Many generations of graduate students, numerous colleagues, and other friends have generously given of their time, talents, and skills. In addition, much of the research support for the early development of the college version was provided by the Army Research Institute for the Behavioral and Social Sciences. Finally, several people have made such enormous contributions that they deserve individual mention: the psychometric consultants for our project, Drs. Gary Hanson and Glynn Ligon; our development assistants, Gretchen Stone, Priscilla Myers, Bob Malloch, and Linda Frazer; and two people who inspired, encouraged, and supported us in our work - "Mama" and "Papa" Weinstein.

# Part 1: OVERVIEW OF THE LASSI-HS

## What is the LASSI-HS?

The Learning and Study Strategies Inventory - High School Version (LASSI-HS) is an assessment tool designed to measure students' use of learning and study strategies and methods at the secondary school level. The original version of the LASSI, which was published in 1987, is designed for students who are currently enrolled in college. The high school version was developed in response to the need to assess skills that are critical for academic success at the high school level, but that are also instrumental for making a successful transition into a college setting.

The LASSI-HS is a 76-item self-report instrument. There are two forms of the LASSI-HS: a self-scored form that can be scored by a teacher, counselor, or individual student; and a computer-scored form that is scored through a service provided by H&H Publishing Company. Separate norms are provided for 9th, 10th, 11th, and 12th grade students. In addition, by using the 12th grade norms, this instrument is appropriate for first-year college students who are not yet familiar with the tasks and learning demands of the college environment. The LASSI-HS can be administered on an individual or a group basis.

## What Does the LASSI-HS Assess?

The LASSI-HS is a diagnostic and prescriptive measure that assesses student thought processes and behaviors that impact studying and learning. The specific focus is on both covert and overt thoughts and behaviors that relate to successful learning in high school *and* that can be altered through educational interventions. In addition, these thought processes and behaviors also contribute significantly to success in college *and* can be learned or enhanced through programs and interventions in secondary educational settings.

## Who Can Benefit from Completing the LASSI-HS?

- Students entering the 9th grade who have a history of low achievement.
- Students entering the 9th, 10th, 11th, or 12th grade who are achieving below grade level.
- Students who are experiencing academic difficulty while they are at any grade level in high school.
- Students who are poorly motivated in school.
- Students who want to improve their learning and studying skills.
- Students who want to make the most of their learning potential.
- Students who are preparing for college work.

## How Can the LASSI-HS Be Used?

The LASSI-HS, both the self-scored form and the computer-scored form, can be administered on either an individual or a group basis. It is meant to be used as:

1. a **diagnostic measure** to help identify areas in which students could benefit most from educational interventions;
2. a **counseling tool** for student advising, for academic remediation and enrichment programs, for student learning assistance programs, for high school to college transition programs, and for college preparation programs;
3. a basis for **planning individual prescriptions** for both remediation and enrichment;
4. a **pre-post achievement measure** for students participating in programs or courses focusing on learning strategies and study skills; and
5. an **evaluation tool** to assess the degree of success of intervention programs or courses.

## Who Can Administer the LASSI-HS?

There are no special certification or training requirements for administering the LASSI-HS. It can be administered by high school counselors, classroom teachers, or paraprofessionals. The LASSI-HS is designed to be easily administered. However, it does require some expertise to interpret and use the scale scores.

## The Ten LASSI-HS Scales

There are ten scales on the LASSI-HS:

- Attitude
- Motivation
- Time Management
- Anxiety
- Concentration
- Information Processing
- Selecting Main Ideas
- Study Aids
- Self Testing
- Test Strategies

**Attitude**, the first scale, contains items addressing attitude and interest in education and school.

How clear are students about their own educational goals?  
Is school really important or worthwhile to them?

**Motivation**, the next scale, addresses students' diligence, self-discipline, and willingness to work hard.

Do students easily lose interest in their classes?  
Do they try to stay up-to-date with their class assignments?

**Time Management** examines students' use of time management principles for academic work.

Are they well organized?  
Do they anticipate scheduling problems?

**Anxiety** items address the degree to which students worry about school and their performance.

Do students worry so much that it is hard for them to concentrate?  
Are they easily discouraged about grades?

**Concentration** items focus on students' ability to pay close attention to academic tasks.

Are they easily distracted?  
Can they direct their attention to school work?

The **Information Processing** scale contains items addressing several sub-areas. These include the use of mental imagery, verbal elaboration, comprehension monitoring, and reasoning.

Can students create images to aid their memory?  
Can they reason from hypotheses to form conclusions?

Items on the **Selecting Main Ideas** scale address students' ability to pick out important information for further study.

Can they focus on the key points in a class discussion?  
Can they decide what to underline in a textbook?

The **Study Aids** scale examines the degree to which students create or use support techniques or materials to help them learn and remember new information.

Do they complete practice exercises?  
Do they create or use organizational aids?

**Self Testing** items focus on reviewing and preparing for classes and tests. Most of the items deal with some aspect of comprehension monitoring.

Do students review before a test?  
Do they stop periodically while reading a textbook to review the content?

The last scale, **Test Strategies**, focuses on students' approaches to preparing for and taking quizzes and tests.

Do the students prepare appropriately?  
Do they know how to approach different types of test questions?

Each scale, with the exception of Time Management and Selecting Main Ideas, has 8 items. The Time Management scale has 7 items and the Selecting Main Ideas scale has 5 items.

Sample items and information about the reliability for each scale are included in Part 3: Description of the LASSI-HS Scales.

## Part 2: ADMINISTRATION AND SCORING

### How is the LASSI-HS Administered?

#### Setting

The LASSI-HS can be administered on an individual, a classroom, or a school-wide basis. Although an examiner or proctor must be present to explain the purpose of the inventory (and the scoring key if the self-scored form is being used), the student can complete the inventory independently. The LASSI-HS is not a timed instrument but most students complete it in approximately 20-25 minutes.

#### Choosing the Appropriate Form of the LASSI-HS

Two forms of the LASSI-HS are available:

- a self-scored form
- a computer-scored form

It is important to consider the target student population prior to selecting the appropriate form. It is also important to think about cost, time, and grading considerations.

When you use the computer-scored LASSI-HS, you:

- eliminate student scoring errors
- eliminate student calculation errors
- have the results sent to you within a week of their receipt by the publisher
- receive 10 scale scores for each student
- receive a graph depicting the pattern of scale scores for each student
- receive a summary of the ten scale scores for each class
- receive a graph depicting the pattern of scale scores for each class
- receive an IBM-compatible computer disk containing all of the raw data for your school

- risk losing data for any answer sheet that is not properly filled out
- cannot give immediate feedback to students

When you use the self-scored LASSI-HS, you:

- have the results immediately
- can provide immediate feedback
- have 10 scale scores for each student
- have a graph depicting the pattern of scale scores for each student
- need to check for student scoring or calculation errors

#### Materials Needed to Administer the LASSI-HS

All of the materials needed to administer the LASSI-HS will be furnished along with the copies of the instrument. However, if the computer-scored form of the LASSI-HS is going to be used, either the students or the person administering the LASSI-HS must furnish No. 2 pencils. The self-scored form uses pressure-sensitive paper and completing it does not require using any special pencil or pen.

For each set of LASSI-HS instruments ordered, the following materials are provided:

- User's Manuals for the teachers
- The LASSI-HS Administration Directions (also included in this Manual)
- The LASSI-HS instruments
- The Student Directions handout (computer-scored version only)

In addition, if the computer-scored form will be used, the administrator or students must provide:

- No. 2 pencils

## Administration Procedures for the LASSI-HS Computer-Scored Form

Each student will receive a one-page Student Directions handout and a copy of the LASSI-HS computer-scored form. In addition, students must either bring a No. 2 pencil with them or be given one. This form of the LASSI-HS is printed on both sides of a specially designed answer sheet using a “bubble” format. For each of the 76 items, students are requested to darken the bubble containing the letter that corresponds to how well the statement describes them on a scale ranging from “**NOT AT ALL LIKE ME**” to “**VERY MUCH LIKE ME.**” For example, by darkening the letter **a** for an item, students would indicate that the type of thinking or behavior specified in that item was not at all like them, while darkening the letter **e** would indicate that the state-

ment was very much typical of them. Students are also cautioned to respond according to how well the statements reflect their own behaviors or thinking processes and not how they think they should respond or how others would respond.

The items from each of the 10 LASSI-HS scales are randomly distributed within the instrument. In addition, approximately half of the items are stated in a positive direction (such as item number 36, “I check to see if I understand what my teacher is saying during a class period.”) while the rest are stated in a negative direction (such as item number 48, “When work is difficult I either give up or study only the easy parts.”).

## Administration Directions for the LASSI-HS Computer-Scored Form

1. Make sure that each student has a sharpened No. 2 pencil with an eraser (distribute the pencils if they have been provided by the school).
2. Distribute a copy of the Student Directions hand-out and a copy of the LASSI-HS to each student.
3. "You will now fill in the identification information at the top of the front page. Put your school, teacher (or class), and today's date in the upper right-hand corner of the sheet."
4. "Now fill in your name, grade, student I.D. number, and school number in the spaces provided. Your school number is \_\_\_\_\_. Darken the correct bubbles."
5. "Please look at the Student Directions handout and follow along silently as I read the directions aloud." (Read aloud a copy of the LASSI-HS Student Directions handout.)

**Note: The following is a copy of the Student Directions handout.**

### THE LEARNING AND STUDY STRATEGIES INVENTORY, COMPUTER-SCORED VERSION

#### Student Directions

The Learning and Study Strategies Inventory - High School Version (LASSI-HS) is designed to find out how you learn, how you study, and how you feel about learning and studying. On the front and back of the question and answer sheet you will find 76 statements about learning and studying. Read each statement and then darken the circle which contains the letter you choose: a, b, c, d, or e. To help you decide which choice to mark, we will explain what is meant by each letter.

a. **NOT AT ALL LIKE ME.** We do not necessarily mean that the statement would never describe you, but that it would be true of you only very rarely. Darken the circle with the letter **a** for this choice.

b. **NOT VERY MUCH LIKE ME.** We mean that the statement generally would not be true of you. Darken the circle with the letter **b** for this choice.

c. **SOMEWHAT LIKE ME.** We mean that the statement would be true of you about half of the time. Darken the circle with the letter **c** for this choice.

d. **FAIRLY MUCH LIKE ME.** We mean that the statement generally would be true of you. Darken the circle with the letter **d** for this choice.

e. **VERY MUCH LIKE ME.** We do not necessarily mean that the statement would always describe you, but that it would be true of you almost all of the time. Darken the circle with the letter **e** for this choice.

Use only a No. 2 pencil to darken the circles. Please be sure to completely darken the circle with the letter you choose. Try to answer according to **how well the statement describes you**, not how you think you should be or what others do. There are no right or wrong answers to these statements. Please work as quickly as you can without being careless and please answer all of the items.

6. "If you do not have a No. 2 pencil, raise your hand now and I will give you one."
7. "Are there any questions?"
8. "Remember, there are no right or wrong answers. We are interested in how well the statements describe you."
9. "Please begin now and be sure to answer all 76 items."
10. "When you have finished completing the inventory, please put your pencil down and remain seated."

After the students have completed the inventory:

11. "Check your answer sheet to make sure that you have filled in all of the information at the top of the front page. Be sure that all the bubbles are darkened correctly."
12. Collect the answer sheets. "Now pass your answer sheet and the directions to the front of the room."

**Note: It is critical that you check the answer sheets to make sure that the students filled in all of the information at the top of the sheet and that they answered each of the questions. It is important that the bubbles be filled in correctly, otherwise the data on some sheets may be lost.**

13. Put the answer sheets for each class in a packet. Do not use paper clips or staples on the sheets.

Use a clearly marked folder or sheet of paper to indicate the class designation and school. Line up the answer sheets so that the notch on each sheet is in the lower right-hand corner. This is necessary for the grading process.

14. **It is important to re-check each answer sheet to make sure that the bubbles at the top of the front page are darkened correctly.**
15. Pack the answer sheets in a sturdy box. You can use the box in which the LASSI-HS materials arrived. Place a clearly marked sheet with the class, school designation, and address with each packet of answer sheets. Ship these materials to H&H Publishing Company, Inc.
16. The scores, summary data, and a copy of the PC-compatible data disk will be sent to you within one week of receipt of the material at H&H Publishing Company.

## Administration Procedures for the LASSI-HS Self-Scored Form

Each student will receive a LASSI-HS packet. This packet contains:

- the inventory items
- the scoring directions
- the score report forms, including the summary graph

In addition, students must either bring with them or be given a pencil or a ballpoint pen. Since the LASSI-HS self-report form uses pressure-sensitive paper, the type of writing implement used is not important. This form of the LASSI-HS is printed on two separate pages. Since each inventory page is attached to a pressure-sensitive coding sheet which is used for grading, it is very important that students keep the two inventory pages separate or their answers will be recorded in the wrong places.

For each of the 76 items, students are requested to darken the letter that corresponds to how well the statement describes them on a scale ranging from

**“NOT AT ALL LIKE ME”** to **“VERY MUCH LIKE ME.”** For example, by darkening the letter **a** for an item, students would indicate that the type of thinking or behavior specified in that item was not at all like them, while darkening the letter **e** would indicate that the statement was very much typical of them. Students are also cautioned to respond according to how well the statements reflect their own behaviors or thinking processes and not how they think they should respond or how others would respond.

The items from each of the 10 LASSI-HS scales are randomly distributed within the instrument. In addition, approximately half of the items are stated in a positive direction (such as item number 36, “I check to see if I understand what my teacher is saying during a class period.”) while the rest are stated in a negative direction (such as item number 48, “When work is difficult I either give up or study only the easy parts.”).

## Administration Directions for the LASSI-HS Self-Scored Form

1. Make sure that each student has a pencil or a ballpoint pen.
2. Distribute a LASSI-HS packet to each student.
3. “Notice that there are two sets of pages that extend from the right-hand side of the packet. These pages are marked with the words, ‘Pull Here.’ You need to remove these pages from the packet. Please watch as I demonstrate how to do this. (Demonstrate now.) Notice that you should not remove the tabs at the edge of the pages. Now please do the same to your packet.” (Check to see that each student did this correctly.)
4. “Please write your name at the top of both pages in the spaces provided.”
5. “Please put these two pages aside for the moment.”
6. “Now, fill in the identification information on page 3. Put your name, school, I.D. Number, and today’s date in the upper right-hand corner.”  
**Note: Since pressure-sensitive paper is used in this part of the packet, all of the information the students provide will automatically be transferred to the school’s copy of the grading report.**
7. Hold up a LASSI-HS packet and say: “Turn back to the cover page and follow along silently as I read the directions aloud.” (Read aloud the directions on the first page of the LASSI-HS packet.)

**Note: The following is a copy of the directions on the first page of the LASSI-HS packet.**

The Learning and Study Strategies Inventory - High School Version (LASSI-HS) is designed to find out how you learn, how you study, and how you feel about learning and studying. If you have not already pulled out the two sets of pages marked PULL HERE, do that now. On these two pages you will find 76 statements about learning and studying.

Read each statement and then mark one of these choices:

- a. **NOT AT ALL LIKE ME**
- b. **NOT VERY MUCH LIKE ME**
- c. **SOMEWHAT LIKE ME**
- d. **FAIRLY MUCH LIKE ME**
- e. **VERY MUCH LIKE ME**

To help you decide which choice to mark, we will explain what is meant by each one.

By **NOT AT ALL LIKE ME**, we do not necessarily mean that the statement would never describe you, but that it would be true of you only rarely. Darken the letter **a** for this choice.

By **NOT VERY MUCH LIKE ME**, we mean that the statement generally would not be true of you. Darken the letter **b** for this choice.

By **SOMEWHAT LIKE ME**, we mean that the statement would be true of you about half of the time. Darken the letter **c** for this choice.

By **FAIRLY MUCH LIKE ME**, we mean that the statement generally would be true of you. Darken the letter **d** for this choice.

By **VERY MUCH LIKE ME**, we do not necessarily mean that the statement would always describe you, but that it would be true of you almost all of the time. Darken the letter **e** for this choice.

Please be sure to completely darken the letter you choose. **Do not stack the sets of pages on top of each other while marking your answers.** (This would damage the pressure-sensitive paper.) Try to answer according to **how well the statement describes you**, not how you think you should be or what others do.

## LASSI-HS User's Manual

There are no right or wrong answers to these statements. Please work as quickly as you can without being careless and please answer all of the items. Use a pencil or a ball point pen to darken the letters.

8. "If you do not have a pencil or a ballpoint pen, raise your hand now and I will give you one."
9. "Are there any questions?"
10. "Remember, there are no right or wrong answers. We are interested in how the statements describe you."
11. "Please get the pages you set aside before. You may begin now. Be sure to answer all 76 items. Do not stack these pages on top of each other."
12. "When you have finished completing the inventory, please put your pencil down and remain seated."

After the students have completed the inventory:

13. "Check the packet to make sure you have filled

in all of the information at the top of page 3. Also, make certain that you have answered each of the questions."

14. If someone else is going to score the inventories, say: "Now pass all of your materials to the front of the room." Otherwise direct students to proceed through the scoring procedure described on Page 2 of the LASSI-HS packet.

**Note: The self-scored LASSI-HS can be scored by the student, a teacher or counselor, a paraprofessional, or a clerical assistant. Although this form of the LASSI-HS was designed for ease of scoring, it does require careful effort and the addition of up to eight single-digit numbers. Therefore, it may not be appropriate for some students to score their own inventories.**

If the LASSI-HS is going to be scored by the students, it may be necessary to monitor the scoring and assist students who experience difficulty.

# PART 3: DESCRIPTION OF THE LASSI-HS SCALES

## Attitude

Students' general attitudes toward school and their general motivation for succeeding in school have a great impact on their diligence in study, particularly in autonomous situations in which they must study on their own. If the relationships between school, their life goals, and their attitudes about themselves and the world are not clear, then it is difficult to maintain a mind-set that promotes good work habits, concentration, and attention to school and its related tasks.

Students' scores on this scale measure their general attitudes and motivation for succeeding in school and performing the tasks related to school success. Students who score low on this measure need to work on higher level goal setting and reassess how school fits into their future. If school is not seen as relevant to the student's life goals and attitudes, then it will be difficult, if not impossible, to generate the level of motivation needed to help take responsibility for one's own learning and for helping to manage one's own study activities.

**Coefficient Alpha** = .74

**Sample Items:** I feel confused and undecided as to what my educational goals should be.

I only study the subjects I like.

**Note:** The coefficient alpha is a measure of reliability.

## Motivation

The Attitude Scale measures students' general attitudes toward school and their general motivation for succeeding in school. However, although general motivation level is important, so is a student's motivation to perform the specific tasks related to achievement. The degree to which students accept responsibility for studying and for their performance is reflected in the everyday behaviors they exhibit related to school and school tasks. These behaviors include reading the textbook, preparing for class, finishing assignments on time, and being diligent in studying even if the topic is not particularly interesting to them (or even trying to figure out ways to make it more interesting).

Students' scores on this scale measure the degree to which they accept responsibility for performing the specific tasks related to school success. Students who score low on this measure need to work on goal setting, perhaps at the more global levels assessed on the Attitude Scale, but certainly at the more specific level of individual tasks and assignments. Accepting more responsibility for studying and achievement outcomes requires that students learn to attribute much of what happens to them in school to their own efforts rather than to outside forces such as luck or poor teachers, or to uncontrollable forces such as innate ability. Accepting more responsibility and attributing success to one's efforts results in more effective studying and school performance.

**Coefficient Alpha** = .78

**Sample Items:** When work is difficult I either give up or study only the easy parts.

I set high standards or goals for myself in school.

## Time Management

Managing time effectively is an important support strategy for learning. Most students have various demands on their time and only by creating realistic schedules and sticking to them can they fit in everything. Creating and using schedules also encourages students to take more responsibility for their own behavior. It also requires some knowledge about themselves as students and learners. What are their best and worst times of day? Which subjects are easier or harder for them? What are their preferences for learning methods? This type of knowledge and self awareness helps students to create workable schedules, and perhaps even more important, helps to create the motivation to use them.

Students' scores on this scale measure the degree to which they create and use schedules. Students who score low on this measure may need to learn about how to create a schedule and how to deal with distractions, competing goals, and procrastination. Accepting more responsibility for studying and achievement outcomes requires that students set realistic school goals and create plans that will facilitate goal achievement. These activities are enhanced by effective time management.

**Coefficient Alpha** = .77

**Sample Items:** I only study when there is the pressure of a test.

When I decide to do schoolwork, I set aside a certain amount of time and stick with it.

## Anxiety

Current conceptions of anxiety emphasize the effects of our own thought processes and how they affect school performance. Cognitive worry, a major component of anxiety, is manifested in negative self-referent statements. These negative thoughts about

one's abilities, intelligence, future, interactions with others, or likelihood of success divert a student's attention away from the task at hand, such as studying or taking a test. If a student is worried that he will not have the time to finish a test, then he is just making matters worse by taking even more time away to worry about his performance. This type of self-defeating behavior often sabotages a student's efforts. If students are tense, anxious, or fearful about studying or performing in academic situations, this will divert their attention away from the academic task and inward to self-criticism or irrational fears.

Students' scores on this scale measure how tense or anxious they are when approaching academic tasks. Students who score low on this measure (indicating high anxiety) need to learn techniques for coping with anxiety and reducing worry so that they can focus on the task and not on their anxiety. Many very capable students are often incapable of demonstrating their true level of knowledge and skill because they are paralyzed or distracted by debilitating anxiety. In fact, helping some students learn how to reduce their anxiety is sufficient to help them improve their performance. Once these attentional blocks are removed, they do well.

**Coefficient Alpha** = .82

**Sample Items:** While I am taking a test, worry about doing poorly gets in the way of keeping my mind on the test.

I am very tense when I study.

## Concentration

Concentration helps students to focus their attention on school-related activities, such as studying and listening in class, rather than on distracting thoughts, emotions, feelings, or situations. People have a limited capacity to process what is going on around them and in their own thoughts; if they are distracted

then there will be less capacity to focus on the task at hand. For students this means that distractions, or anything else that interferes with concentration, will divert attention away from school-related tasks.

Students' scores on this scale measure their abilities to concentrate and direct their attention to school and school-related tasks, including study activities. Students who score high on this measure are effective at focusing their attention and maintaining a high level of concentration. Students who score low on this measure are less successful at focusing their attention on the task at hand by eliminating interfering thoughts, emotions, feelings, and situations. They need to learn techniques to enhance concentration and to set priorities so that they can attend to school as well as their other responsibilities. Learning techniques for focusing attention and maintaining concentration helps students to implement effective learning strategies and can make learning and studying both more effective and more efficient.

**Coefficient Alpha** = .82

**Sample Items:** I pay attention fully when studying.

I find that when my teacher is teaching I think of other things and don't really listen to what is being said.

## Information Processing

Meaningful learning is enhanced by the use of elaboration and organization strategies. These strategies help to build bridges between what a student knows and what he or she is trying to learn and remember. Using what we already know, that is, our prior knowledge, experiences, attitudes, beliefs, and reasoning skills to help make meaning out of new information is critical to success in educational and training settings. The difference between an expert and a novice

is not just the amount of knowledge they possess but also, and perhaps even more important, the way that knowledge is organized. It is the difference between storing one thousand folders by throwing them in the middle of a room versus storing them by some meaningful organization in filing cabinets.

Students' scores on this scale measure how well they can create imaginal and verbal elaborations and organizations to foster understanding and recall. Students who score low on this measure need to learn methods that they can use to help add meaning and organization to what they are trying to learn. These methods range from simple paraphrasing and summarizing to creating analogies, the use of application, creating organizational schemes and outlining, and the use of inferential, analytical, and synthetic reasoning skills. A student who does not have a repertoire of these strategies and skills will find it difficult to incorporate new knowledge and understanding in such a way that acquisition and recall will be effective, often despite the large amount of time spent studying. The effectiveness and efficiency of both autonomous and classroom learning are facilitated by the use of information processing strategies.

**Coefficient Alpha** = .80

**Sample Items:** I change the material I am studying into my own words.

I try to think through a topic and decide what I am supposed to learn from it rather than just read it over when doing schoolwork.

## Selecting Main Ideas

Effective and efficient studying requires that the student be able to select the important material for in-depth attention. Most lectures, discussions, and textbooks contain redundant material, extra examples, and many supporting details to help explain what is

being taught or presented. A major school task involves separating out the important from the unimportant or simply didactic information that does not have to be remembered. If a student cannot select out the critical information then the learning task becomes complicated by the huge amount of material the individual is trying to acquire. Lacking this skill also increases the likelihood that the student will not have enough time to study everything that must be covered.

Students' scores on this scale measure their skills at selecting important information to concentrate on for further study in either classroom lecture or autonomous learning situations. Students who score low on this measure need to learn more about how to identify important information so that they can focus their attention and information processing strategies on appropriate material.

**Coefficient Alpha** = .71

**Sample Items:** I have a hard time finding the important points in my reading.

Often when studying I seem to get lost in details and can't remember the main ideas.

## Study Aids

Students need to know how to use study aids created by others and how to create their own. Textbook authors or publishers will often use headings, special type, white space, special markings, summaries, and statements of objectives to help students learn from these materials. However, unless students know how to recognize and use these hints and aids they will not benefit from them. It is also important for students to know how to generate their own aids by methods such as the creation of diagrams, text marking, creating charts or summary sheets, and underlining. There are other supplementary activities that also support and enhance meaningful learning such as attending group

review sessions or comparing notes with another student to check either accuracy or completeness.

Students' scores on this scale measure their ability to use or create study aids that support and increase meaningful learning and retention. Students who score low on this measure may need to learn more about the types of study aids provided in educational materials and classes and how they can create their own aids. Using and creating study aids improves both the effectiveness and the efficiency of learning, particularly in autonomous learning situations.

**Coefficient Alpha** = .68

**Sample Items:** I use special study helps, such as italics and headings, that are in my textbooks.

When they are available, I go to study or review sessions.

## Self Testing

Reviewing and testing one's level of understanding are important for knowledge acquisition and comprehension monitoring. These strategies both support and contribute to meaningful learning and effective performance. Without them learning could be incomplete or errors might persist undetected. Reviewing and self-testing also contribute to knowledge consolidation and integration across topics. Using mental reviews, going over class notes and the text, thinking up potential questions to guide reading or help prepare for an exam are all important methods for checking understanding, consolidating new knowledge, integrating related information (both from what is being learned and from what is already known), and identifying if additional studying must be done.

Students' scores on this scale measure their awareness of the importance of self testing and reviewing and the degree to which they use these methods.

Students who score low on this measure need to learn more about the importance of self testing and need to learn specific methods to review school material and to monitor their comprehension. These methods include structured reviews of large amounts of material; mental reviews of individual study segments; asking questions before, during, and after reading or studying or going to class; trying to use new information in novel ways; trying to apply a principle or method; and using a systematic approach to study.

**Coefficient Alpha** = .74

**Sample Items:** I stop often while reading and think over or review what has been said.

I try to think of possible test questions when studying my class material.

## Test Strategies

Effective test performance depends on both preparation strategies and test-taking strategies. A student needs to know how to prepare for the type of performance that will be required and how to maximize that performance. Test preparation includes knowing about the type of test. For example, is it going to be a short-answer or a multiple-choice exam? Will performance require simple recall or will concepts,

principles, and ideas need to be applied? Test preparation also includes knowing about methods for studying and learning the material in a way that will facilitate remembering and later use. Test-taking strategies include knowing about the characteristics of tests and test items, and how to create an effective test-taking plan.

Students' scores on this scale measure their use of test-taking and test preparation strategies. Students who score low on this measure may need to learn more about how to prepare for tests, how to create a plan of attack for taking a test, the characteristics of different types of tests and test items, and how to reason through to an answer. Often, students' performance on a test is not an accurate indicator of what they have learned. Knowing about test-taking and preparation strategies and how to use them helps students target their study activities, set up study goals, implement an effective study plan, and demonstrate their knowledge and skill acquisition so it can be accurately evaluated.

**Coefficient Alpha** = .81

**Sample Items:** I have difficulty adapting my studying to different types of subjects.

In taking tests, writing themes, and other schoolwork, I find I have not understood what the teacher wants and lose points because of it.

## Part 4: THE DEVELOPMENT OF THE LASSI-HS

The LASSI-HS was created in response to educators' requests for a high school version of the LASSI. A team of experts, including educational psychologists, school psychologists, teachers, school counselors, and test specialists analyzed the college version of the LASSI and suggested wording changes for many of the items. These modifications were designed to generate a set of items that used a high school-level vocabulary and that reflected learning tasks and demands in a high school environment. The resulting item set was refined based on two pilot tests with high school students. This item set was also reviewed by 30 high school teachers. This draft version of the LASSI-HS was then field tested with over 750 ninth-grade students from five different school districts in three states. Based on the data obtained from this field test, and a second review by the team of experts, the final 76-item version of the LASSI-HS was developed.

The same conceptual framework underlies the LASSI and the LASSI-HS. Both instruments also include the same scales and almost the same number of parallel items (the only difference is that there are eight items on the LASSI Time Management Scale but there are seven items on the LASSI-HS Time Management Scale). Given these similarities among the instruments, the research underlying the development of the LASSI is relevant for understanding the development of the LASSI-HS.

The developmental work that led to the creation of the LASSI began in 1978 as part of the Cognitive Learning Strategies Project at the University of Texas at Austin. In response to the increasing numbers of academically underprepared students entering post-secondary educational and training settings, many institutions were creating programs to address stu-

dent deficiencies. However, one of the major problem areas in this field related to assessment. The successful implementation of a learning and study strategies course or program requires a reliable and valid means for measuring students' deficits and progress. In addition, an accurate diagnosis of entry-level skills could be used to create individualized prescriptions for improvement and subsequent assessments as well as providing a basis for evaluating the effectiveness of the course or program.

### Early Developmental Activities

The first few years of work focused on data gathering. In addition, an analysis was made of existing published and experimental instruments and inventories. It was found that the topics encompassed by the terms "study skills" and "learning strategies" varied considerably among researchers, practitioners, and assessment measures. Since there was no consensus concerning definitional components, the initial phases of this work involved an attempt to create a categorical scheme. To assist in this work a survey project was conducted to examine the contents of study skills books, manuals, and programs. Input was also gathered from a series of experts in the area.

### Development of an Item Pool

Using the data gathered in the first series of studies, an initial item pool was created. This pool of 645 items was drawn from all of the sources used in the early developmental stage. These items were sorted by expert judges using a tentative categorical scheme that was developed.

During the process of sorting the items two major problems were identified: first, many items were

close duplicates; and second, a number of items fit into more than one category (e.g., time management as a test-taking strategy). The first problem was resolved by eliminating duplicate items and the second was left to be addressed after the initial pilot tests when the categorical scheme could be revised based on both the descriptive and correlational data collected. In addition, items that did not directly deal with study practices (e.g., items about personality characteristics) and items whose content concerned an aspect of behavior or experience that could not be altered and, therefore, could not be a target of remediation (e.g., “My parents read to me as a child.”) were eliminated. Items that were confusing, compound items (those containing more than one question or statement in the same item), and poorly worded items were rewritten by specialists in tests and measurement.

As a result of these selection processes the pool of potential items was reduced to 291. Although the LASSI currently used a Likert-type scale, these initial pilot items were converted to a true-false format. Approximately half of the items were worded positively and half negatively.

## Pilot Testing

A preliminary pilot test was conducted to evaluate the administration procedures and to begin collecting psychometric data about the items. Different groups of students completed approximately one third of the items (to reduce the burden of testing for any one individual) as well as a measure of social desirability and a questionnaire about the items and administration procedures. A subset of this population was also interviewed.

The measure of social desirability was used to determine the degree of relationship between responses to individual items and the subject's desire to be socially acceptable. This response bias can be a major problem for self-report instruments. The post-experimen-

tal questionnaire was used to gather information from the students about perceived difficulties, problem questions and suggested modifications and improvements.

Based on an analysis of this data set and its relation to other student data such as Scholastic Aptitude Test scores, grade-point average, and high school rank, a number of changes were made. First, the format was changed to a Likert-type measure. If necessary, items were reworded. Second, wording and phrasing changes were made on a number of items. Finally, items correlating above .50 with the measure of social desirability were eliminated. In addition, confusing or unclear items were rewritten or eliminated.

In addition to eliminating items from the potential pool, a number of new items were added. The sources of these new items included: a survey of current research literature in cognitive psychology, responses from students on the post-experimental questionnaire, suggestions from practitioners, and student responses on the Learning Activities Questionnaire, a precursor of the LASSI developed as part of the project.

This new pool of items was then examined independently by two content matter specialists and two psychometricians. A revised set of 14 categories containing at least 7 items for each category was created. This version of the LASSI had 149 items.

A second pilot test was conducted to evaluate the administration procedures and to examine the properties of the items on the revised instrument. The descriptive data collected and the student comments made during the feedback portion of the administration sessions were used to establish criteria for selecting items for the field test version of the LASSI. This version of the LASSI had 130 items. In addition, a preliminary study of test-retest reliability (with a 3 to 4-week interval) was conducted. A test-retest correlation of .88 was computed for the total instrument.

## Scale Construction

A series of field tests was conducted over a 2-year period. During this period the number of items was reduced from 130 to 90, and 10 scales measuring clusters of learning strategies, study skills and attitudes were developed. These clusters were identified by groups of experts and refined using psychometric data, such as coefficient alpha, for each potential scale. In addition, preliminary norms were developed using the Fall 1982 incoming freshman class at a small private college in the eastern United States (with a representative student body). A total of 850 students participated, with complete data available for 780 students.

The scales were refined and thirty new items were created and added prior to another large-scale field test in 1984. Item analysis data were used to create the current form of the LASSI. Norms were developed using a sample of 880 incoming freshmen from a large southern university. Test-retest correlations (3-week interval) were computed on a sample of 209 students from an introductory course in communications at the same school.

A number of different approaches have been used to examine the validity of the LASSI. First, the scale scores have been compared, where possible, to other tests or subscales measuring similar factors. Second, several of the scales have been validated against performance measures. Finally, the LASSI has been subjected to repeated tests of user validity. Professors, advisors, developmental educators, counselors, and learning center specialists at more than 700

colleges and universities have used the LASSI. They report few, if any, administration problems and a high degree of usefulness in their settings.

We have also examined the usefulness of the LASSI as part of our own work on the Cognitive Learning Strategies Project. It has been used repeatedly in an undergraduate course in learning-to-learn that is part of our real-world laboratory. This course is designed to help academically underprepared and educationally disadvantaged students who are either experiencing, or are predicted to experience, academic problems while attending college. Approximately 1,000 students per year enroll. This 3-credit elective course is taught in sections of about 30 each. The LASSI has been used to help diagnose individual student problems, to direct both remediation and enrichment activities, and to evaluate student progress and course components.

## Development of the LASSI-HS Norms

The initial norms for the LASSI-HS were developed from a sample of 2,616 high school students in a mid-size city in the southwest. Students were selected to reflect a range of ethnic backgrounds, economic conditions, and academic achievement levels. The sample included a total of 857 9th grade students, 500 10th grade students, 575 11th grade students, and 604 12th grade students. See Tables 1-4 for the percentile equivalents of the raw scores on each of the 10 LASSI-HS scales. See Tables 5-8 for the raw score equivalents of the percentiles on each of the 10 LASSI-HS scales.

**Table 1. Percentile Equivalents of Raw Scores in each of the 10 LASSI-HS Scales for 9th Grade Students**

## Grade 9

SCORE	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	SCORE
5	—	—	—	—	—	—	1	—	—	—	5
6	—	—	—	—	—	—	1	—	—	—	6
7	—	—	1	—	—	—	1	—	—	—	7
8	1	1	1	1	1	1	1	1	1	1	8
9	1	1	1	1	1	1	4	1	1	1	9
10	1	1	3	1	1	1	8	1	1	1	10
11	1	1	6	3	2	1	12	1	1	1	11
12	1	1	8	4	3	1	17	3	1	1	12
13	1	1	11	6	5	2	23	4	2	1	13
14	1	1	15	8	6	3	30	7	4	2	14
15	1	1	18	11	8	4	38	10	5	3	15
16	2	2	23	14	11	6	46	13	8	4	16
17	3	3	28	17	14	9	54	17	10	6	17
18	4	4	33	21	17	12	63	22	14	9	18
19	5	6	38	25	20	15	70	28	18	12	19
20	6	8	44	29	25	20	78	34	22	15	20
21	8	10	50	34	29	25	84	40	28	19	21
22	11	13	56	40	35	30	90	47	33	24	22
23	13	17	63	45	40	36	95	54	39	29	23
24	17	21	68	50	46	42	99	60	45	34	24
25	20	26	74	56	51	49	99	66	51	40	25
26	24	31	78	61	57	55	—	72	57	46	26
27	29	37	83	67	62	62	—	77	63	52	27
28	34	43	86	72	68	68	—	82	69	58	28
29	40	49	90	77	73	74	—	87	74	63	29
30	46	55	92	81	78	79	—	90	79	69	30
31	52	61	95	85	82	83	—	93	83	74	31
32	58	66	97	88	86	87	—	95	87	79	32
33	64	72	98	91	89	90	—	97	90	83	33
34	71	77	99	93	92	93	—	98	93	87	34
35	77	81	99	95	94	95	—	99	95	90	35
36	83	86	—	97	96	97	—	99	96	93	36
37	88	90	—	98	98	99	—	99	98	96	37
38	93	94	—	99	99	99	—	99	99	98	38
39	98	98	—	99	99	99	—	99	99	99	39
40	99	99	—	99	99	99	—	99	99	99	40

**Table 2. Percentile Equivalents of Raw Scores in each of the 10 LASSI-HS Scales for 10th Grade Students**

## Grade 10

SCORE	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	SCORE
5	—	—	—	—	—	—	1	—	—	—	5
6	—	—	—	—	—	—	1	—	—	—	6
7	—	—	1	—	—	—	1	—	—	—	7
8	1	1	1	1	1	1	1	1	1	1	8
9	1	1	1	1	1	1	2	1	1	1	9
10	1	1	3	1	1	1	5	1	1	1	10
11	1	1	6	2	2	1	8	1	1	1	11
12	1	1	8	4	3	1	12	3	1	1	12
13	1	1	11	5	5	1	17	4	1	1	13
14	1	1	15	7	6	1	23	7	2	1	14
15	1	1	18	9	8	2	29	10	4	2	15
16	2	1	23	11	11	4	37	13	6	3	16
17	3	2	28	14	14	6	45	17	8	5	17
18	4	3	33	17	17	9	53	22	11	7	18
19	5	5	38	21	20	12	62	28	14	9	19
20	6	6	44	25	24	16	70	34	18	11	20
21	7	9	50	29	28	21	77	40	23	15	21
22	10	11	56	34	33	27	85	47	28	19	22
23	12	15	63	39	38	33	92	54	34	23	23
24	15	19	68	45	44	40	98	60	41	28	24
25	18	23	74	50	49	47	99	66	47	33	25
26	22	28	78	56	55	54	—	72	53	39	26
27	27	33	83	61	61	60	—	77	60	45	27
28	32	39	86	66	66	66	—	82	66	51	28
29	37	44	90	71	71	72	—	87	72	57	29
30	43	51	92	76	76	77	—	90	77	63	30
31	49	57	95	80	80	81	—	93	81	68	31
32	56	63	97	84	84	85	—	95	85	74	32
33	62	68	98	87	88	88	—	97	89	78	33
34	69	74	99	90	91	91	—	98	92	83	34
35	75	79	99	93	93	93	—	99	94	86	35
36	81	84	—	95	95	95	—	99	96	90	36
37	87	89	—	97	97	97	—	99	98	93	37
38	93	93	—	99	99	99	—	99	99	96	38
39	98	97	—	99	99	99	—	99	99	99	39
40	99	99	—	99	99	99	—	99	99	99	40

**Table 3. Percentile Equivalents of Raw Scores in each of the 10 LASSI-HS Scales for 11th Grade Students**

## Grade 11

SCORE	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	SCORE
5	—	—	—	—	—	—	1	—	—	—	5
6	—	—	—	—	—	—	1	—	—	—	6
7	—	—	1	—	—	—	1	—	—	—	7
8	1	1	1	1	1	1	1	1	1	1	8
9	1	1	1	1	1	1	2	1	1	1	9
10	1	1	3	1	1	1	5	1	1	1	10
11	1	1	6	2	2	1	8	1	1	1	11
12	1	1	8	3	3	1	11	2	1	1	12
13	1	1	11	4	5	1	16	3	1	1	13
14	1	1	15	6	6	1	21	5	2	1	14
15	1	1	18	8	8	2	28	8	4	2	15
16	2	1	23	10	11	4	35	11	6	3	16
17	3	2	28	13	14	6	43	15	8	5	17
18	4	3	33	16	17	9	51	20	11	7	18
19	5	5	38	19	20	12	59	25	14	9	19
20	6	6	44	23	24	16	67	31	18	11	20
21	7	9	50	27	28	21	75	37	23	15	21
22	9	11	56	32	33	25	83	44	28	19	22
23	11	15	63	37	38	31	90	51	34	22	23
24	14	19	68	42	44	37	97	57	41	27	24
25	16	23	74	48	49	43	99	64	47	32	25
26	19	28	78	53	55	50	—	70	53	37	26
27	23	33	83	59	60	56	—	75	60	43	27
28	28	39	86	64	65	63	—	80	66	49	28
29	33	45	90	69	70	69	—	85	72	54	29
30	38	51	92	74	75	74	—	88	77	60	30
31	44	57	95	79	79	79	—	92	81	66	31
32	51	63	97	83	83	84	—	94	85	71	32
33	57	68	98	87	87	87	—	96	89	76	33
34	64	74	99	90	90	91	—	97	92	81	34
35	71	79	99	93	92	93	—	98	94	85	35
36	78	84	—	95	95	95	—	99	96	88	36
37	84	89	—	97	97	97	—	99	98	92	37
38	90	93	—	99	99	99	—	99	99	96	38
39	97	97	—	99	99	99	—	99	99	99	39
40	99	99	—	99	99	99	—	99	99	99	40

**Table 4. Percentile Equivalents of Raw Scores in each of the 10 LASSI-HS Scales for 12th Grade Students**

## Grade 12

SCORE	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	SCORE
5	—	—	—	—	—	—	1	—	—	—	5
6	—	—	—	—	—	—	1	—	—	—	6
7	—	—	1	—	—	—	1	—	—	—	7
8	1	1	1	1	1	1	1	1	1	1	8
9	1	1	1	1	1	1	1	1	1	1	9
10	1	1	3	1	1	1	2	1	1	1	10
11	1	1	6	2	1	1	5	1	1	1	11
12	1	1	8	3	2	1	8	1	1	1	12
13	1	1	11	4	3	1	12	2	1	1	13
14	1	1	15	6	4	1	17	3	1	1	14
15	1	1	18	8	6	1	22	6	2	1	15
16	1	1	23	9	8	2	29	9	4	2	16
17	1	1	28	12	11	4	37	12	6	3	17
18	1	1	33	14	13	7	45	17	8	4	18
19	1	3	38	17	17	10	54	22	11	6	19
20	1	4	44	20	21	13	62	28	15	7	20
21	2	6	50	24	25	18	71	34	20	10	21
22	3	8	56	28	30	23	79	41	25	12	22
23	5	11	63	33	35	28	87	48	31	16	23
24	7	15	68	38	41	34	95	54	38	19	24
25	9	19	74	43	47	41	99	61	47	24	25
26	13	24	78	48	53	47	—	67	52	29	26
27	17	29	83	54	58	54	—	73	58	34	27
28	21	35	86	60	64	60	—	78	65	40	28
29	27	40	90	65	69	66	—	83	71	46	29
30	33	47	92	70	75	71	—	87	76	52	30
31	39	53	95	75	79	76	—	90	81	59	31
32	46	60	97	80	83	81	—	93	85	65	32
33	54	66	98	85	87	85	—	95	89	71	33
34	61	72	99	88	90	88	—	96	92	77	34
35	68	78	99	91	92	91	—	98	94	82	35
36	75	84	—	94	95	93	—	99	96	87	36
37	82	89	—	96	97	96	—	99	98	91	37
38	89	93	—	99	99	98	—	99	99	95	38
39	96	97	—	99	99	99	—	99	99	99	39
40	99	99	—	99	99	99	—	99	99	99	40

**Table 5. Raw Score Equivalents of Percentiles on each of the 10 LASSI-HS Scales for 9th Grade Students**

Percentile	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	Percentile
99	40	40	34	38	38	37	24	35	38	39	99
95	39	38	31	35	36	35	23	32	35	37	95
90	38	37	29	33	34	33	22	30	33	35	90
85	37	36	28	31	32	32	21	29	32	34	85
80	36	35	27	30	31	31	--	28	30	32	80
<b>75</b>	<b>35</b>	<b>34</b>	<b>25</b>	<b>29</b>	<b>30</b>	<b>30</b>	<b>20</b>	<b>27</b>	<b>29</b>	<b>31</b>	<b>75</b>
70	34	33	--	28	29	29	19	26	28	30	70
65	33	32	24	27	28	28	--	25	--	--	65
60	--	31	23	26	27	27	18	24	27	29	60
55	32	30	22	25	26	26	17	23	26	28	55
<b>50</b>	<b>31</b>	<b>29</b>	<b>21</b>	<b>24</b>	<b>25</b>	<b>25</b>	<b>--</b>	<b>--</b>	<b>25</b>	<b>27</b>	<b>50</b>
45	30	--	20	23	24	--	16	22	24	26	45
40	29	28	--	22	23	24	--	21	23	25	40
35	28	27	19	21	22	23	15	20	--	24	35
30	27	26	18	20	21	22	14	--	22	23	30
25	26	25	17	19	20	21	--	19	21	22	25
20	25	24	16	18	19	20	13	18	20	21	20
15	24	23	14	16	17	19	12	17	18	20	15
10	22	21	13	15	16	18	11	15	17	19	10
05	19	19	11	13	13	16	10	14	15	17	05
01	13	13	9	10	10	11	8	11	11	13	01

**Table 6. Raw Score Equivalents of Percentiles on each of the 10 LASSI-HS Scales for 10th Grade Students**

Percentile	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	Percentile
99	40	40	34	38	38	38	25	35	38	39	99
95	39	39	31	36	36	36	24	32	36	38	95
90	38	37	29	34	34	34	23	30	34	36	90
85	37	36	28	32	32	32	22	29	32	35	85
80	36	35	27	31	31	31	--	28	31	34	80
<b>75</b>	<b>35</b>	<b>34</b>	<b>25</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>21</b>	<b>27</b>	<b>30</b>	<b>32</b>	<b>75</b>
70	34	--	--	29	29	29	20	26	29	--	70
65	--	33	24	28	28	28	--	25	28	31	65
60	33	32	23	27	27	27	19	24	27	30	60
55	32	31	22	26	26	26	--	23	--	29	55
<b>50</b>	<b>31</b>	<b>30</b>	<b>21</b>	<b>25</b>	<b>25</b>	<b>--</b>	<b>18</b>	<b>--</b>	<b>26</b>	<b>28</b>	<b>50</b>
45	--	29	20	24	24	25	17	22	25	27	45
40	30	28	--	23	--	24	--	21	24	26	40
35	29	--	19	22	23	--	16	20	23	--	35
30	28	27	18	21	22	23	15	--	--	25	30
25	27	26	17	20	20	22	--	19	22	24	25
20	26	24	16	19	19	21	14	18	21	22	20
15	24	23	14	17	17	20	13	17	19	21	15
10	22	22	13	16	16	19	12	15	18	20	10
05	19	19	11	13	13	17	10	14	16	17	05
01	14	14	9	10	10	13	9	11	12	13	01

**Table 7. Raw Score Equivalents of Percentiles on each of the 10 LASSI-HS Scales for 11th Grade Students**

Percentile	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	Percentile
99	40	40	34	38	38	38	25	36	38	39	99
95	39	39	31	36	36	36	24	33	36	38	95
90	38	37	29	34	34	34	23	31	34	37	90
85	37	36	28	33	33	32	--	29	32	35	85
80	--	35	27	31	31	31	22	28	31	34	80
<b>75</b>	<b>36</b>	<b>34</b>	<b>25</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>21</b>	<b>27</b>	<b>30</b>	<b>33</b>	<b>75</b>
70	35	--	--	29	29	29	--	26	29	32	70
65	34	33	24	28	28	--	20	25	28	31	65
60	--	32	23	27	27	28	19	--	27	30	60
55	33	31	22	--	26	27	--	24	--	29	55
<b>50</b>	<b>32</b>	<b>30</b>	<b>21</b>	<b>26</b>	<b>25</b>	<b>26</b>	<b>18</b>	<b>23</b>	<b>26</b>	<b>28</b>	<b>50</b>
45	31	29	20	25	24	--	--	22	25	--	45
40	--	28	--	24	--	25	17	--	24	27	40
35	30	--	19	23	23	24	16	21	23	26	35
30	29	27	18	22	22	23	--	20	--	25	30
25	28	26	17	21	20	22	15	19	22	24	25
20	26	24	16	19	19	21	14	18	21	23	20
15	25	23	14	18	17	20	13	17	19	21	15
10	23	22	13	16	16	19	12	16	18	20	10
05	19	19	11	14	13	17	10	14	16	17	05
01	14	14	9	10	10	13	9	12	12	13	01

**Table 8. Raw Score Equivalents of Percentiles on each of the 10 LASSI-HS Scales for 12th Grade Students**

Percentile	ATT	MOT	TMT	ANX	CON	INP	SMI	STA	SFT	TST	Percentile
99	40	40	34	38	38	39	25	36	38	39	99
95	39	39	31	37	36	37	24	33	36	38	95
90	38	37	29	35	34	35	--	31	33	37	90
85	--	36	28	33	33	33	23	30	32	36	85
80	37	--	27	32	31	32	22	29	31	35	80
<b>75</b>	<b>36</b>	<b>35</b>	<b>26</b>	<b>31</b>	<b>30</b>	<b>31</b>	<b>--</b>	<b>28</b>	<b>30</b>	<b>34</b>	<b>75</b>
70	--	34	25	30	29	30	21	27	29	33	70
65	35	33	24	29	28	29	--	26	28	32	65
60	34	32	23	28	--	28	20	25	--	31	60
55	33	--	22	27	27	27	19	24	27	--	55
<b>50</b>	<b>--</b>	<b>31</b>	<b>21</b>	<b>--</b>	<b>26</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>26</b>	<b>30</b>	<b>50</b>
45	32	30	20	26	25	26	18	23	25	29	45
40	31	29	--	25	24	25	--	22	--	28	40
35	--	28	19	24	23	24	17	21	24	27	35
30	30	27	18	23	22	--	16	--	23	26	30
25	29	26	17	22	21	23	--	20	22	25	25
20	28	25	16	20	20	22	15	19	21	24	20
15	27	24	14	19	19	21	14	18	20	23	15
10	25	23	13	17	17	19	13	17	19	21	10
05	23	21	11	14	15	18	11	15	17	19	05
01	19	17	9	10	11	15	9	12	14	15	01



# LASSI-HS

## Learning And Study Strategies Inventory High School Version

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### User's Manual

This User's Manual includes an overview of the instrument, a history of the instrument's development, a section on administration and scoring, a complete description of the ten scales included in the LASSI-HS, and tables showing percentile and score equivalents for each of the LASSI-HS scales.

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### Ordering Information

Volume discounts are available. Complete information on ordering the LASSI-HS is available from:

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