

# College Study Skills Inventory CSSI™ User's Manual

By

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Adapted from *The Learning Wizard*  
<http://www.thelearningwizard.com>

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# Description of the 3 Documents Associated with CSSI

## (1) CSSI User's Manual

- a. Describes how to conduct a root cause analysis of a learning problem.
- b. Gives directions on how to use the Study Skills Action Plan to determine how to solve a learning problem by developing the required study skills.

## (2) *Description of the Scales of the CSSI* contains:

- a. Study skill measured on each scale
- b. Symptom of not applying the study skill
- c. Effect of not applying the study skill
- d. Unit in *The Learning Wizard* that develops the study skill measured in each scale
- e. Assignment that will develop the required study skill

## (3) College Study Skills Inventory (CSSI)

- a. Available in PDF format for free so you do not need to buy expensive booklets.
- b. Inventory Items can be added or deleted to meet the needs of a unique student population.
- c. Can be administered to incoming college students either online or in groups.
- d. As students answer the questions they will immediately realize if there are any study skills they need to develop.
- e. Scales organized by the hierarchical of study skills required for college success
- f. Easy to grade

## **What is the College Study Skills Inventory?**

Studying can be defined as diligently applying one's mind to focus on obtaining, retaining and using information. The College Study Skills Inventory (CSSI) is a diagnostic prescriptive inventory to assess a student's application of the study skills required to excel in college-level courses.

CSSI groups the study skills required for college success into 16 self-reporting scales. Each scale measures one of the study skills required for college success. Questions given for each scale determine if the specific sub-skills required for that study skill are applied.

The inventory is available in Microsoft Word document format making it possible to customize any scale for a unique student population by adding or removing questions.

## ***What is root cause analysis (RCA)?***

A problem can be defined as an undesirable effect resulting from an interaction with either known or unknown causes. RCA is a problem solving method used to determine the initial cause or origin of a problem. Until the initial cause of a problem is solved you can only treat the problem's obvious symptoms. Treating the symptoms does not solve the problem and the problem will keep reoccurring.

After the root cause of the learning problem is diagnosed and corrected, the symptoms can be addressed. A RCA can be done to prevent a learning problem before it can occur as well as after it occurs.

## ***How can the CSSI determine the root cause of a learning problem?***

CSSI is designed to determine the root cause of a student's learning problem by categorizing college study skills in a hierarchical order. In the following list of study skills a lower level study skill must be satisfied before a higher level study skill can be applied.

For example, preparation for college begins by knowing what subjects or courses are required to reach an academic goal. Next, it is necessary to determining how much time one has available weekly to study and how much study time is required. Then, it is necessary to prioritize activities and determine when during the week to complete assigned coursework. Instructing a student how do develop vocabulary skills will not benefit a student who does not have an academic goal or the time to study. Likewise, a student who has comprehension problems will not be able to understand information until developing the prerequisite vocabulary skills required to learn the definition of the technical terms as they are introduced in a course.

## Hierarchy of College Study Skills

Highest	Study Skill	Question Needed to be Answered
	Comprehension Skills	How can the information in a college-level course be understood so I can do critical thinking and problem solving?
	Vocabulary Skills	How can I obtain, retain and use for critical thinking and problem solving the large number of terms introduced in college courses?
	Test Taking Strategies - after	What debriefing strategies can I use to become better prepared for future tests?
	Test Taking Strategies - during	What strategies can I use to answer test questions?
	Test Taking Strategies - before	What test preparation strategies do I need?
	Recall Information	How can I recall information?
	Retain Information	How can I retain information?
	Reading Rate	How can purpose and self-talk determine my reading rate?
	Cognitive Maps and Outlining	How can I use cognitive maps to know what information to obtain and to predict test questions?
	Questions	How can I use questions to keep focused when studying?
	Procrastination	How can I prevent or overcome procrastination?
	Perseverance	How can I keep motivated?
	Time Management	How can I create a prioritized study schedule?
	Priorities	How can I prioritize my activities?
	Study Time Required	How can I predict how many courses I have time to study?
Lowest	Goal Setting	What do I need to learn for my educational goal?

An RCA is necessary to prevent treating the symptoms without eliminating the root cause of a learning problem. The root cause of a student's learning problem is the study skill at the lowest level of the Hierarchy of College Study Skills that has unacceptable responses.

While a student may apply most of the sub-skills required for a specific study skill, it is necessary to apply all of the sub-skills required. This is because a chain is as strong as its weakness link. For this reason it is necessary to develop any of the sub-skills for a study skill that has only a few questions revealing a learning problem. Not using a lower level sub-skill can later become the root cause of a learning problem when the sub-skill becomes a prerequisite for a higher level study skill.

## ***What proactive ways can the CSSI prevent learning problems?***

Administering the CSSI before a student enrolls in a college-level course can reveal to both the college learning specialist and the student what college-level study skills needs to be developed. This application of the CSSI prevents the lack of a certain study skill from impacting the student's ability to succeed in the courses he or she plans to enroll.

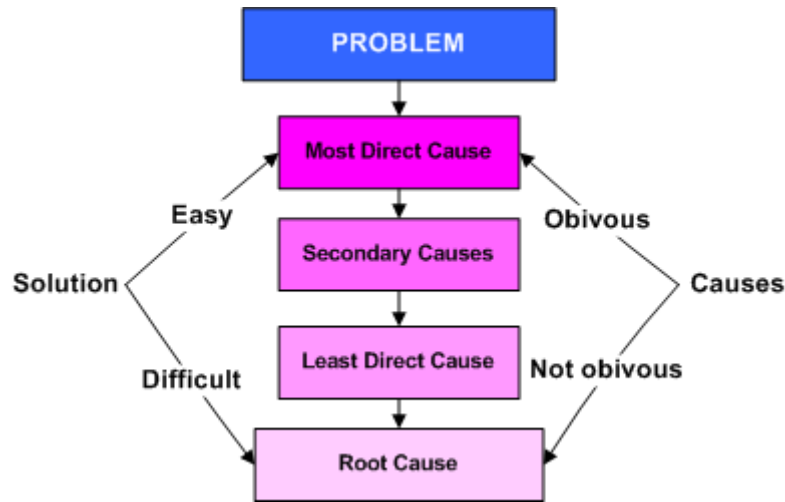
CSSI can be administered to the following groups:

1. **Orientation program** – Cause incoming freshman to become aware of the study skills required to succeed in college-level courses.
2. **Screening tool** – Identify individual students for study skill advisement or classes who are not prepared to succeed in college-level courses.
3. **Difficult programs** – Students going into difficult academic programs such as nursing, accounting and engineering need effective study skills.
4. **Athletic teams** – Due to the time athletic team members must spend practicing, it is imperative that team members are efficient and effective in their studies.
5. **Study skills class** – (a) Introduce the important of all of the study skills required. (b) Introduce at the beginning of a specific study skills unit the sub-skills required for that study skill.
6. **Study skills seminar** – Introduce what questions one must be able to answer to apply a specific study skill such as time management.
7. **High dropout courses** – For courses that have high dropout rates it needs to be determined why students are dropping out. At the same time students need to know what study skills need to be applied to excel in the course.
8. **High school students** – Make students in college-level or advanced placement courses aware of the study skills required.
9. **Compleitive programs** – Sometimes only a limited number of students in a class or course will be selected to continue in a program. Students who want a compleitive edge need to know if there are any study skills they need to develop or improve in order to complete.
10. **College faculty** – Faculty members can be made aware of specific study skills their students need help in developing.

## ***How can the CSSI diagnostic a learning problem?***

A college learning skills specialist can administer the CSSI to any student requesting help in overcoming a learning problem. After administering the CSSI the findings can be used to diagnosis the root cause of the student's learning problem. The first and most obvious cause connected to a learning problem is a symptom called the most direct cause. It is necessary to keep going down the Hierarchy of College Study Skills until the root cause is located. When

going down the sequence of causes to get to the root cause, the root cause usually becomes more difficult to detect and the solution becomes more difficult to implement.



### ***What steps are used to find the root cause of a learning problem?***

**Step 1:** Determine the most direct cause of the learning problem. This is usually the problem the student requests assistance to solve.

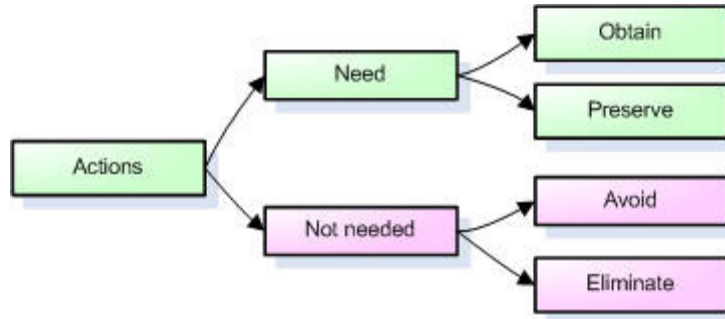
**Step 2:** Beginning with the most direct cause ask, “why?”

**Step 3:** Keep asking “why” as you go down the chain of events causing the problem until the root cause is located. Usually, this requires asking “why” several times until you “get to the bottom of it.”

**Step 4:** Once the root cause of the problem is determined it is necessary to determine if solving it creates another problem. If another problem is created additional problem solving is required.

### ***What are the actions used to solve or prevent a learning problem?***

Solving a learning problem requires both major and minor actions. An action is something that must be done to cause a desired outcome to result. Actions are divided into two groups. One group is the actions that something needs to be obtained or preserved. The other group of actions is those actions that need to be avoided or eliminated. In order solve a learning problem it is necessary to determine what sequence of actions is required.



### ***How are actions used to solve or prevent a learning problem?***

A major action is the action needed to prevent or eliminate the root cause of the learning problem. Usually before a major action can take place several minor actions are required. Minor actions are those actions that are the prerequisites for the major action. Because of the uniqueness of the cause or causes of each student's learning problem, it cannot be predicted in advance what minor actions are required.

The following four questions need to be asked for each major and minor action to determine what needs to be accomplished for each action?

1. What needs to be obtained in order to <study skill>?
2. What needs to be retained in order to <study skill>?
3. What needs to be avoided in order to <study skill>?
4. What needs to be eliminated in order to <study skill>?

### ***Why are synonyms used for the actions required to solve a problem?***

When possible, it is better to define precisely the outcome required to solve a problem by using a synonym of one of the four actions. This is because the synonym of an action defines what specific approach needs to be taken to solve the problem. Notice in the following sample of synonyms how each outcome's synonyms requires a different approach to the action taken to solve the problem:

**Obtain** - Synonyms describe how to *possess* something:

1. *access* - admission, means of entry, approach
2. *accomplish* - successfully doing something
3. *attain* - achieve
4. *perfect* – proficient.
5. *finish* - arrive at the end
6. *learn* - gain knowledge, understand, comprehension, or skills

**Preserve** - Synonyms describing how to *keep* something safe from harm, injury or to maintain current status:

1. *conserve* - save, protect
2. *guard* - protect
3. *keep* - hold,
4. *maintain* - keep or save from decomposition
5. *shield* - protector
6. *hold on* - keep

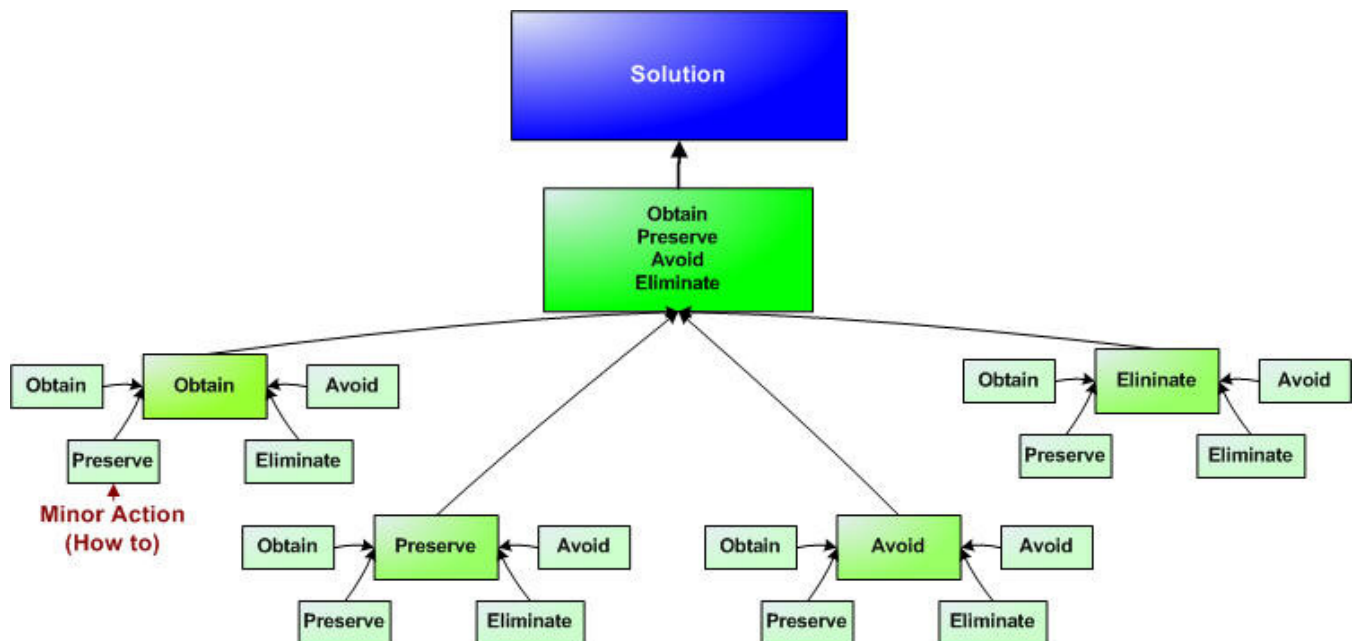
**Avoid** - Synonyms describe how to *refrain or stay away* from or prevent something:

1. *bypass* - go around something
2. *circumvent* - get around by artful maneuvering
3. *dodge* - evade by cunning, trickery, or deceit
4. *elude* - evade or escape from by using daring, cleverness, or skill
5. *evade* - using cleverness or deceit in avoiding or escaping
6. *not participate* - not being involved

**Eliminate** - Synonyms describing how plan to *get rid of or ended* something:

1. *annihilate* - destroy completely
2. *cancel* - erase, call off
3. *erase* - remove
4. *destroy* - demolish
5. *nullify* - revoke, cancel
6. *cut out* - stop

The following problem solving map illustrates the structure of the major and the minor actions required to solve a problem.



## ***What steps are used to solve a learning problem?***

- Step 1:** Administer the CSSI to determine the root cause and symptoms of the learning problem.
- Step 2:** Ask the four questions to determine the major action or actions needed to prevent or eliminate the root cause of the learning problem. Enter this information on the Study Skills Action Plan. This plan should be completed by the student in consultation with the college learning specialist.
- Step 3:** Ask the four questions to determine the minor actions that are the prerequisite for each major action. Enter this information on the Study Skills Action Plan.
- Step 4:** Prioritize the sequence of developing the study skills required by the major and minor actions.
- Step 5:** Determine if any actions are a prerequisite for each minor action required. Enter this information on the Study Skills Action Plan.
- Step 6:** After beginning to work on the solution determine if it is necessary to change any any action due to unpredictable factors and/or a better understanding of the problem.
- Step 7:** Assess the student's readiness to utilize the actions required to remove the learning barriers. When needed, use the following steps to develop the readiness needed to apply a required study skill.

## ***How can a student develop the readiness to apply the required study skills?***

Diagnosing the cause and solution needed for a student's learning problem is usually the easy part. The difficult part is having the student develop a willingness to change current habits and implement the study skills needed. For a student who resists taking the actions necessary to acquire and apply the required study skills the following three steps given in the Lewin/Schein's Change Theory should be applied:

### **Step 1: Become motivated to change requires the following:**

- a. **Overcoming Disconfirmation Bias** – Disconfirmation bias is being unwilling to develop new habits and study skills by giving reasons why the changes needed will not work. This is done by offering (1) imagination problems caused by the change, (2) reasons that diminish the change's importance and/or (3) low probability of needing to apply the change.

**Solution Requires** – Providing overwhelming evidence of the need to develop and apply the study skill required to overcome the learning problem. All reasons given that disconfirm the actions needed must be strongly contradicted by evidence demonstrating why the current study habits are not going to bring about the changes required to succeed in college.

- b. Overcoming Learning Anxiety** – Learning anxiety is worry produced by having to learn something that appears difficult or impossible. Learning anxiety causes defensiveness and resistance to change. The student does this through the use of denial, scapegoating, maneuvering, bargaining, and/or blaming something else.

**Solution Requires** – Have activities that demonstrate how it is possible to succeed when applying a specific study skill. Demonstrating how using the needed study skill will reduce or prevent learning anxiety from occurring. Emphasize that if the proper study skills are not applied survival anxiety will soon develop.

- c. Develop Survival Anxiety** – Survival anxiety is having to learn something in order to survive. Sometimes, survival anxiety needs to be greater than one's learning anxiety before a needed change will take place. Therefore, as a last resort in order to initiate a change it is necessary to cause the student to develop survival anxiety.

**Solution Requires** – Emphasizing if the required change does not take place it will result in not be able to reach one's academic goal. The consequence is having to fail a course and/or having to leave college friends and activities. Explain this is not an option if the necessary actions are taken to improve or acquire the necessary study skills.

## **Step 2: Accepts the idea that a change in study skills is needed**

After Step 1 the student must be willing to learn how to develop and apply the study skills needed.

**Solution Requires** – Have the student discuss changes he or she is willing to try. Provide instructional material that the student can use to develop the required study skills. In the Description of the Scales of the CSSI it is given what unit in *The Learning Wizard* develops the study skill measured by each scale. Use additional follow up meetings to support and praise the student for the success now being achieved. Have the student describe what success he or she can now achieve by using certain study skills. Keep reviewing and updating the Study Skills Action Plan and eliminating those study skills that are now applied.

## **Step 3: Establish a new self-identify through success and new interpersonal relationships**

**Solution Requires:** Suggesting ways the student can become involved with other students who are committed and involved in activities that promote college success by doing the following:

1. Ask the student the following questions:
  - a. Do your associates have an academic goal?
  - b. How are your associates interested in supporting your academic goals?
2. Recommend the student join a study group or professional student organization.

# Study Skills Action Plan

**Major Action Required:** \_\_\_\_\_

**Minor Actions Required For Major Action:**

**A. Obtain:** \_\_\_\_\_

In order to obtain the major action listed enter the minor actions required?

Obtain: \_\_\_\_\_

Preserve: \_\_\_\_\_

Avoid: \_\_\_\_\_

Eliminate: \_\_\_\_\_

**B. Preserve:** \_\_\_\_\_

In order to preserve the major action listed enter the minor actions required?

Obtain: \_\_\_\_\_

Preserve: \_\_\_\_\_

Avoid: \_\_\_\_\_

Eliminate: \_\_\_\_\_

**C. Avoid:** \_\_\_\_\_

In order to obtain the major action listed enter the minor actions required?

Obtain: \_\_\_\_\_

Preserve: \_\_\_\_\_

Avoid: \_\_\_\_\_

Eliminate: \_\_\_\_\_

**D. Eliminate:** \_\_\_\_\_

In order to preserve the major action listed enter the minor actions required?

Obtain: \_\_\_\_\_

Preserve: \_\_\_\_\_

Avoid: \_\_\_\_\_

Eliminate: \_\_\_\_\_