Strategic Learning:

A Guide to Understanding Your Learning Self

Featuring the Let Me Learn Process®, an Advanced Learning System

Christine A. Johnston, Ed.D.

Originator and Lead Resarcher

Let Me Learn, Inc

# Strategic Learning

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Part I

Understanding Yourself as a Learner

Preparing for Success

College is a time for discovery and self-exploration. To be successful, it is important to explore how you learn and how to use this knowledge to help you thrive, not only in college, but in life. In this course, you will have the opportunity to learn not only course content, but also how to learn the content. The focus will be on how your instructor perceives, takes in, and works with materials so you can see her approach to teaching this course. You will examine how you perceive, take in, and work with materials as you learn. Knowing this about your instructor and yourself will help you learn with intention. In short, what you find out will be helpful in this course, in other courses, and in life in general.

This may seem irrelevant to you at the moment since you find yourself in college and believe the fact that you succeeded to this point must indicate you are a successful learner. The truth of the matter is that most students get to college without understanding how they learn and often times find themselves frustrated and bewildered when the way they learned in high school or even entry level classes does not transfer to college or higher level courses particularly.

What’s the difference between success in your younger years of learning and learning in college? The answer is twofold: the first difference is the instructors and their approach to teaching, and the second is the subject matter and the challenges it presents by virtue of its content and performance requirements. College seeks to prepare you for employability. Therefore, it is vital that within your course you learn not just information, but that you learn how to understand the thinking and concepts behind the information so that you can work with it independently without constant supervision and direction. Economists, business executives, and educators alike all agree that in today’s global economy, the person who knows how to learn effectively and efficiently is the person who is most employable.

Read the following definition of learning and discuss your response to it: “Learning involves taking in the world around you (sounds, sights, information, experiences etc) and making sense of it so that you can respond to it in a timely and appropriate manner” (Johnston, 2010).
Discovering Your Combination of Learning Processes

Before continuing this course, you will need to complete the Learning Connections Inventory as per your instructor’s directions. Once you have completed the on-line instrument, bring the print-out that describes your combination of learning processes to class.

Place your combination of scores on the lines below:

<table>
<thead>
<tr>
<th>LCI Scores</th>
<th>Level of Usage (Use First, Use As Needed, Avoid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td></td>
</tr>
<tr>
<td>Precision</td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td></td>
</tr>
<tr>
<td>Reasoning</td>
<td></td>
</tr>
<tr>
<td>Confluence</td>
<td></td>
</tr>
</tbody>
</table>
Activity

Examining Your LCI Printout

The Learning Connections Inventory printout that you downloaded after completing the LCI instrument is filled with information about your Learning Processes. Read through the material carefully. Then ask yourself the following questions:

- Does the explanation of your LCI scores make sense to you?
- Have you always had a sense of yourself as a learner?
- What did these scores confirm for you?
- What new insights did these scores provide?
- What would you like to know more about concerning yourself as a learner?
Strategic Learning

Part II

Understanding Your Learning Patterns

Exploring Your Learning Patterns

Your four Learning Patterns (Sequence, Precision, Technical Reasoning, and Confluence) work as a team. Therefore, it is not accurate to say that an individual is a “technical learner” or a “sequential learner.” You use all of the Patterns but to varying degrees. Research shows, however, that you do not use each Pattern with equal comfort and naturalness. You may use one or more of them First, and one or more of them As Needed—and you may Avoid one or more of them. Keeping that information in mind, you are ready to examine each of the Patterns individually to see what lies within each.

A review of the Patterns begins with developing an understanding of the scores that make up your Learning Connection Inventory results (See Figure 2.1 Range of LCI Scores). Please note that if you use a Pattern in the Use First range (25–35) you can expect to find yourself saying, “Yes,” to most of the Pattern characteristics listed.

Figure 2.1 Range of LCI Scores

Avoid
(Score of 07-17)

Use As Needed
(Score of 18-24)

Use First
(Score of 25-35)

If some of your Patterns fall within the Use As Needed range (18–24) you just don’t feel an urgency to use them. Sometimes, you actually need to wake them up to let them know that you need them—now! If one or more of your Patterns are Use As Needed, you will find yourself saying, “I agree with some of the characteristics and behaviors cited under a specific Pattern category but not all of them. I don’t feel a strong pull to use this Pattern. I can use it when I need to, but it isn’t a Learning Process that I feel I must use or else I won’t succeed.”
If, on the other hand, you have a Pattern score in the Avoid range (7–17), you will find yourself saying, “I truly do not like to use that Pattern. Frankly, I avoid using it whenever I can. I don’t understand it. I don’t enjoy it, and I simply don’t like it.”

**Reviewing Pattern Explanations**

What follows next is an explanation of each of the Learning Patterns. Please note that each Pattern explanation begins with what people think, do, feel, or say if they use that Pattern at the Use First level (LCI scale scores 25-35). The Use First set of descriptors is followed by an Avoid set (LCI scale scores 07-17). As you read the following descriptions consider how each pulls you in a different direction forming the interaction of the Patterns within you.

If your LCI score for Sequence is between 25 and 35, then the following explanation of Sequence makes a great deal of sense to you (See Figure 2.2 Use First Sequence). If, on the other hand, your score for Sequence is between 7 and 17, you will find the Avoid Sequence descriptions (See Figure 2.3 Avoid Sequence) much more accurate to how you experience your Sequential Learning Pattern.

*Figure 2.2 Use First Sequence*

<table>
<thead>
<tr>
<th>How you think</th>
<th>How you do things</th>
<th>How you feel</th>
<th>Your internal self-talk sometimes said aloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think in goals, objectives and steps.</td>
<td>I break tasks into steps.</td>
<td>I feel secure when I have the steps laid out.</td>
<td>What’s the goal for this task? What’s the first step?</td>
</tr>
<tr>
<td>I think with clarity not clutter.</td>
<td>I organize my life by keeping a tight schedule.</td>
<td>I thrive on a well ordered life.</td>
<td>There is a place for everything and everything in its place.</td>
</tr>
<tr>
<td>I think in phases—start-up, progress, completion.</td>
<td>I strive to do a task methodically from beginning to end</td>
<td>I feel a great sense of satisfaction when I finish a task A-Z.</td>
<td>Nothing feels better than crossing an item off my to-do list.</td>
</tr>
</tbody>
</table>
You will note the descriptive characteristics of Precision that follow are formulated both as Use First (See Figure 2.4 Use First Precision) and then As Avoid (See Figure 2.5 Avoid Precision).

Be careful to distinguish them from what you just read about Sequence. Note that Sequence refers to order, rules, planning, and completeness while Precision focuses on the importance of information, accuracy, exactness, and documentation.
An example of the distinct difference between the two Patterns is a person who uses Precision at the Use First level and gathers so much information and documentation that his office is awash in piles of folders and projects but who does not possess the use of Sequence at a level to be able to organize or locate the information for fast retrievability. Each Pattern has its own particular descriptors as the remaining figures illustrate.

It might be tempting to think that those who Avoid Precision cannot do well in the Information Age, but actually that is not true. With the availability of information at the touch of Google or many other search engines, those who Avoid Precision can make their world of work operate successfully as long as they are aware of the Pattern that would lead them to rely on summaries and abstracts instead of delving into the body of facts available for analysis and projections. Read the descriptors of the Avoid Precision Pattern and determine how to avoid the problems this Pattern may set you upon if you are not alert to its effects upon your learning.

Figure 2.5 Avoid Precision

<table>
<thead>
<tr>
<th>How you think</th>
<th>How you do things</th>
<th>How you feel</th>
<th>Your internal self-talk sometimes said aloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>How am I supposed to remember all this stuff?</td>
<td>I don’t have specific answers.</td>
<td>I feel stupid if I don’t have the one expected answer.</td>
<td>Stop asking me so many questions!</td>
</tr>
<tr>
<td>Do I have to read all of this?</td>
<td>I skim instead of read details.</td>
<td>Pages of information make me feel like I am drowning in words.</td>
<td>Don’t expect me to know names and dates!</td>
</tr>
<tr>
<td>What am I expected to write down and keep track of?</td>
<td>I take few, if any, notes.</td>
<td>I fear looking unprepared because my notes are so few.</td>
<td>Do I have to read all of this? Is there a DVD I can watch instead?</td>
</tr>
</tbody>
</table>

Another Pattern, Technical Reasoning, adds an additional awareness to your Learning Processes. Technical Reasoning's uniqueness (See Figure 2.6 Use First Technical Reasoning and Figure 2.7 Avoid Technical Reasoning) lies in its "thinking without words," and poses an interesting juxtaposition to Precision, which is the Learning Process of the most words. Your Technical Reasoning has a bit of a Nike ad sense to it as this Learning Process urges you to "Just do it!" This Learning Process also demands relevance and practicality.
While Technical Reasoning and Precision can work together at the Use First level, the effect of Technical Reasoning upon the usually ready flow of information provided by Precision is muted so that only pertinent facts are shared and "information for information's sake" is not shared.
It should be clear to you by this point that no Pattern operates in isolation from the others. The final set of descriptions is of If You Use First Confluence and If You Avoid Confluence (See Figure 2.8 Use First Confluence and Figure 2.9 Avoid Confluence). In the case of Use First Confluence, the person who has this level will generate lots of ideas and want to implement them all. This is a risk taker. Use First Confluence coupled with Use First Precision frequently yields an entrepreneurial approach to business and life.

**Figure 2.8 Use First Confluence**

<table>
<thead>
<tr>
<th>How you think</th>
<th>How you do things</th>
<th>How you feel</th>
<th>Your internal self-talk sometimes said aloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think to risk is to learn</td>
<td>I take risks and push the boundaries. I brainstorm. I read over, under, around, and between the lines.</td>
<td>I am not afraid to fail. I feel energized by possibilities that are still in the idea stage. I revel in connecting the dots!</td>
<td>Nothing ventured, nothing gained! I have an idea. No, wait! I have an even better idea! Think Big Picture!</td>
</tr>
</tbody>
</table>

Sequence, Precision, Technical Reasoning, and Confluence can form any combination of Use First, Avoid and Use As Needed levels of these Processes. It is fascinating at times to observe Use First Sequence and Use First Confluence competing for your attention and use. When that occurs, you will find yourself having an idea and immediately seeking to organize it to bring it to fruition.

On the other hand, you may have an Avoid Sequence connected to Use First Confluence. That's when it's helpful to have someone on your team who can help model for you techniques for organizing your Confluence before it becomes chaos! The descriptions of If You Avoid Confluence (Figure 2.9) which follow explain the tension that can exist among team members or board members whose Learning Processes consist of varying levels of use of Confluence ranging from Use First to Avoid.
**Gaining Insights into Your Patterns**

Having a high score in a Learning Pattern isn’t always better, just as having a low score in a Pattern is not necessarily a problem. Your Patterns are your Patterns. Only if you do not know how to use each with intention can that Pattern become a problem for you. That point becomes even clearer when you read the Pattern contexts that follow. It is that unless you, as the learner, use your Learning Patterns with intention, they will use *you*.

**Pattern Pros and Cons**

**Sequence**

**Pros:**
- Reviews and revisits directions repeatedly.
- Seeks a sample.
- Takes time to develop a plan or outline.
- Practices and rehearses when studying.
- Reorganizes frequently for neatness.
- Sticks to the plan or schedule.
Cons:
- May have difficulty completing timed tests.
- Has trouble getting started without a plan.
- Spends too much time focusing on directions.
- May spend too much time planning, leaving too little time for the task.
- Has difficulty deviating from a plan, even when the alternative is better.
- Consumes too much time practicing and reorganizing.

Precision

Pros:
- Double checks for accuracy and additional details.
- Capable researcher in seeking additional information or verification of information.
- Looks for assurance for accuracy of notes.
- Seeks extraneous details to support accuracy.

Cons:
- Consumes too much time correcting and double checking.
- May get lost in the details and miss the main issues.
- Feels there is never enough information to complete the task.
- Asks too many questions.
- Agonizes over every question and response.
- Finds it difficult to accept others’ editing or corrections.

Technical Reasoning

Pros:
- Works well independently.
- Finds relevance or logical connections in the assignment.
- Communicates knowledge better one-on-one instead of in writing.
- Prefers to construct projects to show skills or knowledge.
- Is often the problem solver in group assignments.
- Typically is excellent with hands-on learning.
Cons:
- Finds group work is difficult and would rather work alone.
- Requires relevance to focus and retain information.
- Does not submit written assignments once completed.
- Needs frequent physical activity.
- Does not value grades and academic awards.
- Feels no need to share knowledge.
- Has difficulty paying attention in long lectures.

Confluence
Pros:
- Connects quickly to assignments.
- Needs freedom to take a unique approach.
- Collects many novel ideas and starts each.
- Enjoys early and frequent feedback on novel ideas.
- Prefers speech or public performance to writing.

Cons:
- May be on the wrong track from the start.
- Frustrated by specific, rigid requirements.
- Uses too much time starting over with each new idea.
- Moves from task to task forgetting to complete items thoroughly.
- Allows train of thought to wander, losing sight of the planned process.

Identifying Different Patterns Different Combinations

The following descriptions of Learning Pattern combinations will help you understand the interaction occurring among your Patterns. Figure 2.10 Dynamic, Bridge, and Strong-willed Pattern Combinations graphically represents the interaction of Learning Patterns and the influence of one Learning Pattern upon another based upon its degree of use (its score).
**Dynamic Learner**

If you use one or two of Patterns at the Use First level and then any other combination of the remaining Patterns at either Avoid or Use As Needed then, you are a Dynamic Learner.

*Example LCI scores of a Dynamic Learner:*

<table>
<thead>
<tr>
<th>Sequence</th>
<th>12</th>
<th>(Avoid)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision</td>
<td>32</td>
<td>(Use First)</td>
</tr>
<tr>
<td>Technical</td>
<td>26</td>
<td>(Use First)</td>
</tr>
<tr>
<td>Reasoning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confluent</td>
<td>19</td>
<td>(Use as Needed)</td>
</tr>
</tbody>
</table>

**Bridge Learner**

If you Avoid no Patterns nor use any at a Use First level, then you are a Bridge Learner. You learn from listening to others and interacting with them. You are comfortable using all of the Patterns. Sometimes you feel like a “jack of all trades and a master of none,” but you also find you can blend in, pitch in, and help make things happen as a contributing member of the group. You weigh things in the balance before you act. You lead from the middle by encouraging others rather than taking charge of a situation.

*Example LCI scores of a Bridge Learner:*

<table>
<thead>
<tr>
<th>Sequence</th>
<th>19</th>
<th>(Use as Needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision</td>
<td>24</td>
<td>(Use as Needed)</td>
</tr>
<tr>
<td>Technical</td>
<td>18</td>
<td>(Use as Needed)</td>
</tr>
<tr>
<td>Reasoning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confluent</td>
<td>21</td>
<td>(Use as Needed)</td>
</tr>
</tbody>
</table>

**Strong-willed Learner**

If you use three or more patterns at the Use First level, you are a Strong-willed Learner. You are your own team. You prefer to work alone so that you can control the plan, the ideas, the talk, the decisions, the process, and the outcomes. Sometimes others find it hard to follow your lead.

*Example LCI score of a Strong-willed Learner:*

<table>
<thead>
<tr>
<th>Sequence</th>
<th>26</th>
<th>(Use First)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precision</td>
<td>34</td>
<td>(Use First)</td>
</tr>
</tbody>
</table>
Figure 2.10 Dynamic, Bridge, and Strong-willed Pattern Combinations
Activities
Developing a Personal Learning Profile

It is time now for you to use your Learning Processes with intention by completing the following exercise. Depending upon your Pattern combination you may want to first examine the sample Personal Learning Profile in Figure 2.11. Whether you use Figure 2.11 as an example or not, your task is to record your own Personal Learning Profile on the blank Personal Learning Profile which follows (See Figure 2.12).

Figure 2.11 Sample Personal Learning Profile

<table>
<thead>
<tr>
<th></th>
<th>Use First</th>
<th>Use As Needed</th>
<th>Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precision</td>
<td></td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Technical Reasoning</td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Confluence</td>
<td>25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SEQUENCE:
I like to have a plan. I make “to do” lists. I go into classes with an outline (but, I am open to changing it, [Confluence]). I create thorough (but tentative) syllabi. I like examples. I clean my desk top every night. I have my own work system, filing system, and e-mail organization system. I keep a neat house. I like to put things in “their place”. I am the person in our family who knows where everything is kept.

PRECISION:
I like to know information, and ask questions about things. I like to be “in the know.” However, I don’t like to get bogged down in details. I like to start with the big picture. I worry about details later. I like evaluations and feedback.

TECHNICAL REASONING:
I will take something apart if I need to, but I generally don’t. I seek to work with others on something complicated. I hire others to do home repairs. We’ve bought a new house twice. For the most part, I don’t necessarily feel competent or enjoy doing home projects.

CONFLUENCE:
I like to look at the big picture. I wonder why we don’t “try something.” I figure if we try and it doesn’t work, we can try again. I take small risks and like to try something new. I like to discuss ideas and brainstorm. Sometimes people move too slowly for me. I often see “shades of gray.”
**Figure 2.12 Personal Learning Profile Blank**

Your Personal Learning Profile

<table>
<thead>
<tr>
<th></th>
<th>Use First</th>
<th>Use As Needed</th>
<th>Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Reasoning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confluence</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SEQUENCE:**

**PRECISION:**

**TECHNICAL REASONING:**

**CONFLUENCE:**
**LCI Interview Activity**

Ask at least two people you know well to take the LCI. When they have their results, use your LCI print out and theirs, and your Strategic Learning book and have a conversation. You may want to use the following interview questions to guide your discussion with the persons you chose for this activity.

- First, share your LCI Profile results and use the materials in Strategic Learning to help you explain how your Learning Processes work in different situations.

- Next review their LCI results and print out along with the Pattern characteristics (Figures 2.1-2.9) to explain their profile to them.

- Did you agree with your Learning Profile? Why or why not?

- Can you give me at least one example of how you feel your profile helps you succeed as a learner?

- Can you give me an example of how your Learning Profile sometimes works against you or makes it difficult for you to succeed while learning?
Strategic Learning

Part III

Understanding the Power of Your Learning Processes

Understanding the Science behind the Let Me Learn Process

Knowing about your Learning Processes marks the beginning of your becoming an intentional learner. The next step is to become familiar with the Let Me Learn Process,® an Advanced Learning System which consists of a number of tools, terms, and skills. It is these tools, terms, and skills that can equip you to use the knowledge of your Learning Processes to communicate more effectively important information about yourself as a learner, a classmate, a team member, or a leader with instructors, coaches, peers and employers.

To be successful in whatever you do, you need to understand how you learn, and then you need to make your learning work well for you. So what is “learning?” For centuries, philosophers, academics, and physicians have attempted to explain what is happening in our brains/minds when learning is occurring.

Our brains are consistent in size, shape, and function across genders, ethnicities, and cultures. The brain is a series of routers, transistors, and microchips that stores data via electrochemicals and receptors. By itself, the brain takes in stimulus through our five senses.

In order to use the stimulus the brain has received, it needs an interpreter, something that can break the electrochemical and neuro-receptor code. The translator/interpreter is our mind! The mind compares data, uses abstraction, makes judgments and is the core of our decision making. In order to be successful in any endeavor we need to understand and use our minds with intention.

Our mind uses our individualized mental processes to convert stimulus from the brain into symbolic representations to be stored and retrieved as needed throughout our lives. The depictions of this process and the explanations that follow help explain this fascinating process of the brain-mind connection.
Exploring the Brain and Mind Connection

Stimuli enter the brain in the form of sight, sound, taste, touch, and smell. The stimuli are processed by the brain’s neuro-receptors and pass through an interface of Patterns (filters) and enter our human consciousness (the mind) where they are translated by the Working Memory and stored for retrieval and use at an appropriate time.

As demonstrated in Figure 3.1 Brain-Mind Connection, the Working Memory then works to translate the stimuli into symbolic representations ——words, numbers, signing, Braille—symbols which it then stores in your Declarative Memory or your Non-declarative Memory. While the Patterns are universal across race, gender, and ethnicity, their make-up and use is very person specific as you have already noted when you developed your Personal Learning Profile (See Figure 3.1 Brain-Mind Connection below).
Recognizing the Role of Mental Processes

Within each Pattern are located the Mental Processes of Cognition, Conation, and Affectation (thinking, action, and feelings) which foster your personal response to any learning situation. These Mental Processes work within each of your Patterns and do the work of thinking, acting, and emoting (See Figure 3.2 Mental Processes).

Figure 3.2 Mental Processes

1. I Think
2. I Take Action
3. I Have Feelings

Making a Hand Sandwich

One way of describing this phenomenon is to extend your right hand out curled into a fist with the palm held downward. This represents the brain. Next put your left hand curled into a fist 4 inches below your “brain” hand with the palm held upward. This represents your mind. Now ask a classmate to assist you with completing this representation of the brain-mind connection. Have that
person simply hold his or her hand vertically to your “brain” fist allowing that person’s five fingers to represent the five stimuli which are constantly bombarding the brain. Then have that person place his/her four fingers horizontally between your brain-mind fists as a means of representing your Learning Processes or Patterns.

See how their four fingers act as a mesh or filter as the imaginary stimuli pass through the brain to the mind. The hand sandwich you have structured is a simple, yet accurate representation of the very complex Brain-Mind Interface.

What does this hand sandwich look like in real life? Well, maybe you are a history buff. You enjoy being in a lecture where the professor gives lots of details. You take notes because your Use First Precision is enjoying the opportunity to have all the information flowing through your Precision filter. Or maybe you are sitting in a course where the instructor has provided you with a clear, organized syllabus with the directions for each assignment carefully laid out. Now you understand why your Use First Sequence thrives when you have a dependable plan to follow.

Then again maybe you are in a college writing course, and you are trying to figure out why it is so difficult to get words on paper. In that case you might be feeling your Use First Technical Pattern or your Avoid Precision Pattern struggling to get the things you are picturing in your mind put into words. Your mind is working well, but it isn’t as comfortable using words as it is using graphic representations. Your mind would rather manually demonstrate than verbally articulate your ideas.

It is this latter effect that marks the role your Mental Processes play within each of your Patterns. Remember you have thoughts, actions, and feelings that occur within each of your Learning Patterns, and it is the assignment that confronts you that causes your thoughts, actions, and feelings to respond based upon how well the task at hand matches the make-up of your Learning Patterns. There is no doubt that the filtering effect of your Patterns has a strong effect on how you learn and how you feel about the assignments you are being required to complete!
**Activity**

**Recognizing the Power of Learning Patterns in Others**

- If you were the instructor of a course why would it be helpful for the instructor to know the Learning Patterns of the class participants? List two reasons.
- As a participant in the class, why is it helpful for you to know your instructor’s Learning Patterns? Your peers’ Learning Patterns?
- Looking at your instructor’s Patterns, what are some things you personally might need to do to be successful in this class? List at least three.
Strategic Learning

Part IV

Understanding a Key Tool of Learning

Learning the Power of Metacognating

The power of your personal Learning Processes lies in something called metacognition. Metacognition is the internal talk of your Patterns as they collectively consider information and experiences (Cognition), organize, research, figure out, and evaluate the risk involved in taking on a new learning challenge (Conation), and feel their responses to the situation they are facing (Affectation). This Internal Talk or Internal Chatter can be very distracting when you seek to begin a new or even familiar learning task.

Examining the Metacognitive Drill

What follows is a description of the type of chatter that goes on among your Learning Processes when your mind is working through any given task, assignment, or new situation. These mindful conversations have been “named” for the function each provides within each Process and among your combination of Learning Processes (See Figure 4.1 Metacognitive Drill). The first set of actions involved in metacognition includes Mulling, Connecting, Rehearsing and Expressing. When you Mull you are working through what you are experiencing. You ask yourself, “Have I seen or heard this before? What is this about?” You stir through your thoughts and ideas.

Next you Connect. You Connect to a previous experience similar to what is currently happening. This helps you have an example to work from. You connect to something similar you heard or read about. You make sense of what you are experiencing because you have to fit the pieces of the assignment together in your mind. Connecting is followed by Rehearsing. For this you need privacy. You are not prepared to go public with your thoughts or ideas. You put a “Do Not Disturb” sign on your face. Eventually you may share what you are thinking with someone you trust. Finally you are ready to Express. Expressing means you are ready to field test your
thoughts or product in front of an audience of one or more persons. You have rehearsed to the point of having confidence in taking your thoughts and ideas public.

Figure 4.1 Metacognitive Drill

The second set of actions involved in Metacognition begins with Assessing. You don’t wait for anyone else’s feedback. You critique your own work. You compare what was expected with what you actually produced. You are brutal. You ask yourself, “Did I meet the criteria set for high achievement? Did I do my best?”

Next you Reflect: You look in the mirror and face yourself. Did you do your personal best? Did you take time to use your Learning Processes wisely? Did you allow them to connect and work...
through the process, or did you ignore what was required of you to succeed? Did you just get by? What did you learn about yourself by doing this assignment?

Finally you Revisit the task to determine, “When I have a similar assignment or task, what will I keep the same? What changes will I make? How can I plan to do this task again more efficiently? Effectively?” Metacognition is the Internal Chatter of your Learning Processes as each works through the Metacognitive Drill and confronts how well the “learning” went. This is a powerful and insightful learning experience, and an experience that only works when you are prepared to face yourself as a learner and examine the effects of each of your Learning Patterns upon you.
**Activity**

**Metacognition Your Way**

Pull out the next assignment you are required to complete for this course or another in which you find yourself challenged. Now apply the Metacognitive Drill to it by doing the following:

- Picture yourself driving through the assignment with the directions as the roadmap. (Mull)
- Seek to relate to the assignment. Have you done one like this before? Is this new or is this familiar? (Connect)
- Have you seen these cue words before? Recall how you proceeded the first time you did this task. (Rehearse)
- Consider your progress, carefully checking the cue words that signal telling you when you need to slow down, proceed with caution, or make a U turn and re-think how you are proceeding (Assess).
- Ask where you made a right or a wrong turn (Reflect).
- Look for internal Metacognitive Drill markers along the way telling you to slow down, Mull longer, merge with caution, Connect the thoughts carefully, or re-check the map for cue words you may have missed (Revisit).
Strategic Learning

Part V

Connecting Your Learning Processes to Your Studies

Using the Word Wall

Once you know your combination of Learning Processes, you can use them with greater intention. You can analyze work responsibilities, learning tasks, and project assignments, always asking yourself, “What processes am I being asked to use? How will I direct my Learning Processes so that what I do and how I do it matches the expectations of my instructor, my classmates, or my teammates?”

The Word Wall

Once you understand the actions and talk of your Learning Processes, you can direct your Processes to take specific action (See Figure 5.1 Word Wall).

Figure 5.1 Word Wall

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Precision</th>
</tr>
</thead>
<tbody>
<tr>
<td>alphabetize</td>
<td>label</td>
</tr>
<tr>
<td>arrange</td>
<td>measure</td>
</tr>
<tr>
<td>classify</td>
<td>name</td>
</tr>
<tr>
<td>compare and contrast</td>
<td>record (facts)</td>
</tr>
<tr>
<td>develop</td>
<td>observe</td>
</tr>
<tr>
<td>distribute</td>
<td>perform accurately</td>
</tr>
<tr>
<td>group</td>
<td>specify</td>
</tr>
<tr>
<td>list</td>
<td></td>
</tr>
<tr>
<td>order</td>
<td>calibrate</td>
</tr>
<tr>
<td>organize</td>
<td>detail</td>
</tr>
<tr>
<td>pros and cons</td>
<td>describe</td>
</tr>
<tr>
<td>put in a series</td>
<td>document</td>
</tr>
<tr>
<td>put in order</td>
<td>examine</td>
</tr>
<tr>
<td>sequence</td>
<td>explain</td>
</tr>
<tr>
<td>show an array</td>
<td>identify</td>
</tr>
<tr>
<td>show an example</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Reasoning</th>
<th>Confluence</th>
</tr>
</thead>
<tbody>
<tr>
<td>assemble</td>
<td>act carefree</td>
</tr>
<tr>
<td>build</td>
<td>imagine</td>
</tr>
<tr>
<td>construct</td>
<td>improvise</td>
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<tr>
<td>demonstrate</td>
<td>chance</td>
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<tr>
<td>engineer</td>
<td>innovate</td>
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<td>erect</td>
<td>concoct</td>
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<td>experience</td>
<td>invent</td>
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<td>create</td>
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<td></td>
<td>originate</td>
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<tr>
<td></td>
<td>dream-up</td>
</tr>
<tr>
<td></td>
<td>risk</td>
</tr>
<tr>
<td></td>
<td>make-up</td>
</tr>
<tr>
<td></td>
<td>take a chance</td>
</tr>
</tbody>
</table>
You can Decode assignments, objectives, or the task-at-hand. You can look for key words and know that when you see them within a set of directions, you are being asked to use a specific Learning Process (Sequence, Precision, Technical Reasoning, or Confluence) to accomplish the task. The Word Wall provides cue words for identifying appropriate Pattern use with a particular assignment.

**Learning to Decode**

The actual task of Decoding is quite simple and very effective as a learning tool. These are the steps to follow in order to decode an assignment or work task successfully:

- Underline key verbs and nouns in the directions.
- Match the words circled to those on the Word Wall.
- Identify degree of each Learning Pattern you are being asked to use to do the assignment.
- Examine what you will need from each Learning Pattern to accomplish the task.

This is what decoding looks like:

Key:
- S=Sequence required
- P=Precision required
- T=Technical Reasoning required
- C=Confluence required

**Example A:**

```
P    T   T
```

“make specific recommendations that solve the current structural problem,”

**Example B:**

```
P  S     T
```

“write in bulleted form a brief technical description of the newly developed circuitry board”
Following Steps to Insure Accurate Decoding

- Understand how your Patterns respond when given a specific assignment. (What did you think, feel and do first?)
- Look at assignments and directions. Do you see any words that provide clues to the Patterns required to complete the work?
- Use the Word Wall to take the assignment apart Pattern-by-Pattern.
- Determine whether you used the required Patterns in the right places.
- Recognize that assignments may require you to use a Pattern to a different degree than you would do “naturally” or comfortably.
- Create a strategy sheet as a reference/reminder of how to complete an assignment successfully, once you have developed sufficient insights into how to “work” your Patterns.
Activities

Practice Decoding

Here are two tasks for you to decode:

• Using the data below, draw a graph that shows the percentage of car accidents for drivers from ages 17 to 25.

• Imagine that you are an unhappy Shakespearean character like Hamlet. Write an original eight-line soliloquy about the hardships of being a student.

Practice Decoding a Course Assignment

Here is another opportunity to rehearse. The following is a macro economics assignment. Here is an opportunity to rehearse the skill of “decoding.” (See Figure 5.1 Word Wall.) Circle each cue word and indicate the Pattern used. Map your approach to completing the assignment by identifying which Pattern would be the most appropriate to use to do each aspect of the assignment successfully:

Read the Metpath Case. Imagine yourself as the recently widowed husband in the case. Build a 10 year scenario using data from the Case. Structure your finances in a fashion similar to the husband in this case. However, you must reorder your financial priorities to include childcare, college funds, and homemaker assistance.

Report your financial plan and justify your decisions for each category. Do not forget issues of insurance. To what degree will the husband in your scenario “benefit” from the loss of a spouse? How is this outweighed by future expenses because of the spouse’s absence from the family unit? Loss of income, benefits, etc?

Your answer may take the form of a chart with accompanying rationales in paragraph form or it can be completed in totally essay form.
Strategic Learning

Part VI

Applying Your Learning Processes to Your Studies

FITting Your Patterns to the Task

Once you have Decoded a specific learning task and listened to the Internal Talk among your Patterns, you may frequently find your Patterns and the task requirements are mismatched. If that is the case, you need to modify your personal Patterns to align them with what the task requires. While no learner can stretch or hold back his/her Patterns for long periods of time, you, with practice, can achieve a temporary and limited modification of the degree to which you use each Pattern. We refer to this as “FIT”ing the learner to the task using the tools of Forge, Intensify, or Tether.

Examining “FIT” Tools

The acronym, FIT, represents the three verbs Forge, Intensify, and Tether. What follows is an explanation of how each works to help the learner adjust to a specific task.

- Forge: requires you to increase the use of your Avoid level of a specific Learning Pattern in order to succeed in completing a specific task. You can Forge the use of a Pattern by as much as five points on the LCI scale for a limited period of time. Forging requires intention, strategies, and focused energy.

- Intensify: requires you to apply your Use As Needed Pattern(s) more forcefully. You can Intensify the use of a Pattern by as much as five points for a limited period of time. Intensifying requires intention, strategies, and focused energy.

- Tether: requires you to restrain your use of a Use First Learning Pattern. This is done by pulling back and limiting the use of a Pattern that would otherwise mislead or dominate your ability to redirect effort to meet the task at hand.
Developing a Strategy Card

You can use the knowledge of your Learning Processes to develop personal Learning Strategies to direct your own efforts. You can record and organize the Internal Talk of your Personal Learning Patterns and rally their efforts to achieve, in other words, to set goals!

The most efficient way to do this is to develop a Personal Strategy Card. A Personal Strategy Card (PSC) looks like the following (See Figure 6.1 Personal Strategy Card Example):

**Figure 6.1 Personal Strategy Card Example**

<table>
<thead>
<tr>
<th>Your LCI Scores</th>
<th>Sequence</th>
<th>Precision</th>
<th>Technical Reasoning</th>
<th>Confluence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28</td>
<td>15</td>
<td>25</td>
<td>23</td>
</tr>
</tbody>
</table>

**Your Description of Your Learning Patterns**

| How do you naturally use each of your Learning Processes? | I'm organized. I break my work into steps. I check my work to make sure that I'm following the directions. | I don't ask many questions. I don't read much either. I can find facts when I need to, but I don't use big words, and I hate writing. | What is the purpose of this? How will I ever use it? Let me get my hands on something real and fix it or make it work. | I have some ideas that connect to what I read and that I can use for my writing, but I am not into taking risks! |

**Your Analysis of the Learning Patterns Needed to Complete the Task**

**Task:** Read each of five paragraphs carefully. Then make a case for which is correct.

| What does the assigned task require each of your Learning Processes to do? | I must read and follow directions carefully. I will only have a certain amount of time to do each section of the test. | I will be asked to read and find facts to support what I write. Help! | The test isn’t interested in seeing how I problem solve. | This test won’t ask me to imagine or do really unusual things. |

**Your Strategies for Using Your Learning Patterns Most Effectively**

| How can you Forge, Intensify, or Tether your Learning Processes to complete the task successfully? | Tether so I have enough time to write my answers. I will check my work at the end. | Forge by reading the passage like a detective looking for facts that I can use to write about and make my point. Do allow myself to feel overwhelmed! | Just Tether and don’t keep looking for relevance! | None Needed |
To complete a Strategy Card, simply follow the directions provided in the far left column of the card. Use the data you have accumulated about your Learning Patterns (LCI Pattern scores and your Learning Profile), the skills of Decoding, and the tools of the Metacognitive Drill, and FITing to complete the card. If you find yourself stuck, talk with your classmates about which personal learning strategies they are electing to use. Compare their Learning Pattern combination to yours and based upon any matches, develop a repertoire of their strategies and yours to refer to when completing different types of learning tasks.

**Developing Effective Strategies**

Record your strategies for achieving success. This disciplines you to put forth intentional, focused effort. Developing a Strategy Card requires you to *invest* not *Avoid; dig deeper* rather than skim the surface of the task at hand. Using a strategy card keeps you using your learning potential at all times. After all, your learning potential is your greatest asset. You need to invest it wisely in whatever you do.

The types of strategies you choose to use depend upon both the specific task assigned and the make-up of your Learning Processes. Yet, regardless of your team Patterns, you know that you need to be prepared to make your Patterns fit the assignment or situation of learning you find yourself in. The strategies that follow have been developed as a resource for you so that you can match your Learning Processes to your strategies.

Please note: not every strategy will work for you. Making the strategies match how you learn will work for you. The match will make you a more efficient and effective learner. Take time to review each set of strategies as they are developed for different subject matter and different aspects of learning.

The key here is to come away with your own Personal Learning Strategies, not a generic list of broad stroke approaches. Work to craft your strategies by reviewing the charts below. Then tweak and craft your own effective set.
Using Writing Strategies

**Sequence**

If you use Sequence between 7-17:

- Start with a small plan.
- Begin your responses with the first part of the question.
- Write one sentence that guides you from one part of your essay to the next.
- Use time order words at least two times in each paragraph.
- Go back and read aloud what you’ve written so that it makes sense.
- Have a second reader (if time and circumstances permit), review your work before you submit it.

If you use Sequence between 25-35:

- Never leave your writing task to the last minute. Effective writing is a process which your Sequence understands. Take the time to work the process.
- Clarify the point of the task; develop a graphic organizer; begin the writing.
- Don’t over-plan; just do a basic sketch.
- Start writing so that you have time to re-read and edit.
- Don’t overuse words such as “then” or “next” at the beginning of your sentences.

**Precision**

If you use Precision between 7-17:

- Don’t panic! You can use words as a tool for communicating.
- For every paragraph that you normally write, add up to three more sentences that support or expand your idea.
- Replace vague words with adjectives or clear nouns (try not to use “things” or “stuff”).
- Add as many detailed words as possible.
- Check for spelling mistakes and other writing errors.

If you use Precise between 25-35:

- Don’t over-analyze the task.
- Pick one or two things to write about and get started.
• You can get your message across without using pages of writing and a lot of words.
• Use words to tell or describe, but don’t use them to explain in great detail if pages are limited. Select carefully those items that require detail.
• Know that you will never feel you have enough information gathered before you start to write.
• Don’t try to show that you are an expert on the topic. Instead, use your time to become an effective communicator about the topic.

**Technical Reasoning**

If you use Technical Reasoning between 7-17:

• Figure out the problem by thinking of something similar you watched a classmate or dorm mate do.
• Make the topic your own and find a purpose to your writing. Stick to the facts; don’t be flowery.
• Use life experiences to add realness to your writing.

If you use Technical Reasoning between 25-35:

• Write down what you know or what you’ve experienced.
• Add 2-3 more words to every sentence you write.
• Think of this as a problem that you are tackling.
• Draw your ideas on paper before you begin to write about it. Then change your pictures into words.
• Think of a movie you’ve seen; then change it to fit your assignment.

**Confluence**

If you use Confluence between 7-17:

• Use examples of ideas that you’ve seen or heard before.
• Take the risk and try your idea. It doesn’t have to be earth shattering, just a bit different than normal.
• Try to picture what your story would look like if it were a movie. Now, add something funny or a little different twist to make it more memorable.
If you use Confluence between 25-35:

- Stay on task.
- Choose *one* idea; then focus and stick with it.
- Write the beginning and ending first; then write the middle. Finally check the finished product carefully to make sure that it stays on one topic.
- Dare to be different as long as you stay within what you are being asked to do and not changing it to what you *want* to do.
- Share your ideas and opinion as long as you can back them up with Precision (facts grounded in documentation, not made up!).

**Using Test Taking Strategies**

*Sequence*

If you use Sequence between 7-17:

- Follow the directions and use the examples to help you know what you’re supposed to do.
- Use *all* of the time you’re given to make sure that you make a plan for your writing, and that your work looks neat.
- Stay focused! Don’t start gazing out of the window.
- Make sure that you fill in the correct bubbles and don’t skip a line.

If you use Sequence between 25-35:

- Think of a question like the one you’re doing now and remember how you worked through it before whenever directions aren’t clear.
- When you are short of time, put a star by the answers that you need to go back and check.
- Don’t over analyze the directions. Use the charts and examples to help you get a clearer picture.
- Don’t over plan graphic organizers for writing. There is a time limit.
- Calm down if you don’t have time to make a better/neater copy.
- Don’t get worried if you see other people finish before you.
- Don’t worry about your mistakes. Correct them when you are double-checking your answers.
**Precision**

If you use Precision between 7-17:

- Use all of the time that you are given and add more sentences to each open-ended question.
- Use terms, names, and dates found in the multiple choice section to prompt your use of facts when completing the essay questions.
- Label all diagrams to explain how you solved a problem.
- Use your finger to guide your reading and scrap paper to record notes when completing an open-book test.
- Read the comprehension questions first and then go back and look for the correct answers in the test’s passages.

If you use Precision between 25-35:

- Don’t over analyze the readings. Read it once and move on.
- Don’t try to be perfect. Guess if you don’t know the answer and keep going.
- Don’t worry about spelling if you are using course content terms and vocabulary.
- Watch your time so that you’re able to go back and check your answers.
- Don’t linger on the questions that you think you missed.

**Technical Reasoning**

If you use Technical Reasoning between 7-17:

- Stick with the problem until you solve it. Don’t give up.
- Use the charts and diagrams to help you figure out how to solve the problem.
- Use words and pictures to show your solution.

If you use Technical Reasoning between 25-35:

- Use words to explain your work. Label your diagrams. Don’t make the person correcting your work guess at how much you know.
- Tackle each question as if it’s a contraption, and you have the tools (the answers) to make it work.
- Don’t daydream. Just get in and start it. Once started don’t dawdle or rush.
• Use all of the time allotted.
• Go back and add two more sentences to your written answers because what you wrote is probably not enough for those who are grading it.

**Confluence**

If you use Confluence between 7-17:

• If you’re not sure of the right answer, think of a similar question and take the risk that you can make a good guess from the choices given you.
• Use other people’s ideas to help you with your writing.

If you use Confluence between 25-35:

• Use the scrap paper for planning, not for doodling.
• Stay with what the exam is asking you to do, not what you would rather do.
• Share your opinion if it’s a persuasive essay, but make sure you use Precision to back it up.
• Use your time wisely. Don’t procrastinate and hope for inspiration or an adrenaline rush.
• Read the questions and answers carefully. There is only *one* answer to choose, don’t analyze the answers seeking to justify why each *could be* correct.
• Don’t make up your own version of what you think the question means. Read it word-for-word.
• Go back and check your work to make sure that you explained your answer without rambling or jumping from idea to idea.

**Developing Personal Strategies as a Result of Working with a Team**

*Forge Sequence*

If you use Sequence between 7-17:

• Watch to see how others make a plan.
• Stay focused and listen to your team members.
• Work step-by-step with the help of your team.
• Allow another, more Sequential member, to keep track of your materials.
**Tether Sequence**

If you use Sequence between 25-35:

- Allow others to share their plans.
- Observe that each person has his/her own way of doing things.
- Help to keep members focused, but don’t be controlling.
- Allow some flexibility. You don’t always have to follow every direction step-by-step.
- Don’t get angry if someone doesn’t follow the plan as thoroughly as you would like.

**Forge Precision**

If you use Precision between 7-17:

- Stay focused and listen to your team members share their information.
- Ask if you don’t know the answer.
- Watch how your team members ask and look for information.
- Be willing to take notes every once-in-a-while.

**Tether Precision**

If you use Precision between 25-35:

- Watch how you ask questions. You don’t want others to think that you’re questioning their ability.
- Allow others to share information.
- Allow others to take notes if they ask.
- Recognize you won’t have perfection the first time the team develops an end product.

**Forge Technical Reasoning**

If you use Technical Reasoning between 7-17:

- Ask someone to show you how to use the materials without “breaking” them.
- Watch how team members figure out how to problem solve in order to make the task work.
- Stick with the task until you can make it work.
- Don’t be afraid if it doesn’t work the first time.
**Tether Technical Reasoning**

If you use Technical Reasoning between 25-35:

- Allow others to put their hands on the materials.
- Show and use words to explain what you are thinking.
- Recognize that team means working *with* other people.
- Trust that your team members also want to do well with the task.
- Don’t become impatient if the team can’t figure out the solution right away.

**Forge Confluence**

If you use Confluence between 7-17:

- Watch how others use their ideas.
- Don’t be afraid to take the risk to share what you think. It’s just an idea; it doesn’t hurt to give it a try.
- Be willing to go with the flow when you need to.
- Don’t criticize others’ ideas even if you are not willing to use them.

**Tether Confluence**

If you use Confluence between 20-35:

- Stay with one idea at a time so you don’t confuse your team members.
- Explain in a Sequential manner what your idea entails...help them see the “big picture.”
- Don’t jump from one task to the other. Keep in mind that you’re working with other people and you have just one agenda.
- Allow others to use their ideas.
- Don’t tell people what you think of their ideas if your comments don’t sound helpful.
**Activities**

**Practicing Strategy Card Development**

Select an assignment you have been given in this or another course. Decode it. Identify the differences or similarities between the Patterns required to do the assignment and your own.

**Your Strategy Card Guide**

<table>
<thead>
<tr>
<th>S</th>
<th>P</th>
<th>T</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe how you use your Patterns.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write key words from the directions in the Pattern square that it matches using the Word Wall to help you Decode the assignment.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Decide what to do with each of your Patterns (Forge, Intensify, Tether or leave as is.)</td>
<td>1)</td>
<td>1)</td>
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</tr>
<tr>
<td>Select one or two strategies to help you FIT your Patterns to the task. Not all Patterns will require a strategy.</td>
<td>2)</td>
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</table>
Your Strategy Card

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<tr>
<th>S</th>
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Activity

Preparing a Strategy Card for an Exam

Identify a course which you find most challenging and for which you recognize you will need specific strategies in order to succeed on the final exam. Once you have selected the course to focus on, complete the pre-strategy card questions listed below.

Your Learning Patterns:

- Sequence:
- Precision:
- Technical Reasoning:
- Confluence:

Record what you believe are the probable Patterns of your instructor in the course (Remember you can invite this individual to take the LCI online using your school’s protocol):

- Sequence:
- Precision:
- Technical Reasoning:
- Confluence:

As you prepare for the final exam, what Pattern insights or awareness should you be considering in order for your preparation to be successful? List your awareness by each Pattern designation.

- Sequence:
- Precision:
- Technical Reasoning:
- Confluence:
Strategic Learning

Part VII

Understanding the Power of Learning Teams

Using Team Work to Help You Develop Effective Strategies

Teamwork often gets a “bad rap” because students don’t feel successful in developing their skills as a result of it. But teamwork is more than working in a group. Teamwork allows you to understand yourself better as you reflect upon how you learn and do things differently than others.

There are also many different forms of team. There is the team made up of your Learning Patterns. There are also teams consisting of your instructor and you, and your classmates and you. Learning how to work with each and learning *from* each type of team is vital to your personal development as a student and your professional development as an adult.

Taking Inventory of Yourself as a Potential Team Player

Before you become a team member, it is to your advantage to understand the following about yourself. The list that follows can help you reflect on why teamwork works for you and why sometimes it does not. If you are going to be an effective team member, you need to know the following:

- What skills do you bring to the team?
- What knowledge do you bring to the team?
- What experiences do you bring to the team?
- What behaviors of others rub you the wrong way and why?
- Why do you feel the frustration you do when reading directions, following directions, or following other people’s directions?
- Why do you need information before you begin a team task?
- Why do you need your questions answered before launched into a project?
- Why don’t you want to start a project without the right materials, tools and equipment?
• Why do you become defensive about your ideas?
• Why do you work better with others who have ideas to suggest rather than becoming frustrated trying to generate your own?
• Why do you feel uneasy about taking risks?
• Why are you bored doing the task the same way you did it the first time?
• What can you learn from other members of the team that will help you be more effective?

Recognizing the Components of Responsible Team Membership

You are accountable for:
• Your intentional use of your Learning Processes.
• Your interactions with team members.
• Your thoughts.
• Your feelings.
• Your personal decisions.
• Your re-decisions.
• Your choices.
• Your behavior.
• Your conduct.
• Your comportment.
• Your commitment.

What are the implications of this for you as a learner and as a member of a team?

You are accountable to others for:
• Participating to you fullest to achieve the goal we jointly have set out to achieve.
• Communicating with others until they understand what you are seeking to convey.
• Respecting others’ thoughts.
• Supporting others’ efforts.
• Accepting others’ ways of doing things.
• Articulating your concerns.
• Owning your frustrations rather than ascribing them to others.

**Taking Time to Become a Real Team**

Teams that succeed know, understand, and respect the individuals who comprise the team. Teams that work well begin by developing Charters that establish how the team’s members will function when working together and when working apart from one another.

Team Charters state what purpose the team serves and what the team members value. The Charter states the commitment of the team to work together to agree to whatever general and specific goals it sets. Effective teams live by their Charter.

Effective and efficient teams understand how the Learning Processes of each of its members work and agree to respect and allow each individual to participate fully in the team making regular, meaningful, and mindful contributions to the team’s efforts. (See Figure 7.1 Learning Team Graph of Patterns)

**Figure 7.1 Learning Team Graph of Patterns**

One way to understand how the team members interact is to graph their individual LCI scores. In doing so the team can observe how each individual’s Patterns contribute to the teams make-up.

Team members who understand each other’s Learning Processes also help provide insights and strategies to other teams members as they seek to Forge, Intensify, and Tether their Patterns to achieve the team’s goal.

The following chart indicates how this team’s members will interact with one another. Study the chart and identify areas of commonality and areas of possible conflict. Note that in the case of
each Pattern, at least one member uses the Pattern first, while others use it as needed or avoid it. Strong teams have Pattern diversity within them and use that diversity to their advantage.

**Activity**

**Tracking the Development of Learning Strategies as a Result of Teamwork**

What is Going on Inside Your Mind?

Your Learning Pattern (S) _____(P) _____(TR) _____(C)_______

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<thead>
<tr>
<th>Session</th>
<th>What were you thinking?</th>
<th>What were you feeling?</th>
<th>What did you do?</th>
<th>What strategy did you observe from a member of your group?</th>
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Appendix A

Patterns in Everyday Life

**Sequential Pattern**

First we will…
Hold on a second.
We need to get this organized.
Let me finish this first.
Then next…
Where’s the agenda?
Wait!
What do you want first?
What are my priorities?
Let’s organize this!
One thing at a time.
Show me an example.

Let’s use a template.
What’s the plan?
Was this on the calendar?
Can we cross that off the list?
Can you take that one step at a time?
Could you give me some directions?
Are there instructions for this?
Where are we going with this?
What do you want?
What are your priorities?
What are your expectations?
What rules should we follow?
What are the rules?

**Precise Pattern**

I need more information.
What are you going to do?
I’d like some more data on that.
Did I tell you about …?
Is that really correct?
This would be a good six sigma project.
Don’t you mean…?
Keep me informed.
That’s not exact enough.
Is this reliable?

Why are you doing that?
What data do we need?
We don’t have enough information.
What are your metrics?
What data do you have to support that?
Could you clarify that?
Why are you doing that?
I better keep that email.
Is this accurate?
I’d like to see a report on that.
**Technical Reasoning Pattern**

Let’s just do it!  How does that work?
Here’s why it will work/not work.  Is this relevant?
What’s the bottom line?  What’s the principle?
Demonstrate this!  Why is this important?
We don’t need a meeting!  You don’t trust me?
This is @#*%&/!#%@!  Let’s fix that.
Let’s get on with it.  Why do you want to know?
Tell me this one-on-one.  Can we please focus?
Just let me do this myself.  How are we doing this?

**Confluent Pattern**

I’ve got an idea!  Let’s try this.
Let me draw you a picture.  Just blurt it out!
Let’s brainstorm that.  Let’s make some connections.
This is like that.  Let’s get a picture of this.
Here’s my vision.  I just dreamt this up.
This may seem far-fetched.  If that doesn’t work, always try something else!
There are lots of ways to do this.  What are alternatives?
Let me suggest this.  Here’s another way to look at it.
Give me the big picture.  What’s the rush?
Let’s play around with this?  Imagine this.
Use your imagination!  How about this?
### Appendix B

Strategy Card (Blank)

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Print and fill out this chart. Save for your reference.
## Strategy Card

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Glossary of Terms

**Advanced Learning System** refers to LML’s system for developing intentional learners. The system includes a specific learning theory (the Interactive Learning Model); learning tools (the Learning Connections Inventory [LCI], the Learner Profile, the Metacognitive Drill, and the Strategy Card); an array of skills (Decoding, metacognating, and FITting); and a specific learning lexicon of terms that make up the LML Process.

**Affectation** refers to our feelings of worth and value as learners. This mental process focuses our emotive response to a learning task.

**Assess** refers to an individual’s means of weighing his or her performance against another’s expectations for a specific task. This is the phase within an individual’s metacognitive cycle that launches reflective practice.

**Avoid Pattern** refers to LCI scale scores that range from 7 to 17. An Avoid Pattern has an impact on the learner equal to a Use First Pattern. It will make itself heard in a learner’s internal Metacognitive Chatter. When an individual Avoids a Pattern, he or she will feel stress whenever asked to use that Pattern without the benefit of intentional strategies.

**Bridge Learner** refers to a learner whose LCI scores fall between 18 to 24 in all four Patterns and can apply each Pattern on Use As Needed basis. “I learn from listening to others and interacting with them. I am comfortable using all of the Patterns. Sometimes I feel like a jack-of-all-trades and a master of none, but I also find I can blend in, pitch in, and help make things happen as a contributing member of the group. I weigh things in the balance before I act. I lead from the middle by encouraging others rather than taking charge of a situation.”

**Cognition** refers to our internal processing of information. This Mental Process focuses on thinking.

**Conation** refers to the pace, skill, autonomy, and manner with which we perform a task. This Mental Process focuses on the *doing* of a learning task.

**Confluence** refers to the Pattern that describes the way we use our imagination, take initiative and risks, and brainstorm ways of approaching things in a unique manner. Confluence allows the learner to link disparate pieces of information into the big picture.

**Connect** refers to relating the current learning context to prior learning experiences, gathering and reading information, asking questions, and reviewing previous learning. It may also mean linking up with a peer in the classroom who can model what needs to be done and how to
do it. This phase within an individual’s metacognitive cycle launches Reflection on previous learning.

**Decoding** refers to analyzing a task to determine the degree to which each of the four Patterns is required to complete the task successfully. Used as a way for learners to Assess how to apply their Patterns (i.e., Tether, Intensify, or Forge their use).

**Dynamic Learner** is a learner who has a set of LCI scale scores that use one or two Patterns at the Use First level and any other combination of Avoid or Use As Needed for the remaining Patterns. The combination of Use First with the other Use As Needed or Avoid Patterns creates a dynamic different than either a Bridge Learner (one whose all four scale scores lie between 18–24) or a Strong-willed Learner (one who uses three or more Use First Patterns resulting in the learner’s sense of being his or her own team).

**Express** refers to the public performance of knowledge and/or a specific skill. This phase within an individual’s metacognitive cycle typically follows Rehearsing. Publicly performing the task opens the individual to receiving public feedback.

**Forge** refers to increasing the use of an individual’s Avoid level of a specific Learning Pattern for that person to succeed in completing a specific task. An individual can Forge his or her use of a Pattern by as much as five points for a limited time. Forging requires intention, strategies, and focused energy.

**Group Charter** refers to a written agreement among members of a team to work as a cooperative unit to achieve a specific goal. Implicit in the Charter agreement is the willingness to honor one another’s Learning Patterns and resolve Pattern conflicts as they arise. Most important, the Charter includes how its members will support and mentor one another in the use of their Patterns.

**Intensify** refers to increasing the use of an individual’s Use As Needed Pattern to a more forceful level. An individual can Intensify his or her use of a Pattern by as much as five points for a limited time. Intensifying requires intention, strategies, and focused energy.

**Intentional Learning** refers to making the learning experience work for the individual by Decoding the task, matching the Pattern use required to the individual’s Patterns, and then strategizing how to Forge, Intensify, or Tether the individual’s Patterns to meet those of the task.

**Intentional Teaching** refers to the teacher’s knowing his or her Learning Processes and how they shape the learning environment and activities the teacher brings to the classroom. Next, Intentional Teaching involves a conscious effort on the part of the teacher to respect, value,
and mentor the personal Learning Processes of his or her students. Finally, Intentional Teaching relies on communicating with students about their Learning Processes vis-a-vis their peers and their teacher. Intentional teaching creates a dialogue about learning inside and outside the classroom.

**Interactive Learning Model (ILM)** refers to the simultaneous interactions of three Mental Processes, identified as Cognition, Conation, and Affectation, which operate concurrently within each of the four operational Patterns that make up each learner’s brain-mind interface. The model developed by Christine Johnston (1994) is based on research conducted in cognitive psychology, learning theory, multiple intelligences, and neuroscience.

**Internal chatter** see Metacognition and Metacognitive Process

**Learning** refers to our ability to take in the world around us and make sense of it so that we can respond to it in an efficient, effective, and appropriate manner.

**Learning Connections Inventory (LCI)** refers to the instrument (a two-part, 28-question, self-report tool with three open-response written questions). It is administered to identify an individual’s combination of Learning Patterns. Responses to the 28 items are tallied, forming a score representing the degree to which an individual uses each of four Learning Patterns: Sequence, Precision, Technical Reasoning, and Confluence. Each score is placed on a continuum that indicates the range or level of use of each Pattern: Use First, Use As Needed, and Avoid.

**Learning Patterns/Learning Processes** (used interchangeably) refer to Sequence, Precision, Technical Reasoning, and Confluence. Within each of these Patterns, the source and degree of the Cognitive, Conation, and Affective characteristics of each determine the level to which an individual naturally uses each.

**Let Me Learn integrated system** see Advanced Learning System

**Mental Processes** refer to the Cognition, Conation, and Affectation occurring within each discrete Learning Pattern.

**Metacognition** in its traditional use refers to thinking about one’s thinking. The term means much more when used within the context of the LML Process. Metacognition as a LML term refers to the ability to hear the talk (sometimes referred to as internal chatter) among one’s Learning Patterns and respond to the talk by using personal strategies to intervene in negative talk and respond positively to use one’s Learning Processes with intention.
Metacognitive Drill refers to the seven terms LML uses to explain what the learner is experiencing as he or she is completing a learning task. These Mull, Connect, Rehearse, Express, Assess, Reflect, and Revisit.

Metacognitive process refers to the phases of internal talk (internal chatter) that occur among an individual’s four Patterns as he or she considers the task before him or her.

Mull refers to considering, contemplating, even wallowing in the description or directions of an assignment until the learner is able to understand the expectations of the task and how he or she can make a conscious effort to begin his or her learning. Mulling may take minutes, hours, or even days depending on the nature of the task to be accomplished and the Patterns of the learner seeking to respond to the task.

Patterns see Learning Patterns/Learning Processes

Pattern characteristics refers to the commonly repeated words and phrases found within data describing learning behaviors collected from more than 5000 six- to eighteen year-olds and 4000 adults who responded to early iterations of the Learning Connection. From these Pattern characteristics, labels were created which capture each category of characteristics. The labels are the following: Sequence, Precision, Technical Reasoning, and Confluence.

Pattern Combination refers to any combination of an individual’s four Learning Patterns.

Pattern difference refers to the difference of Pattern Combinations between/among individuals.

Pattern FIT refers to the appropriate use of Patterns to undertake a task successfully, the match between the task to be done and the Pattern levels available to do the job.

Personal Learning Profile refers to a record of your Learning Patterns described in your own words. It is a way of translating the Pattern scores into an authentic profile of yourself as a learner.

Precision refers to the Learning Pattern that seeks information and details, asks and answers questions, and researches and documents facts and critically examines information for any flaws.

Reflect refers to looking in a handheld mirror, facing oneself, and asking, “What specifically did I or did I not do that resulted in this learning outcome?” Reflection is an inward directed activity that reinforces the ownership of the individual’s learning strategies and intentional behaviors. This metacognitive phase follows Assessment. This is the heart of becoming an intentional learner. This is where the buck stops.
Rehearse refers to privately practicing a response to a learning task. The only audience (and critic) is the learner him or herself.

Revisit refers to revisiting the original learning task, a similar task, or an extension of that task (new assignment) and applying what was learned through the metacognitive phases of Assess and Reflect. This is where transferrable skills are applied to a specific task with the intention of demonstrating improvement over the previous performance. This metacognitive phase fosters measurable improvement based on the implementation of new learning strategies.

Score see Learning Connection Inventory (LCI).

Sequence refers to the Learning Pattern that needs to organize, plan, and complete work assignments without interruption, using clear instructions as well as a time frame that allows for checking work.

Strategy Card refers to a charted representation of the gap between a learner’s Patterns and a particular task to be completed. A strategy of specific actions is written by the learner for those Patterns that the learner recognizes need to be Tethered, Forged, or Intensified to undertake the task successfully.

Strong-willed Learner refers to learners whose scores are 25 or more in at least three out of four Patterns. “I am my own team. I prefer to work alone so that I can control the plan, the ideas, the talk, the decisions, the process, and the outcomes. I lead from out in front. Sometimes others find it hard to follow my lead.”

Technical Reasoning refers to the Pattern that describes the way we seek relevant real-world experiences and practical answers. This is the Pattern of the fewest words. It emphasizes the ability to problem solve using independent, private thinking and hands-on interaction.

Tether refers to restraining the use of a Use First Learning Pattern. This is done with intention to allow the learner’s other Patterns to be heard metacognitively and to operate more effectively.

Use As Needed refers to LCI scale scores that range from 18 to 24. These Patterns tend to be lost among the more vocal Pattern chatter of Use First and Avoid Patterns.

Use First refers to LCI scale scores that range from 25 to 35. A Use First Pattern has a volume equal to an Avoid Pattern. It will make itself heard in a learner’s internal metacognitive chatter. Learners use this Pattern first and begin their learning task relying on it.
**Word Wall** refers to posters or charts that list words associated with each of the four Patterns: Sequence, Precision, Technical Reasoning, and Confluence. The posters provide learners with assistance in doing task analysis and creating Strategy Cards.

**Working memory** refers to a specific type of memory function which receives and translates stimuli into symbolic representation (words, numbers, musical notes, and the like) and stores it in long term Declarative Memory for ready retrieval.
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