Part IV - The Five Driving Abilities

This Part of the Report shows your results in five worksamples. They are called the Driving Abilities. They are: Classification; Concept Organization; Idea Productivity; Spatial Relations Theory; and Spatial Relations Visualization.

The Driving Abilities are very powerful and pressing, and they influence almost every part of our work lives. This is true whatever an individual's results - high or low. Each one of these abilities forces itself into our lives. It is important to take them into account when considering what role you should play at work.

The five Driving Abilities are generally more assertive and difficult to ignore than the other abilities. They are like fast-moving streams which carry a swimmer easily from one place to another. If the swimmer swims with the current, he moves with grace and ease. If the swimmer swims against the current, he may flounder.

Leaders will probably have an instinctive sense which of the Driving Abilities will help them to move easily with the current and which may cause them to flounder. They may also sense which currents to follow and which to resist, and when to seek the help of another swimmer.

But the wisest course for anyone who is chosen or aspires to lead is to build upon the solid foundation of self-knowledge. By studying their results on tHAB, leaders can learn to use the Driving Abilities to control the currents around them. The newly-acquired self-knowledge will tell them when to push, and when to pull back from, the abilities that drive them.

Classification & Concept Organization -
The Problem-Solving Abilities

The five Driving Abilities constitute our problem-solving abilities. Two of these - Classification and Concept Organization - are called the "convergent thinking" abilities. A third - Idea Productivity - measures the ability to solve problems by producing new ideas. The ability to solve problems relating to space is measured by the two worksamples in Spatial Relations. Classification and Concept Organization, are sometimes given other names. Classification is called inductive reasoning or diagnostic thinking. Concept Organization is called deductive reasoning or analytical thinking.

Over time and through experience, the best leaders learn to recognize which of the problem-solving combinations comes most naturally and easily to them. And they learn when to encourage and when to suppress this natural pattern for problem-solving. They become skilled at gauging when to apply it to the problem at hand, and when to adjust or modify it by adopting another pattern - at least, temporarily. As they do with the other natural abilities, the best leaders also know that fitting their work environment to their natural problem-solving pattern results in enhanced performance as well as in greater job satisfaction.
Our experience has shown that when we arrange them in patterns or combinations, CL and CO together yield nine distinct and identifiable problem-solving patterns. These problem-solving patterns are controlled by an individual's natural abilities for inductive reasoning (Classification) and/or deductive reasoning (Concept Organization) - each combination of abilities determines how that individual will most easily and naturally approach the process of problem-solving. Because a leader is forced by his position in the organization to confront and solve problems at every turn, it becomes essential to know his or her pattern in dealing with new problems.

As leaders study and observe others with different problem-solving patterns, they realize that it’s relatively easy to master the patterns which are closest to their own natural or preferred pattern (see diagram below). The most difficult pattern to master is the style which is most unlike their own style. These principles apply also when a leader communicates or interrelates with a person possessing a different pattern. For example, a leader who possesses Pattern C may find it difficult to communicate with, or to mentor, an individual with Pattern G. On the other hand, he will probably find it relatively easy to work with or to guide a problem-solver with Pattern B or Pattern A.

The Problem Solving Patterns

Classification = CL

High CL

High CO

Pattern A

Mid CL

High CO

Pattern D

Low CL

High CO

Pattern G

Concept Organization = CO

High CL

Mid CO

Pattern B

Mid CL

Mid CO

Pattern E

Low CL

Mid CO

Pattern H

High CL

Low CO

Pattern C

Mid CL

Low CO

Pattern F

Low CL

Low CO

Pattern I
Classification

This worksample indicates your ability to see relationships between seemingly unrelated events, situations, or information. It shows how easily you move from the specific to the more general when solving the many problems you face every day.

Classification ("CL") is the ability to see a common link among scattered, discrete and unorganized facts or ideas. Years of research have shown that Classification is a valid measure of inductive reasoning. High CL scores are evidence of a Diagnostic or Consultative problem-solving style; low CL scores indicate an Analytical or Experiential problem-solving style.

High CL ability is demonstrated in the fields of diagnostic medicine and scientific research. A medical diagnostician, for example, is often confronted with a barrage of disassociated symptoms. He has to wend his way through these symptoms to find those which are relevant to his cure and those which can be discarded. Ultimately, he is able to tie the critical facts together into one diagnosis which he can proceed to treat. Low CL scores are advantageous to leaders who are inclined to wait until they have studied or experienced a problem or situation before they are comfortable enough to adopt or report a decision.

Concept Organization

This worksample indicates your ability to arrange ideas, information, or events in logical order. It shows your ability to move from the general to the specific to solve problems and to communicate the logic in doing so.

Concept Organization ("CO") is an aptitude for the organization of detail, i.e., for planning and doing things logically. This calls upon deductive reasoning or analytical thinking. High CO scores are evidence of an Analytical problem-solving style; low CO scores, when combined with low CL scores, indicate an Experiential problem-solving style.

High CO makes many tasks easier for a leader. A few examples: when the leader has to arrange and present the details of a financial report to the press; when he has to deal with architects and engineers in the planning and building of a new plant; when he has to review and revise copy for an ad or news release. These are all tasks which demand the logical organization of thought and ideas.
Your Results

Pattern A Problem Solvers

Your scores in Classification and Concept Organization indicate that you are most naturally a Pattern A Problem Solver (High CL, High CO).

As a person with high Classification, you:

- Can easily and quickly see patterns and relationships among discrete data and objects.
- Will find that this ability is in constant use and will influence almost every aspect of your working life.
- Need challenges in problem-solving as a foundation of your work.
- Are likely to get enjoyment from using this ability, and to be unhappy in positions that don’t use it.
- Love to solve new problems and to "figure things out".
- Are able to quickly summarize a set of ideas and jump to the end of a discussion.
- Can see pros and cons in a plan or idea quickly and easily. On the negative side, unless you exercise self-discipline, you can be indecisive as a manager or decision-maker, because you are constantly weighing alternatives.
- Can be easily bored in positions that require routine and repetitive tasks.
- Do not like to be bothered with details and can usually gather enough information to get by or "wing it."
- Must use education and self-discipline to channel this ability properly - just because something is learned quickly does not necessarily mean it has been learned well.
- Will enjoy activities that involve rapid-fire problem-solving, advice-giving or consultation.

Classification

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Concept Organization

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As a person with high Concept Organization, you:

- Will find this is the primary ability for the communication of ideas.
- Are able to analyze ideas and concepts and to arrange them easily into their logical sequence. This enables you to make ideas clear to others.
- Are able to see the logical consequences of events, making it possible for you to predict, order, and plan schedules showing when things will happen.
- Can see how all the pieces of a project fit together.
- Can use this ability easily for any planning activity.
- Are able to organize internally and may not need to organize objects around you.
- Enjoy arranging the steps in a task in sequence. You do not like to leave any steps out.
- Have an advantage in any kind of task that requires analytical thinking (e.g., literature, history, research, accounting, etc.).
- Will be able to use this ability effectively in any work with a recurring need to organize materials or information; or to plan, prioritize or develop logical conclusions and plans.
- Will find that you will use this ability often, both in and outside of work. The opportunity to use it in your other activities may substitute for the need to use it as part of your job.
- Will be able to see problems and pitfalls when work schedules are not analyzed and organized.

Leaders who score high in both CL and CO are able to arrive at solutions quickly and then are able to explain the logic behind their solutions clearly and persuasively. Because they share with Pattern B and Pattern C leaders a high score in CL, their preference is to have lots of problems to solve, although they are less likely to enjoy the time-consuming steps required to implement the solutions they (or others) come up with. Because of their relatively high CO scores, Pattern A problem-solvers enjoy explaining their solutions to others.

High Classification causes these leaders to perform well and feel most at home in fast-paced or hectic environments (a hospital emergency room, a criminal court room, a political campaign). An ideal environment for Pattern A problem-solvers is one in which they must constantly face problems and identify solutions, deploy and instruct a group or team, and monitor the group’s progress. Because their style adjusts best to constant problem-solving, Pattern A leaders should learn to:

- Slow down enough to ensure they have all the relevant information they need to solve a particular problem.
- Curb the natural tendency to be impatient with others and to interrupt their thoughts and speech.
- Review staff performance of the work they delegate to keep projects and processes on target.
- Confirm that team members understand their instructions and the rationale behind a solution.
- Review their initial decisions with others to avoid an excessive rush to implement them.
- Resist the natural inclination to view every discussion or conversation with subordinates as an opportunity to solve a problem.
IDEA PRODUCTIVITY

In Idea Productivity, we measure the number of new ideas you are able to generate within a given time in response to a set of new and imaginary facts. It does not reflect the quality or creativity of the ideas. It is simply a measure of the volume or flow of your ideas. As a problem-solving ability, rapid Idea Productivity becomes extremely useful when you are forced to face a new situation or when you have no personal experience upon which to base a decision.

We assess the capacity of leaders for idea generation, their ability to stay focused on one task or idea, and their natural preference for the way in which to respond to new ideas. Some leaders prefer to articulate and focus on one idea at a time ("focusing"); others prefer brainstorming sessions in which people are urged to articulate and consider many ideas at once ("brainstorming").

Your Results

You will see a question about an imaginary situation in this space during the timed Worksample.

Type your response to the question in this space. Type as fast as you can.

Your score indicates that you are in the mid-range for Idea Productivity.

Leaders who score in the mid-range in this worksample share with Brainstormers their ability to generate new ideas and with Focused leaders their ability to discriminate among a large flow of ideas to select one or two that merit follow-up and careful study. They excel as chairmen or managers of meetings at which ideas are produced and exchanged. They are most effective in roles that draw on their strength in producing their own ideas, in inducing others to produce theirs, and in motivating the discussion and selection of ideas that lead to a concerted plan or solution.

Because they are in the mid-range, these leaders can handle several projects simultaneously, but they may have some difficulty maintaining a single focus for a prolonged period of time.

These leaders can avoid the risk of confusing the people they work with by controlling the flow of their ideas. As new ideas occur to them, they should consider them carefully before they announce them to others. Otherwise, their workers may shift their time and energy from one project to another, feel frustrated by the inability to complete anything, and become confused about goals and priorities.
On the other hand, because they are in the mid-range, these leaders will feel a pull towards staying focused, i.e., to work on one project at a time. They may need to consciously avoid the stress that comes when multiple tasks need simultaneous attention. In brainstorming sessions, they may want to listen to and sift through all the ideas being generated, identify one or two of the best, and bring the group back to focus on the principal goal as more ideas are generated and reviewed.

In achieving a balance between many undisciplined ideas and one or two really constructive ideas, the mid-range leader will make a vital contribution to the success of the organization.

As a person with medium Idea Productivity, you:

- Can generate plenty of ideas, but you are also able to concentrate, focus, and follow through on details.
- Should plan to use this ability in your work. If your Idea Productivity is not used at work, you should find some other outlet for it outside of work.
- May find it difficult to focus on a task or train of thought that requires long-term attention.
- May find yourself restless over time in a task that is mostly routine or rote, one with very little change or opportunity for idea production.
- Can use your relatively strong idea flow to come up with solutions for problems, or in persuading others to your point of view.
- Will enjoy working in environments with a moderate amount of change, but with some demand for problem-solving and persuasion.
- Do not require new data or information to begin the generation of ideas.
- Will find this ability useful in many jobs, including executive leadership and management.

To make maximum use of your mid-range ability, you may want to:

- Build ways to help you generate new ideas and give yourself a kick-start (read newspapers and industry magazines, consult websites, etc.).
- Develop a network of strong idea-producers to consult with when you need to develop new solutions for old ideas.
- Encourage occasional roles and environments that require intense focus or concentration.
- Ask workers if they are ready to focus on one idea or task, or if they need more brainstorming.
- Let others know you are available to assist in assessing and sorting ideas.
- Decide when focusing is appropriate and when it is time to consider new ideas.
- Encourage people who are relatively unable to focus but have a steady stream of ideas; one of the ideas may be the key to the solution you need.
SPATIAL RELATIONS

The Spatial Relations abilities are the best understood and most researched of all the abilities. The Highlands Ability Battery splits these abilities into two worksamples - Spatial Relations Theory (SRT) and Spatial Relations Visualization (SRV). SRT measures the ability to "see" (conceive) and manipulate three-dimensional objects in space. It can be a helpful tool in solving theoretical problems. A nuclear scientist, for example, works within his brain, not with his hands, to unravel the structure of atomic particles. Einstein did not develop the theory of relativity by building something with his hands.

Leaders with high SRT are able to design a new bridge or building or a new industrial or medical product without necessarily touching any of the materials required in the construction. In the corporate or organization environment, this ability enables the leader to show the way in personnel alignment, long-range organizational goals and targets, product design, distribution channels, communication facilities, and workplace design. Leaders high in SRT are most satisfied when they can say, "I conceived this," or "I designed this."

Leaders who are low in SRT have their feet firmly on the ground. They like to control projects and get things done. They are the leaders who keep groups and organization on a steady keel. Leaders with low SRT are most satisfied when they can say, "I did this."

SRV, on the other hand, demonstrates the ability to work with tangible objects and problems. It can be a helpful tool in occupations which involve working "hands on." People who score high in this ability need to see and feel the results of their work. They are most satisfied when they can say, "I built that", or "I made this." SRV is one of the abilities most likely to affect job satisfaction. In the corporate or organizational world, leaders high in SRV will be drawn to supervision of construction, management of a lab or technical facility, or direction and management of a production team or process. Leaders who are low in SRV are most satisfied when they can say, "I solved this." They are exhibiting the tendencies required for work in the service and financial industries.

Leaders who are low in SRV and relatively strong in SRT tend to turn to jobs and professions dealing with abstractions. They don't need to find validation or satisfaction in working with their hands. They prefer to work with words and ideas. In the corporate world, these leaders will serve as general legal counsel, HR directors, and heads of the marking and public relations departments. All these leaders will find satisfaction in the world of ideas and expression.
Psychiatrists and surgeons both receive medical training, but psychiatrists work with patients over long periods of time without necessarily achieving tangible results, while surgeons always work in the concrete world of hospitals, operating rooms, surgical instruments and immediate "hands-on" applications. Both may achieve positive results, but the surgeon would probably not be satisfied in the theoretical world of the psychiatrist, and the psychiatrist may find the life of the surgeon too impersonal and stressful.

**Spatial Relations Theory (SRT):** This worksample helps us to measure whether a leader thinks first or most easily in the theories which control the functioning of systems - both intangible systems like astronomy or computer science - or in the tangible components of those systems. To restate the difference - do you understand easily the principles which enable mechanical or inter-personal structures to operate, or do you prefer to apply yourself to the practical, concrete application of those principles - e.g., designing or using tools to repair or build an engine? In directing a project or exercising leadership over others, do you prefer to develop theories and broad concepts and leave the implementation and details to others, or do you prefer to define and direct the details yourself?

**Spatial Relations Visualization (SRV):** This worksample confirms whether a leader relates best to the world of concepts and ideas or to the structural, concrete world. When he engages in a project, or manages the work of others, is an idea as real to him as a tangible object, or is it difficult for him to become engaged unless the work will result in a tangible product - a new drug, a bridge, a building? The partnership between architects and construction foremen illustrates the differences that arise when we measure the visual and structural abilities. When we wish to design a bridge as inspiring and beautiful as the Golden Gate Bridge or the George Washington Bridge, for example, we call upon the services of an architect. To the architect we assign the task of conceiving the shape and design of the bridge - a function which requires abstract thought and conception. To the construction foremen who work with the architect's plans, we assign the job of putting in place the structures and facilities which are dictated by the size, shape and traffic-load of the bridge.

Because SRT and SRV both influence an individual's ability to deal with the three-dimensional world, we have created a grid showing how different scores in both relate to each other in suggesting the ideal role for you.
Your Orientation to Space and Work (Spatial Relations)

Theory (SRT)       Visualization (SRV)

High SRT           High SRT           High SRT

High SRV           Mid SRV           Low SRV

Group A           Group B           Group C

Mid SRT           Mid SRT           Mid SRT

High SRV           Mid SRV           Low SRV

Group D           Group E           Group F

Low SRT           Low SRT           Low SRT

Group G           Group H           Group I
You fall into Group B (High SRT/Mid SRV). Leaders who score high in SRT and in the mid-range of SRV relate easily both to the world of concepts requiring implementation and to the physical (concrete) or structural world that results from the implementation of spatial concepts, although they are more comfortable designing than building. They are able to contribute to the creation and formulation of concepts and theories and, at the same time, to plan and direct the steps that lead to production of the product the ideas suggest. They work best when theories can be reduced to concrete examples and they are able to drive toward successful execution of a plan. They have a knack for understanding and implementing the relationship between a spatial concept and the mechanical or structural world, and they know how to build whatever is required of them. In simple terms, they want to know - and they can understand - both the "why" and the "how", allowing them not only to design and build, but to trouble-shoot and solve structural problems as they arise. Without a thorough understanding of the theories supporting the project (the "whys"), they are not likely to begin work on a new project.

These leaders should learn to:

- Demonstrate their appreciation for, and encourage discussion of, concepts contributed by others.
- Reduce theories and abstract concepts to the simplest terms and formulas possible.
- Help their subordinates to express their theories and concepts in concrete terms and with concrete examples.
- Allow a project to begin even if they are unclear of the form and shape of the ultimate outcome (e.g. the development of a new drug or surgical procedure).
- Understand the importance of relationships, both informal and formal (study the company’s organizational chart).
- Appreciate the important role of feelings in the work environment.
- Make a determined effort to be aware of company politics (as well as those general political issues which affect the business or organization) by gathering the information themselves or relying on trusted interpreters.
- Become less involved in production (doing) and more involved in policy and direction-setting (directing) - let others handle the production.