

THE CRITICAL SKILLS that NeuroHeadway examines

- 1) Skills related to interacting with others
- 2) Skills related to making sense of the world
- 3) Skills related to personal growth and development
- 4) Skills related to solving problems in the world

1. Interacting with Others

Since we are a social species, effectively interacting with other humans is often critical to our success.

It is beneficial to be competent at:

- **Communication Skills** —including the abilities to read, write, speak, and listen in a particular language as well as in other common languages; express oneself through and interpret non-verbal communication; communicate through and interpret artistic expression
- **Collaborative Skills** —including the abilities to contribute to group activities and discussions; consider the ideas and perspectives of others; include others in the collaborative process; stay focused on the task; provide and receive feedback constructively
- **Leadership Skills** —including the abilities to model appropriate behaviour; direct and organize the behaviour of others; persuade others; manage conflict; take action and accept responsibility for the consequences
- **Interpersonal Skills** —including the abilities to take the perspective of others; manage conflict; manage one's emotions and impulses across a variety of interpersonal situations; maintain positive relations with others; adhere to appropriate boundaries when interacting with others

2. Making Sense of the World

Also, part of human nature is our capacity to reason and reflect upon the decisions and problems we encounter. Thus, the cognitive processes that often direct our behaviour are also critical to our success.

Such skills include:

- **Logic or Reasoning Skills** — including the abilities to draw appropriate inferences; deduce logical conclusions; identify assumptions; generate predictions; recognize faulty logic
- **Quantitative Reasoning Skills** — including the abilities to estimate; exhibit a sense of scale; interpret quantitative data in varied formats; use quantitative data to support arguments; interpret probabilities; recognize misuses of data.
- **Analytical Skills** — including the abilities to identify patterns;
 - Identify the components of a concept or problem; identify appropriate criteria for judging a product or idea;
 - Compare and contrast concepts or processes;
 - Classify or organize elements along specified criteria
- **Evaluation Skills** — including the abilities to evaluate the validity of claims;
 - Evaluate the relevance of different types and sources of evidence for different types of claims or questions;
 - Evaluate the sufficiency of evidence to draw a conclusion;
 - Apply criteria to the judgment of a product or idea;
 - Identify possible errors and biases in claims or conclusions
- **Integration Skills** — including the abilities to find connections between similar and dissimilar concepts or processes;
- Combine disparate ideas into a new, coherent idea;
- Synthesize a variety of components into a new product

3. Personal Growth and Development

With such a plastic brain, humans have considerable capacity to adapt to the environment. The more we learn from our successes and failures and learn how to adjust accordingly the more successful we tend to be. That places considerable importance upon the following skills:

- **Self-assessment Skills** — including the abilities to apply relevant criteria to own work;
 - Identify strengths and weaknesses;
 - Judge when one has successfully completed a task
- **Goal-setting Skills** — including the abilities to identify clear goals;

- Identify realistic goals; identify goals relevant to the task;
 - Identify effective responses to positive and negative outcomes
- **Self-management Skills** — including the abilities to manage one’s time;
 - Be prepared; develop and follow successful routines;
 - Organize and plan appropriately;
 - Prioritize; respond flexibly to new situations;
 - Manage stress and handle distractions;
 - Act independently when necessary or appropriate
- **Metacognitive Skills** — including the abilities to monitor one’s progress on a task; assess task difficulty;
 - Anticipate likelihood of difficulty on a task;
 - Acknowledge one’s strengths and limitations;
 - Evaluate effectiveness of current and alternative strategies;
 - Recognize when a change in approach is needed and make adjustments;
 - Identify errors
 - Take control of learning
- **Study (or Learning) Skills** — including the abilities to manage time for a task or situation;
 - Recognize the best strategies for certain kinds of tasks;
 - Outline or organize information to be learned;
 - Give meaning to the information to be learned;
 - Attach useful cues to the information to be learned;
 - Exhibit active engagement with information to be learned;
 - Make information personally relevant; use others wisely in service of learning of information;
 - Apply meta-memory knowledge to learning of information.

4. Solving Problems

Virtually everything humans do can be thought of as a problem to be solved, a question to be answered, or a task to be completed.

Thus, our success in life also depends upon developing skills which enhance our capacity to successfully approach, analyze, and complete tasks.

Such skills include:

- **Problem-solving Skills** — including the abilities to identify a (the) problem;

- Determine knowledge and skills necessary or helpful to solve the problem or complete the task;
- Apply appropriate knowledge, rules and strategies to the problem;
- Generate possible solutions;
- Evaluate the feasibility and effectiveness of possible solutions;
- Given relevant constraints, determine best possible solution(s)