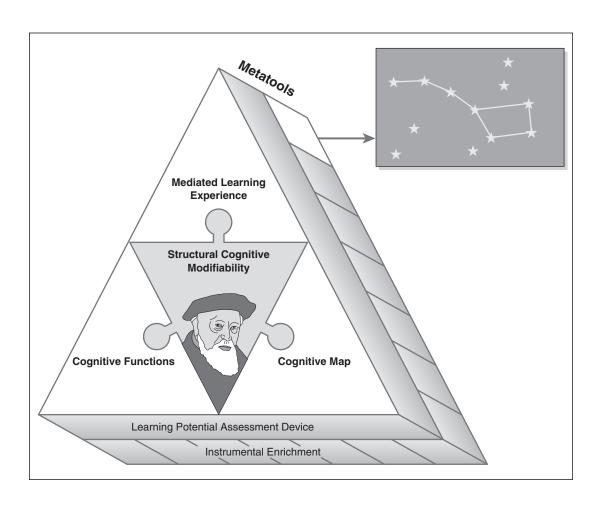
Organization



he thinking skill that is outlined in this chapter is *organization*. Organization involves creating order out of discrete and unconnected items. Order is imposed by linking, structuring, and organizing items. For example, a group of seemingly unrelated people can be linked through different forms of relationships—family members, friends, work colleagues, and so on.

The thinking skill of organization is taught in the *organization of dots instrument* of Feuerstein's (1980) Instrumental Enrichment (IE) program. Feuerstein's symbol for the organization of dots instrument is the Big Dipper, a constellation of stars found in the northern hemisphere. In the Big Dipper symbol, imaginary lines connect a group of stars into a recognizable and distinguishable pattern. Linking items together into a pattern illustrates the cognitive operation of organization.

ORGANIZATION—WHAT, WHY, WHEN, AND WHERE?

Why is the dictionary organized from A to Z? How are books ordered in a library? In what section of the supermarket would you look for the milk?

How are calendars and timetables structured?

The ability to answer these kinds of questions depends on the thinking skill of organization. We are born into a world of stimuli that are seemingly unrelated and disconnected. Order is imposed on these stimuli through linking objects and events according to relationships and rules. This is the process of organization. Different cultures, societies, or groups organize events, activities, objects, and stimuli in different ways depending on the mores and practices of that culture or context. Organization gives meaning and purpose to the world.

Without organization we would have what Feuerstein (1980) calls an *episodic grasp* of reality. In episodic reality, the world is perceived as consisting of separate, isolated, and unrelated episodes, events, or items. This perception of reality, where there is no organization, can result in confusion and chaos. In order to overcome the chaos and confusion of episodic reality, the skill of organizing is mediated. This varies depending on different contexts and cultures. For example, calendar months and years are organized in different ways according to different religions and festivals. Writing can be organized in a left to right, right to left, or top to bottom sequence depending on the language being written and the culture. Information can be organized in a sequential, linear, logical order as in the chapters of a book, or in a simultaneous, webbed, networked way as in a concept map or on the Internet. As the skill of organization is mediated, culture is transmitted. Thus, culture and context is mediated through the relationships that connect things and make order out of apparent chaos.

What Is the Thinking Skill of Organization?

Organization involves creating or recognizing the links and connections between objects and events and the rules, systems, or criteria that govern these connections. For example, words in a dictionary are organized according to an alphabetical ordering system. Air travel is organized according to scheduled times that flights depart and arrive. The general rule for sorting clothes for washing is into piles of whites, colors, darks, and delicates. Music and literature can be organized into genres, styles, or periods. School classes are organized according to the criteria of age and subject level.

Why Is the Thinking Skill of Organization Important?

There are many reasons for teaching the skill of organization. Organization aids understanding, creates order and meaning, and allows for efficiency and convenience. For example, an essay or assignment has greater clarity when it is organized into an introduction, body, and conclusion. Laws organized into a legal system provide a structure for people to understand their rights. Diaries or daily logs enable us to manage time more productively. Products in a discount or superstore organized into departments make it easier and quicker to find things such as groceries, kitchenware, gardening tools, and clothing.

When and Where Is the Thinking Skill of Organization Used?

There are numerous contexts and situations where organization occurs. Time can be organized into seconds, minutes, hours, days, weeks, seasons, years, centuries, and so on. Objects can be grouped according to different criteria—for example, food in a shop, books in a library, or clothes in a closet. Activities can be planned and arranged—for example, outings, parties, and tournaments and games have different organizational requirements. Ideas and thoughts can be organized in different ways—for example, poems, concept maps, overviews, and arguments all have different formal structures. Knowledge can be organized into different disciplines—for example science, fine arts, and humanities.

Cognitive Conundrum—Organization

There is a school of thought that suggests that parents and teachers, who constantly mediate organization to young children, actually inhibit their creative development. Statements such as "Put all your clothes on that shelf," "The green blocks go in that box," "Line up along this wall," and so on do not allow students freedom to explore their world of creative talents. Are we living in an overly organized world?

What do you think?

BRIDGING ORGANIZATION TO FORMAL LEARNING CONTEXTS

Numerous formal learning experiences can be used to mediate organization.

Humanities

- Become familiar with the way a dictionary is organized in order to use it more effectively and plan an essay or report using specific headings and subheadings.
- Mediate how language, grammar, and word structures are organized in terms of parts of speech, conjunctions, prefixes and suffixes, and so on.

Social Sciences

- Create timelines to illustrate the order of historical events.
- Use maps (such as political, physical, topical, or contour maps) to illustrate how land, people, and resources can be organized.

Sciences

- Examine how ecosystems are organized into food chains, life cycles, and so on.
- Discuss the organization and operation of body systems (e.g., the human respiratory system, digestive system, renal system).
- Organize statistical data by structuring it into pie graphs, line graphs, or bar graphs.
- Show how numerical values can be placed into columns for ease of computation (e.g., 10s, 100s, other units of measurement).

Arts

- Review how a poem, painting, piece of music, or art form is organized in order to aid its appreciation.
- Show how living spaces have been organized differently in various architectural periods.

Technology

- Examine the organization of Internet structures and show how they facilitate communication and research on a global scale.
- Select and study the workings of a manufacturing organization in terms of efficiencies of effort, labor usage, placing of machinery, safety measures, and so on.

BRIDGING ORGANIZATION TO INFORMAL LEARNING CONTEXTS

General

- Improve study skills. For example, apply organizational principles to structure a study timetable, a workplace, and the particular subject content in a mind map or overview.
- Develop a plan that can always be used to check or proofread written work.

Health and Personal Development

- Consider organization as a remedy for disorganization—disorganization can lead to negative emotions such as anger, frustration, and low self-esteem; and to feeling swamped and generally unable to cope.
- Work on ways to organize a day so that it reduces personal stress—for example, taking time out, doing meditation, following an interest or hobby, and so on.

Home

- Make a mundane shopping trip more meaningful by mediating to children how and why the products in a supermarket have been organized. For example, show how perishables are stored in refrigerated sections of the store and cleaning products are separated from food. Encourage children to use these principles of organization when unpacking the purchases back home. Organize one's living space for functionality and aesthetics.
- Manage money by structuring a personal budget.

Counseling

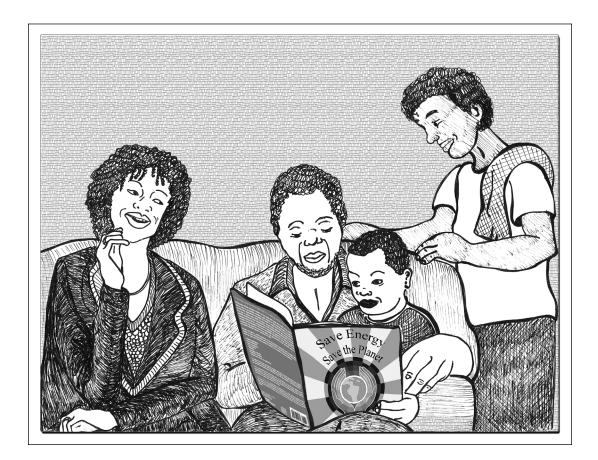
- Organize thoughts in decision-making. For example, examine the pros and cons of all the alternatives before making a final choice.
- Examine organizations in terms of their hierarchies, power structures, and rules and regulations, and explore how they impact the individual.

Multicultural

 Experience a day with a colleague or friend from a different country or culture, and observe how that individual's day is organized in terms of events of the day, structure of religious or social rituals, preparation of meals, family hierarchy, or home situations. Record your observations and feelings, and apply your organizational skills to put together a presentation of your experience.

APPLICATION OF ORGANIZATION—ENERGY EFFORTS

The skills involved in organization can be applied in the home setting. For example, consider a family discussing the importance of saving energy and the impact it can have on the planet.



Start with brainstorming ways in which family behaviors and rituals in the home can be organized to minimize energy use—switching off lights which are not needed, taking shorter showers, recycling waste, and so on. Part of this organizational process will involve allocating tasks to various family members. For example, get dad to change shower heads, mom to purchase energy-saving light bulbs, granny to help kids to make a compost heap with left over vegetables and food waste, and so on. This plan can include ways to measure energy-saving efforts and to evaluate the reorganization of lifestyle and behaviors to achieve the goal.

FEUERSTEIN'S THEORY IN MEDIATING ORGANIZATION

Feuerstein's (1980) theory focuses on three areas that impact the development of the thinking skills. These include the *mediated learning experience* (MLE)—the type of interaction initiated by a mediator; the *cognitive functions*—the thinking skills of the learner; and the *cognitive map*—an analysis of the learning task. These three areas provide techniques for analyzing the interaction between the mediator, the learner, and the learning task. They provide a useful framework to use when mediating the thinking skill of *organization*. This can be illustrated using the example of organizing and planning a journey.

Mediated Learning Experience

Feuerstein's (1980) 12 criteria of MLE (see Appendix A) provide the mediator with techniques that help mediate the skill of organizational planning for a journey. Organization is needed to ensure safe and enjoyable travel. For example, mediating *goal planning* will help the learner work systematically through setting and planning an itinerary. Mediating a sense of *challenge* will instill in the learner a feeling of determination and enthusiasm to cope with the novelty and complexity of experiencing new places, different currencies, food, and people.

Cognitive Functions

The list of cognitive functions (see Appendix B) at the input, elaboration, and output phases provide a framework for targeting specific skills needed to ensure effective organization in planning a journey. For example, planning travel arrangements includes ensuring that all the relevant information, such as departure times and accommodation details, are carefully collated (*clear and systematic data-gathering at the input phase*). Similarly, planning needs to be done in a structured and meaningful way (*adequate elaboration of concepts, summative behavior at the elaboration phase*). Finally, a planned and focused response is needed (*appropriate expressive behavior at the output phase*).

Cognitive Map

The cognitive map can be used to analyze and manipulate the learning task to ensure that it is pitched at a meaningful and useful level for the learner (see Appendix C). In this example, planning for travel is an everyday life experience (content) using a range of tasks and approaches (verbal, written, and graphic modalities) that requires thinking hypothetically about unfamiliar situations, which might prove difficult and challenging (high levels of abstraction, novelty, and complexity).

Thus, the techniques of MLE, the cognitive functions, and cognitive map can be used to mediate the skill of *organizing* or planning a journey.

WINDOW TO INTERNATIONAL RESEARCH ON COGNITIVE EDUCATION

Organization of dots is the first instrument used in Feuerstein's (1980) Instrumental Enrichment (IE) program. Overall there are 14 instruments that make up the IE program, which has been implemented in a range of contexts internationally. This extract describes research done using IE with children who have Down syndrome in Israel:

Feuerstein, Feuerstein, Falik, and Rand (2006) reported that, at the International Centre for the Enhancement of Learning Potential in Jerusalem, an intensive program of Instrumental Enrichment, socialization, training and the creation of modifying environments has helped young adults with Down syndrome

develop into individuals who can read and write, serve as volunteers in the army, learn vocational skills and ultimately be gainfully employed as caretakers for the elderly. In one follow-up study of Down syndrome and other developmentally disabled young adults, four to six years following their training in the above-mentioned program and subsequent employment, it was found that 39 of the 40 participants were still gainfully employed, and implementing their training. The authors point out that this constitutes a higher incidence than would be predicted for individuals in similar occupational tracks.

"The reason why most people face the future with apprehension instead of anticipation is because they don't have it well designed."

—Jim Rohn (1994)