Accelerated-Learning Techniques through Mindmapping

by Linda Chernek Moore

I vividly remember my beloved high school English teacher stressing that in the first paragraph of an article you must grab the reader's attention to persuade him or her to continue. You may be scanning this paragraph right now to see if I can do just that. You may have looked at the title and are not sure you should read on since you may be an M programmer or manager and may not be directly involved with learning situations, or so you think. Maybe we need to begin by defining learning. *The American Heritage Dictionary* defines learning as, first, instruction or education, and, second, as acquired wisdom, knowledge, or skill.

The first definition is the one that comes to mind with most of us but the second definition is the one I want you as an M professional to consider.

This article addresses the application of one specific accelerated-learning technique not only to training but also to those tasks we do not normally think of as learning situations. For example, we are acquiring wisdom, knowledge, or skill when we develop an M routine or system, take notes at a meeting, attempt to solve a personnel problem, diagram a complex networking system, or organize a presentation. These are all learning situations where a technique called *mindmapping* can help.

An Introduction to Accelerated Learning

Rather than try to define what accelerated learning is, let me describe what it isn't. First, accelerated learning is not the same as conventional learning. Colin Rose states that "Conventional teaching has assumed that learning should involve determined concentration and frequent repetition. We now know that this style of learning is not efficient because it causes unnecessary tension and it tends to involve just one half of the brain."[1] This brings to mind memorizing multiplication tables (even remembering the experience brings back tension for some). Conventional instructional techniques use the "I tell-you listen" format that also is known as "pour and snore." These techniques were developed in the industrial age when learning had to be linear, teacher-centered, authoritarian, competitive, single-path, uniform, and time-based.[2]

Accelerated learning refers to tools and techniques to enhance learning. "Accelerated Learning . . . teaches you how to achieve a pleasantly relaxed, yet receptive state of mind, and presents information in new ways that actively involve both the left and right brains."[3] Accelerated-instructional techniques are necessary for the information age and are participatory, nonthreatening, geodesic, energizing, learner-centered, integrative, collaborative, and results-based.[4,5]

This learning philosophy developed out of neuropsychological and cognitive research into how the brain functions. Creating a memory, which is a record of learning, is a complex operation involving chemical processes through stimulation of various centers of the brain. The general premise is that the more brain centers involved, the more lasting will be the memory. Also, the brain absorbs, sorts, and recalls materials more efficiently in images and events than it does in words.[6] Accelerated-learning techniques use a visual image and add color, music, words, and action associations to make the strongest memories. In other words, accelerated learning says we need to involve the whole brain in learning.

Mindmapping

Picture yourself at a recent meeting or class taking notes. You start at the top of the page and continue downward, writing phrases and sentences. It is not long before you find you want to add to the notes above and have not left room, or you get an idea related to something somewhere else on the page and you scribble in the margin wherever you can. At the end of the meeting, you have several pages of notes. As you later try to review them, you may find you cannot make the connections between ideas represented on multiple pages.

Now, here is another scenario. It is time for the next meeting and you come armed with blank paper and colored pens. You turn the paper sideways, start at the center of the page where you place the main topic, and draw a simple sketch to depict it. As you are listening to the presentation, you find your thoughts flowing freely as you represent them as words, colors, and pictures that radiate from the center. You find that

you do not have to write sentences or phrases; you use keywords and images instead. You use lines to connect ideas. You skip around the page as you add ideas and establish new connections between the ideas.

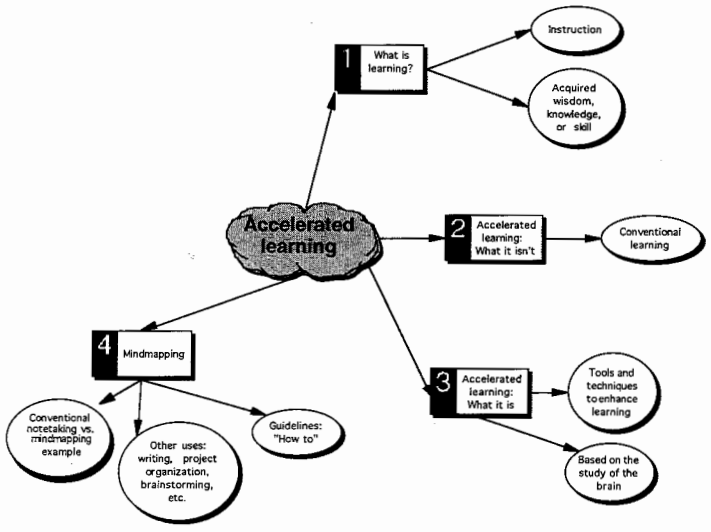

Figure 1. Sample mindmap, prepared as a guide for this article.

The second scenario introduces the mindmapping technique, which is a nonlinear way to represent ideas rapidly using keywords, color, and images. Mindmapping was developed in the 1970s by Tony Buzan, a British author and expert on brain functioning. The activity involves the whole brain and more closely represents how the brain works. Since there are few restrictions, information flows freely and "also organizes itself into clusters as it flows from the mind to the page."[7]

Buzan developed the technique as a tool for taking notes but it can be used for much more than that. Here is a list of some of the uses of mindmapping:

- Writing (preparing course materials, writing articles, etc.; see figure 1 for a mindmap of this article);
- Taking notes in classes or meetings (see figure 2 for a mindmap of selected class notes from my course "Introduction to MUMPS Programming");
- Organizing a project (system design and installation, meeting or conference preparation);
- Preparing a presentation (mindmaps can be used to plan a speech and/or to prepare visual aids for your audience to follow during the presentation);
- Brainstorming sessions where ideas are flowing freely (see figure 3 for a mindmap of a brainstorming session to solve a personnel problem); and
- Charting personal growth (planning your career or a vacation, setting goals).

Mindmapping is not difficult to learn. There are only a few formal guidelines, and the actual structure of your mindmap ends up being a very personal reflection of the workings of your mind.

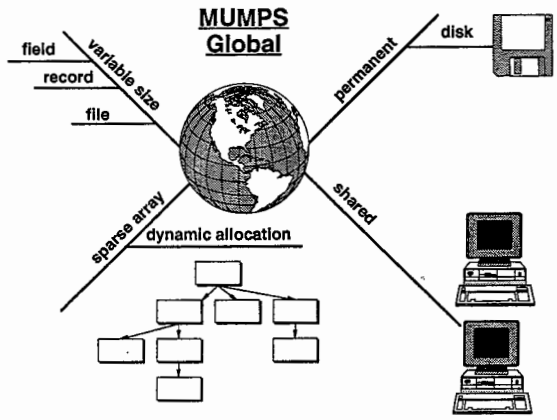

Figure 2. Class notes mindmapped from "Introduction to MUMPS Programming."

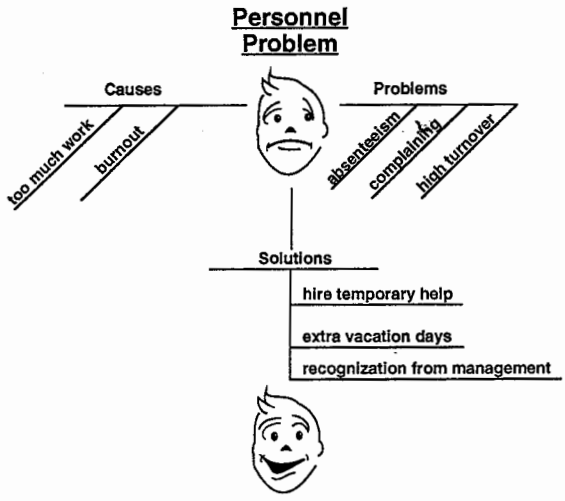

Figure 3. Brainstorming led to this mindmap.

Guidelines to Begin

Here are some suggestions to get you started. Turn a piece of paper sideways. Start in the middle with the central focus, topic, or idea. It is best if you sketch a simple picture to go with this central idea since the brain tends to remember images better than words. Using an image here also may start ideas flowing more rapidly.

Use keywords to represent ideas. Print only one word on a line when possible to avoid clutter.

Connect the keywords with lines from the central image to create branches. You can use arrows to show a directional flow of things. You can connect keywords by drawing lines between them, too.

Use colors and pictures for emphasis. You might use colored pens plus highlighters. For example, you might show each branch in one color and use highlighters to emphasize the most important point in each branch. The pictures can highlight ideas and get the mind making other connections. If you are preparing a mindmap for others to follow, there are several software packages that will help you to produce professional-looking mindmaps. I used a MacIntosh package called Inspiration by Inspiration Software, Inc. The other figures were prepared using Canvas 3.0, a MacIntosh graphics package.

As you develop the mindmap, withhold judgment about the way you represent the information. It is the critical, judgmental part of our thinking that slows down the creative process. Your first attempt should flow freely, then. You do not have to be an artist to use pictures effectively. Most of the time, you are doing the mindmap for yourself and the point is to draw something with meaning for you alone. Later, if you want to redraw the mindmap, that's fine.

Mindmapping in a Training Environment

On the basis of my research, mindmapping is a useful tool in two aspects of training: designing curriculum and taking notes. I readily admit that many of my M course materials have been designed using conventional techniques (e.g., linear presentation and teacher-centered orientation). I sense that for most students this is not completely effective. In my onsite teaching, I try to supplement these materials with various teaching techniques to make learning more interesting for the students. Two of these techniques are role playing and games. Many students respond positively but there will be some students who seem not to learn through my materials or my teaching techniques. I now see that mindmaps, integrated into the curriculum, might be helpful as adjuncts to my existing materials and techniques. Mindmaps capitalize on what we have found out about how the brain works: The brain is more efficient processing images than words!

In figure 2, a mindmap presents the concept of an M global. I can use this figure to supplement linear text as part of a more conventional lecture. I chose the globe symbol to help the student remember the word *global* but also to reinforce that an M global can be shared by multiple users (loosely, "across the globe"), which is reinforced by another branch of the mindmap also.

Perhaps it is more important for my students that I teach them mindmapping techniques than that I design images. Then they can create personal diagrams of M programming concepts that have meaning for them. They can use images and colors that tap into their individuality and creativity. Both neuropsychological and cognitive research show that adding an emotional or personal context to a learning situation is one of the best ways to enhance learning.[8]

Summary

Ours is an age where visual images from television, newspapers, magazines, and computers fill our lives. In our own M community, we have moved from text-based processing to graphics and image-based processing. Mindmapping, as one example of accelerated-learning techniques, should make sense to us as creative M professionals. These techniques involve the whole brain in learning in order to make a pleasurable but effective experience. Mindmapping gets various parts of the brain involved in organizing thought and ideas in a manner that more closely resembles the way the brain functions. It can take an otherwise uninteresting activity and make it a task that unleashes our creativity, enhances the learning process, and maybe even creates a work of art in the process.

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Endnotes

1. C. Rose, *Accelerated Learning* (New York: Dell Publishing, 1985).
2. From a workshop on accelerated training conducted by David Meier of The Center for Accelerated Learning.
3. Rose.
4. Meier.
5. There are several resources about mindmapping. I recommend these three in particular: Bobbi DePorter's *Quantum Learning: Unleashing the Genius in You* (New York: Dell Publishing, 1992); Gill and Meier's "Accelerated Learning Takes Off" in *Training and Development Journal* (January 1989); and Nancy Margulies's *Mapping Inner Space: Learning and Teaching Mind Mapping* (Zephyr Press, 1991).
6. G. Smith, "Igniting the Fire of Learning," *Program Trends for Business and Industry*, November 1992.
7. J. Wycoff, *Mindmapping: Your Personal Guide to Exploring Creativity and Problem-Solving* (New York: Berkley Books, 1991).
8. Rose.