

# BRAIN-BASED FAITH DEVELOPMENT

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Evangelical Lutheran Church in America  
God's work. Our hands.

By: Vicky Goplin

*Brain research is providing insights into how people learn. How can we apply this to the world of faith development that can transform disciples' lives?*

Kansas Lake Lutheran, my home church, sat in the middle of fields of corn and beans. The wind was blowing constantly, and the gravestones created a sense of connectedness. And many adults were doing what good teachers do.

- Cora Ekstrom searched for red and blue glass and ground it into dust, so Bible school students could create Luther's Seal — before the age of felttip markers. This was not an art project but an opportunity to engage head and hands.
- A group of female relatives, identified by their husband's names — Mrs. Carl Johnson (grandmother), Mrs. Aldie Moody (aunt), Mrs. Siegfried Johnson (in-law), and Mrs. Floyd Johnson (mother) — were leaders for the Junior Mission Society. Once a month we learned about the needs of missionaries in faraway places and rolled bandages from strips of old bed sheets. This wasn't a service project but an opportunity to engage head, hands, and heart.
- When Laotian refugees from the Vietnam War were looking for sponsors, Leota Hall and Janice Romsdahl investigated what they needed and how our congregation could help. We became a multicultural congregation on the prairie. This wasn't a response of obligation. It was the faithful practice of responding in love.
- Every year in Bible school all ages (from 3 years to Jr. High) learned all the verses of a hymn — *We Plough the Fields and Scatter; This Is my Father's World; Immortal, Invisible*. These hymns appeared regularly in worship throughout the year. This wasn't rote memorization but an opportunity for children to wholeheartedly participate in worship.

## **From Teaching to Learning**

What does this have to do with brain research or how leaders in the church approach faith formation? A great deal. One short article can't detail how the brain works. It can help you recognize the importance of evaluating and carefully planning your formal and informal learning ministry. There was a time when these examples of transformational learning were attributed to a lucky congregation who had people who were *natural* teachers. Or perhaps these women (yes, women were the formal teachers) didn't have jobs outside the home. They had time to think about these things. Our congregation was lucky, but these farm wives were not looking for ways

to spend their time. They understood the benefit of thinking beyond what *they were teaching* to what *children and youth were learning*.

In addition to these planned experiences, there were softball games at noon, lots of good food, and hide-and-seek in the cemetery. Life was not perfect, but generations of children and adults were the beneficiaries of formal and informal faith formation. We learned stories of faith from the Bible and from the people around us.

What we know about learning is continually changing. The constant thread is that humans are created with a deep desire to make meaning in their lives.

While early theories — behaviorism, cognitivism, and humanism — were developed from research based on what was observed or reported, we now have the amazing ability to see the brain as it is working. MRIs help us discover which part of the brain is activated. How long does the brain respond to a single stimulus? Is this the same for every person? Do the brains of children and youth respond in the same way? The answers to these questions and many more validate the intuitive work of good teachers for many years.

- Learners learn best when they are the ones doing the work.
- Learners are able to make meaning when new knowledge is connected to old knowledge.
- Patterns help us learn. Using these patterns routinely helps us remember. Our emotions matter. Too much stress — or none — can keep us from learning.
- Sometimes learners need to move their bodies a bit to reengage. Sitting around a table for 45 minutes is not a recipe for long-term understanding.
- Some people learn best through music. Others through games. Others by reading and reflecting. Others by making something with their hands.
- Teaching is a great way to learn.
- The best learning often happens outside the planned learning environment.

But the question arises again: How is this information helpful when thinking about faith formation that transforms lives? Medical, psychological, and educational research on cognitive processes has exploded in recent years. This has created a long list of print and web resources to wade through.

### **Learning Which Flourishes**

The recommendations that follow help you answer important questions about your learning ministry so you can create an environment where faith can flourish. Who are you as a congregation? How can you plan learning that focuses on your context? And how do people remember information?

First, Who are you? In her book *Fashion Me a People: Curriculum in the Church*, Maria Harris says, “Churches do not have curriculum, they are the curriculum.” People of faith are fashioned by what they learn through:

*leiturgia*: liturgy and ritual

*diakonia*: serving  
*kerygma*: the Word  
*koinonia*: fellowship  
*didache*: planned learning

What is essential to “teach” in your formal learning ministry? This depends on what people are learning in the other areas. Your plan must be context-specific.

Secondly, how can you make your plan? In the book *Understanding by Design*, Grant Wiggins and Jay McTighe outline three recurring questions that lead to learning experiences that help people make meaning and gain understanding.

“What are the big ideas and core processes that students should come to understand?”

“What will teachers look for as evidence that students truly understand the big ideas and can apply their knowledge and skills in meaningful and effective ways?”

“What teaching strategies will help students make meaning of curriculum content while avoiding the problems of aimless coverage and activity-oriented instruction?” (from “You Can Teach for Meaning” in *Educational Leadership*, September 2004, p. 27)

These questions are as essential to learning experiences in congregations as they are in reading or physics classes. Many congregations have not formally identified what they want people to know, but the big ideas fall into two categories: What are the beliefs and practices of my faith? And what does that mean for how my life is lived?

Thirdly, how do we remember? In Part I of *Brain Matters: Transforming Research into Classroom Practice*, Patricia Wolfe offers a short course on the anatomy and physiology of the brain. Part II describes the brain as an information-processing system, and Part III offers specific teaching strategies that increase the ability to make meaning.

**For Further Information**

On learning that transforms hearts and minds, I suggest these following resources. Some of these resources were cited in the main feature:

**Available from Augsburg Fortress**

([augsburgfortress.org](http://augsburgfortress.org) or 1-800-328-4648)

*Fashion Me a People: Curriculum in the*

The processing system Wolfe describes has three functional memory categories.

### 1. *Sensory Memory:*

All knowledge begins by acknowledging sight, sound, smell, taste, or touch. Our brain cannot possibly attend to all the senses that come its way. The challenge is to help people determine which stimulus to attend to so that it can be moved from our sensory memory to our working memory. Three factors — novelty, intensity, and movement — influence this process.

Vary your patterns — your voice, the lighting, background sounds, or your location. Try beginning with the closing ritual.

Engage the senses in reality or virtual reality with the juiciest and strongest sensory stimuli in the stories you tell.

Look for people who don't seem to be attending. A gentle touch or visual cue may help them determine which of the many stimuli to acknowledge.

### 2. *Working Memory:*

You have a very short time to determine if you will keep this sensory memory for a long time. Your brain tries to find something to connect it to. It gives you time to think about it, talk about it, or rehearse the information. Some is transferred to long-term memory, while other information was only needed for the moment (the citation for a Scripture passage, for example).

- Patterns and skills are important and necessary so that our brain can draw on them when new information arrives.
- Emotional connections help create purpose for committing something to long-term memory. Is there a real-life problem that needs to be solved?

### 3. *Long-term memory:*

Long-term memory allows us to recall information. The ability to remember an experience or event is essentially a process of reconstructing or reactivating all the elements of that event. Often this happens subconsciously — quickly decoding words we've seen many times — but sometimes the process takes intentionality. When the

*Church*, (Maria Harris, Westminster John Knox Press, 1989)

*The Creative Essentials Series for Kids and Christian Education* offers ideas for using art, computers, video, science, puppets, music, games, and storytelling to engage kids in learning.

*The Ministry of Children's Education: Foundations, Contexts, and Practices* (Introduction by Margaret Krych. Fortress Press, 2004)

**Available at [amazon.com](https://www.amazon.com) or your library**

*Brain Matters: Translating Research into Classroom Practice* (Patricia Wolfe, Association for Curriculum and Development, 2001)

*Understanding by Design* (Grant Wiggins and Jay McTighe, Prentice Hall, 2000)

brain is focusing on trying to pronounce unfamiliar words — and the Bible is filled with them — the brain cannot make meaning from the story.

- What about biblical translations? If you are looking for a biblical style and sound, the NRSV may be your answer. If you want to work on understanding, find a translation filled with shorter sentences and more common vocabulary. Neither is good or bad. The purposes are different.
- What do you want committed to long-term memory? Help people find a hook.

### **Where Teachers Learn**

If it is true that we remember what we do and participate in more than what we see and hear, the teachers and leaders in your formal learning programs may be the ones learning the most. This is a strong argument for investing in your time in selecting materials that fit your congregation's theology, language, and practices. The teacher's faith journey could be more strongly affected by the theology of the material than by the sermons you preach or classes you teach.

I began by describing memories from my home congregation. Think about your congregation. How might someone write about his or her experience decades from now? How are adults encouraged to continue to discover new depths of meaning in their lives? Enjoy unexpected delight as you focus on formal and informal learning opportunities for teachers and learners of all ages.

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