# MULTISENSORY SABBATH SCHOOL: A POSSIBLE SOLUTION TO FRAGMENTED AND LOW-BRAIN STIMULOUS LEARNING

## **Cory Wetterlin**

### Fragmentation

There has been a decent amount of research done of the fragmentation of life which the modernist enlightenment project has created. This is based on the atomistic view of reality found in proposals of physics by ancient Greek philosophers. It was believed that the world was made up of small static particles, called atoms separated from one another by empty space. It was also believed, if a person could break something down to its smallest components for the purpose of study and understand the way these components interacted with each other, one could have full understanding of the object being studied.<sup>2</sup>

It is now understood, however, that the cosmos is made up of much smaller particles than atoms and that they are constantly changing and interconnected. The problem is the atomistic world-view shaped the way in which reality was perceived. If the best way to understand something was by its smallest components then this must also be the best way to conduct an efficient life. The hard sciences were fragmented from the social sciences called by some the Non-overlapping magisterium. Science would stick to the study of empirical evidence not to comment on the religious or philosophical life. Religion would therefore stick to the study of more conceptual things and leave the empirical evidence to science. This separated the empirical part of life from the spiritual, social, and emotional part of life.

In youth and children's ministry fragmentation has been voiced by students saying something like this, "Christians are hypocrites, they say one thing and then they do the other. My dad is a completely different person when he is at his office compared to when he is at church." I used to respond to this by saying all Christians are hypocrites because we claim to follow Jesus who set such a high standard, which we all fall short of. I have more recently recognized that the fragmentation runs deeper than this. The modernist view of reality has taught people to look at their lives compartmentally. Work is a separate box from the church box, from the family box, from the social box, etc. It is not a problem, therefore, to act one way at work and another way at Church.

This has affected the way one is taught as well, which means that it has affected Sabbath school. The priority for a modernist education is to share objective facts which can be demonstrated. The emotional health of those being taught was not considered relevant and therefore emotions where something to be pushed aside. Consider the way that a child learns what a duck is. When they encounter their first duck, their parent may point to the bird and say, "duck." The child then follows by example pointing to the bird and saying, "duck." The child comes across the next bird in the park calls it a duck. The bird, however, is actually a goose. The parent then corrects the child that this bird is a goose

and the other one is a duck. This is the objective informational exchange to teach a child. There is much more involved however.

The subjective or emotional connotation of this learning process still needs to be explored. If the child learns what a duck is on a sunny day while tossing bread to the duck with much joy and laughter, then the child has a positive emotional connotation regarding the duck. If the child however offers the newly acquainted duck a piece of bread to be chased and bitten by the duck, then the child has a negative subjective connotation for the duck. The result ultimately being a child wanting to run away from the duck the next time he or she sees it.

When a student comes into a Sabbath school class to learn about the love of God, there will most likely be logical information shared with the child about the love of God. They will learn memory verses and perhaps hear a bible story about Jesus dying on the cross for them to show them God's love. If this is taught in a dingy classroom on hard seats by a teacher with no enthusiasm what-so-ever the emotional connotation of the love of God will not be a very positive one.

If instead the love of God is taught in a well-lit classroom, with comfortable chairs that are soft to the touch, holding a sweet tasting cup of hot chocolate in their hands, after being greeted by a socially loving teacher (both inside and outside the classroom), then the emotional connotation of the student regarding the love of God will be much different. Which learning experience is more likely to draw them towards the love of God in the future?<sup>10</sup>

Another significant category of fragmentation to keep in mind in connection to the Sabbath School experience is that of personhood. In atomistic thinking, individuals are identified as a person by their thoughts. This follows the Cartesian influence regarding dual substances and Descartes's famous statement, I think therefore I am. Because of the atomistic focus on the objective view of reality as the most important part of life, the objective-cognitive function is the most definitive understanding for a person to know who they are. One could argue that as long as you have your thoughts and feelings, you will always be you. The criticism of this however is that personhood is also made up of relational aspects as well. A study was done in Bali asking if a woman was turned into a duck, but still kept her thoughts and memories, would she still be the same person. The response was given in the negative, because she could no longer function in her societal roles or maintain her relationships with others in the same way.<sup>11</sup>

The small group setting of Sabbath school has the potential to help build a more corporate personhood. If the setting is a welcoming one which encourages interaction with other students as part of a discussion, creative project, or service opportunity to the community, this will help to build the social personhood of the students. It will also give the student a better sense of belonging within the church body in general. A positive multi-sensory environment can help to keep students coming back, because it has become part of who they are.

A multi-sensory Sabbath school experience can help to reverse some of the effects of fragmentation on the learning process and experience of students. Fragmentation goes much deeper than the disregard of emotional learning. Fragmentation can be tied to the individual, societal, ecological, temporal, and

other concerns. For the sake of focus and space, this paper will be limited to the short discussion of fragmentation described above.

#### **Low Brain Stimulus Learning**

The advances in brain research have allowed for educators to discover some very interesting results concerning the environment of the classroom. Similar to how there are many different shades of the basic colors on a color wheel, there are various senses related to the five factory senses usually recognized. One researcher described a day down at the creek looking for crawfish as an example of the different senses available. The day was sunny and warm. The author at age 8 and her older brother were playing in the cool creek. They could feel the gravel between their toes, they could sense how close they were to one another. They felt the temperature of the warm sun on their backs and the barometric pressure of the moisture in the air. They of course could see the scene around them and the house at a distance, and they could also sense the magnetic grounding of their location.<sup>12</sup>

The researchers describe up to nineteen different senses that a person can engage in an outdoor context like this one. They call this a learning context of "being there." The senses are nearly cut in half when the class moved inside of a classroom, even one that is immersive in the subject that is being studied including a pond that is created in the classroom out of a small wading pool and decorative objects around the walls. By the time the experience is reduced down to a typical classroom where the knowledge is transferred by symbols of spoken and written words alone the average number of senses involved is only two.<sup>13</sup>

The connection of this research to brain health has discovered that the more senses that are engaged the more dendrites are produced in the brain. The brain becomes denser and more active through these truly multi-sensory experiences. This also increases the retention of the knowledge which is being shared through the teaching experience. This has encouraged in certain circles a push for an outdoor classroom emphasis for children.

Compare the rich sensory experience of the day at the creek with the average Sabbath school class in a church on Sabbath morning. It is true that our children's divisions will often decorate the room, have stuffed animals, songs with motions, and a great deal of movement and interaction. These multi-sensory experiences are really valuable. If, however, the Sabbath school class consists of children coming in to sit at a desk and listen to, or read a story, the learning experience has been reduced to the symbolic level of learning and engages only two senses. The brain growth is way down and so is the retention of what is being learned.

Often by the time our children move to junior, earliteen, or youth Sabbath school, gone are the decorated rooms, the songs, the stuffed animals, and the creative mind stimulating movements and projects. The students enter a room with a circle of folding chairs in order to open their bibles, read, and have a discussion. It is no wonder that the learning retention, let alone student retention, goes down.<sup>15</sup>

#### A Case Study of a Multi-Sensory Youth Sabbath School Program

When I was the youth pastor at the Pleasant Valley Church in Happy Valley, Oregon, I had a very creative group of Sabbath School teachers that I had gathered around me for youth Sabbath School. I decided that I wanted to have a multi-sensory learning experience for the students when they came into Sabbath School. I didn't understand any of the research that has just been shared in the previous sections of this paper, I just knew that I wanted to engage multiple learning styles and make Sabbath School a worthwhile experience. There are several factors that were involved as we made our plans. I will share some of the general factors that were a part of every Sabbath School lesson as well as some specifics for a study we did on Ezekiel.

The first general factor that was a part of the every-week experience was the atmosphere of the room. With the help of a church member who was also an interior designer we made a warm and welcoming environment for the students to walk into. We had to be very intentional about this because we were meeting in the fellowship hall so the decorations had to be set up and taken down every week. We bought large plants, candle holders, pillows, curtains, other decorative items that could be spread around the room. We bought floor lamps, which allowed us to change the lighting in the room to a warmer atmosphere. We also bought large (20+) photograph frames to insert photos of the students from Sabbath School and other youth events.

The second general factor was **breakfast**. There was a rotating team of parents that would come in every week to make breakfast for the students. Nothing can raise youth out of their beds and get them to church on time like knowing breakfast is waiting. It also increases the sensory input. The care and affection of the church for the youth could be seen, felt, and tasted every week.

There was also a **student music team**, which would choose and lead worship music every week. The screen was also taken advantage of, not only for song lyrics but also for illustrative graphics and videos for teaching illustrations.

There was also a **multi-sensory teaching team**, which came up with specific creative ways to teach the content of the Sabbath school lesson. For the study in Ezekiel we set up giant canvases made out of queen size bed sheets stretched over 1"x1" pieces of wood. We then brought in drop clothes, old t-shirts, and a bunch of house paint and brushes. When the students came in, we turned on an audio recording of Ezekiel chapter 1 over the speakers and instructed the students to paint what they heard. Once the paintings of wheels-within-wheels, whirlwinds, and four-faced cherubim had been finished, we waited for them to dry, cut them out, and put them up on the wall. The rest of the 13-week series on Ezekiel had the paintings from the first week as a backdrop. There were other weeks when catapults were built with popsicle sticks and a pile of Styrofoam bones were piled around the class room waiting to be brought back to life.

Another intentional step taken for a different lesson series included the involvement of **small group leaders and mentors**. Adult leaders where selected and at a certain point in the lesson time the students would break into their small groups for the discussion time. This was a hard-hitting life issues based series and asked some significant and personal questions. These small groups gave the students a context in which to share and grow closer to those in their small groups.

How does this multi-sensory Sabbath school class help to meet the concerns of fragmentation and healthy brain growth? First, the atmosphere creates a positive subjective experience for the learning that takes place every week. The students have a sense of ownership of the space, which means that they can feel that they belong to the church. This helps to lessen the fragmentation often felt between the rest of the church and the youth ministry. Multiple adult volunteers being involved heals the generational fragmentation from both the side of the students as well as the adults. This was especially true with the use of small groups during the lesson time.

The stimulating atmosphere and activities also caused the greater growth of the brain, engaging more of the brain, and increasing retention of the material being taught. I will never forget the first chapter of Ezekiel as I think back on those paintings. It is a more strait forward process to teach science in an outdoor class room. You can easily go on a field trip to the local pond and have the "be there" experience. But how do we do this when we are trying to teach the biblical narrative and theological concepts? Emersion is the next best option. It is financially prohibitive to travel to Jerusalem every week, but perhaps we can bring Jerusalem to the classroom. Going to the throne room of heaven is something we are still waiting for, but with artwork, food, and social experiences perhaps we can get closer to an experience of heaven in the classroom.<sup>16</sup> Once again, mentioning the small groups is important here. One of the senses that the researchers mention is the proximal sense, how close one is to the person sharing in the experience with them. It is more than possible to increase our students Sabbath School experience beyond the two senses found in typical symbolic education (auditory and visual).

#### **Summary and Conclusions**

Creativity can often bring on criticism. Church members may ask questions regarding why we are entertaining our kids instead of doing serious bible study. The truth about multi-sensory Sabbath Schools is that they actually increase the learning potential of the Scriptures that are being taught. We have many examples of multisensory learning experiences in the Bible: the sanctuary, communion, baptism, etc. Multi-sensory classes also provide a more holistic and positive connotation surrounding the learning process, reversing the effects of fragmentation within our church and thus our society. This is demonstrated both with the incorporation of the subjective learning experience as well as the connections with the other students and teachers in the class, creating a sense of belonging. With a valuable rationale and an intentional plan to help kids stay connected to the church, the criticism will often die away, when these things are communicated.

#### **Bibliography**

- Bohm, David. Wholeness and the Implicate Order. London; Boston: Routledge & Kegan Paul, 1995. Print.
- Gould, Steven Jay. "Nonoverlapping Magisterium." *Natural History* 106.2 (1997): 16-22. Print.
- Hiebert, Paul G. *The Missiological Implications of Epistemological Shifts: Affirming Truth in a Modern/Postmodern World*. Christian Mission and Modern Culture. Harrisburg, Pa.: Trinity Press International, 1999. Print.
- Hoyt, Edge. A Constructive Postmodern Perspective on Self and Community: From Atomism to Holism. Lewiston: E. Mellen Press, 1994. Print.
- Peters, Ted. "David Bohm, Postmodernism, and the Divine." *Zygon* 20.2 (1985): 193-217. Print.
- ---. Science, Theology, and Ethics. Ashgate Science and Religion Series. Aldershot, Hants, England; Burlington, VT: Ashgate, 2003. Print.
- ---. Sin: Radical Evil in Soul and Society. Grand Rapids, Mich.: Eerdmans, 1994.
  Print.
- Sloan, Douglas. *Insight-Imagination: The Emancipation of Thought and the Modern World.* 2nd ed. San Rafael, CA: Barfield Press, 2008. Print.
- Susan J. Kovalik, Karen D. Olsen. *Exceeding Expectations: A User's Guide to Implementing Brain Research in the Classroom*. 2 ed. Covington, WA: Susan Kovalik and Associates, inc., 2002. Print.

#### **Endnotes**

- 1 "The atomic theory, which was first proposed by Democritus more than 2,000 years ago. In essence, this theory leads us to look at the world as constituted of atoms moving in the void. The ever-changing forms and characteristics of large-scale objects are now seen as the results of changing arrangements of the moving atoms. Evidently, this view was, in certain ways, an important mode of realization of wholeness, for it enabled men to understand the enormous variety of the whole world in terms of the movements of one single set of basic constituents, through a single void that permeates the whole of existence. Nevertheless, as the atomic theory developed, it ultimately became a major support for a fragmentary approach to reality. For it ceased to be regarded as an insight, a way of looking, and men regarded instead as an absolute truth the notion that the whole of reality is actually constituted of nothing but 'atomic building blocks,' all working together more or less mechanical." (Bohm 8–9)
- 2 (Hoyt 10-11)
- 3 This is physics that is based on the theory of quantum mechanics. David Bohm understands the physical nature of reality to better be described as a great sea of energy. While this kind of thinking can lead to pantheistic or panentheistic views of reality, which must be guarded against, it is important to help recognize that things are much more connected then we once thought they were. (Peters Science, Theology, and Ethics 98) (Peters "David Bohm, Postmodernism, and the Divine" 205, 07)
- 4 (Peters Sin: Radical Evil in Soul and Society 45)

- 5 "Science and religion are not in conflict, for their teachings occupy distinctly different domains.... The net of religion extends over questions of moral meaning and value. These two magisteria do not overlap, nor do they encompass all inquiry (consider, for starters, the magisterium of art and the meaning of beauty). To cite the arch clichés, we get the age of rocks, and religion retains the rock of ages; we study how the heavens go, and they determine how to go to heaven." (Gould 16)
- 6 Douglas Sloan brings out the classic complication of the modernist emphasis on reason to the detriment of all other parts of the individual. For the Enlightenment reason is king and no other part of the human is more significant for gaining knowledge, which as Bacon says is power. Sloan points out that this "false divorce" between reason and emotions has led to the neglect of things like "schooling of the emotional life." (Sloan 22)
- 7 Compare this to the work of the scientists who were developing the atomic bomb. The compartmentalization spurred on technological advances while separating those advancements from the moral question as to whether they should be building the bomb at all.
- 8 "What complicates the matter in the 20th century is the segmentation, if not outright fragmentation, of daily life. We divide life into a number of functional sectors: home and workplace, work and leisure, white collar and blue collar, public and private. Such sectoring suits well the needs of large corporations which operate bureaucratically and impersonally. We cannot live all day long in an impersonal atmosphere, of course. So, for our own mental health we find we have to secure a domain for the personal. To do so we draw a line between the impersonal atmosphere of the work or public sector, on the one hand, and the personal domain of home, family and private leisure, on the other." (Peters Science, Theology, and Ethics 256)
- 9 This illustration is used by Paul Hiebert to demonstrate the need for understanding the subjective side of learning rather than purely focusing on the objective side of learning. The objective side includes the information which has been shared while the subjective side includes the experience of the child while learning. (Hiebert 90) Edge Hoyt also includes touch and movement in the educational process as significant. When describing a dance class in in Bali, he notes that the instructor is not simply standing in front of the class demonstrating the movements. The instructor stands behind the student and moves their bodies to the movements in order to give fuller instruction. Now while we will not be giving dance lessons in our Sabbath school classes, it is significant to note the way that kids learn songs better when they have hand motions to accompany the meanings of the words. (Hoyt 108)
- 10 There is of course many more multi-sensory things which could be done to demonstrate the love of God involved with the cross. Using charcoal to cover the hands of the students with dirt which can then only be washed away by a warm red wash cloth representing the blood of Christ.
- 11 (Hoyt 44-45)
- 12 (Susan J. Kovalik 1.7-1.8)
- 13 See the table and chart referenced. (Susan J. Kovalik 1.10-1.11)

- 14 (Susan J. Kovalik 1.3-1.4)
- 15 Kovalik and Olsen share that the non-use of the newly developed dendrites in the brain will eventually cause the loss of those dendrites. It is necessary to continue the stimulation in order to keep higher brain function. (Susan J. Kovalik 1.4)
- 16 I am not advocating a spiritual understanding of heaven. I believe it is a real place.