Language Arts Journal of Michigan

Volume 18 Issue 1 *Diversity*

Article 10

1-1-2002

A Diversity of Writers: Fun with Kinesthetics

Denise Stephenson

Sarah Hochstetler

Follow this and additional works at: http://scholarworks.gvsu.edu/lajm

Recommended Citation

Stephenson, Denise and Hochstetler, Sarah (2002) "A Diversity of Writers: Fun with Kinesthetics," *Language Arts Journal of Michigan*: Vol. 18: Iss. 1, Article 10.

 $A vailable \ at: http://dx.doi.org/10.9707/2168-149X.1306$

This Article is brought to you for free and open access by ScholarWorks@GVSU. It has been accepted for inclusion in Language Arts Journal of Michigan by an authorized administrator of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.

A Diversity of Writers: Fun with Kinesthetics

Denise Stephenson and Sarah Hochstetler

~A writer's body plays an important role in generating a text, a role that is distinctively precognitive.

(Ochsner 2)

When we think of diversity, we often think of racial diversity, ethnic diversity, even religious diversity. This article is about another kind of diversity, the diversity of learning styles and their effects on engaging with words, specifically in writing them. The ideas in this article were generated because of the population we call LD, those students who have language learning disabilities. But as with many forms of diversity, appreciating differences and finding similarities is as critical to those who find themselves outside of the category as to those inside of it. We've found that you don't have to have a learning disability to appreciate the kinesthetic/spatial strategy we describe here: the use of constructive toys or manipulatives.

Sarah and Denise Get Cooking

A New Writing Recipe

Ingredients:

- 1 box of toys—multi-colored and stackable or connectable
- 1 writing student (struggling or not)
- 1 teacher with constructive toy experience Healthy dash of fun for each of the above ingredients

- 1) Slowly introduce students to idea of "building" a paper. Teacher can make comments like: "There is no right or wrong way to do it" and "Try visualizing your paper as a structure."
- 2) Combine toys and students into mix. Allow students to experiment and rise to the occasion uninterrupted. If confusion occurs, repeat step one.
- 3) For ten to twenty minutes have students use the toys to build a structure for their paper. More than twenty minutes often results in overdone structures; ideas become stale.
- 4) Discuss structures with students while ideas are hot. Teacher questions individual students: "Why did you choose blue pieces here?" "Can you explain this piece?" "Why is that side bigger?"
- 5) Allow for a cooling off period. This is a good time to discuss the fun of the activity, the helpfulness to the builder/writer, and its purpose or meaning.
- 6) To keep ideas fresh, have students take notes about significant aspects of the structure. Perhaps ask them to draw their structures, labeling the parts.
- 7) Serve this successful dish with any writing assignment!

Sarah's Favorite "F" word

"F" words, I think as I sit in my departmental meeting. One particular "F" word would never be mentioned here among my teaching colleagues. In fact, it may have been banned from the learning environment all together. I imagine if someone were to say it out loud, the looks of shock it would receive. I think I'll try it some time. "FUN!" I imagine myself yelling. Heads turn; the air in the room shifts as twenty mouths gasp. Yes, I am empowered and give myself permission to say the dirty word "fun." Now I just need to find a place where fun can be had with writing. Why not in the classroom?

As English teachers much of the fun we have is verbally based. We sit with students and say, "Tell me what you're trying to share with your audience," or "Maybe if you tell me a story about that topic, you might be inspired." This is fun for us; we love to talk and write. It's more than just entertainment for us. It extends into thoughts about our various classes, student composition, and ideas for our own writing. Yet, what about the students who ask for extra help because they struggle with language, either in written or spoken form? They come to us looking to improve their papers but remain outsiders to our sense of fun. Writing can be an intimidating and boring task when it isn't one's intellectual strength. This realization makes me want to change things. I want to help students share in the fun I find in writing. I know I have to find ways to teach writing that are more than verbal.

A Little Radical: Denise's Hope

Too often we perceive writing as a function of the brain alone, as if it were separate from the body. In fact, Westerners tend to believe in a mind/body separation with the mind as the controlling entity and essence of the individual. However, even Western science now recognizes the intimate and complex connections between mind and body. It is not a one-way street with the mind sending all of the information to the body and the body simply

responding. Nor are our bodies and minds separate from our emotions. All are one.

When Sarah and I started working on this article, I kept thinking about the Bill Moyers special from the early '90s called Healing and the Mind. I found the printed version in the library and went searching for an interview mentioned in the video that involved research on student actors at UCLA whose hormones and immune systems changed as a result of acting out specific emotions. I found the interview with David Felton, an M.D. and Ph.D. in immunology. He says, "I can't imagine anybody thinking that the mind and the body could be separate in view of the multiplicity of connections from the brain to virtually all systems" (216). And though he expounds on a number of studies that demonstrate how environment, human support systems, and attitudes make significant differences in healing, he and his colleagues tend to be conservative and not over publicize the results of such studies because cause and effect are not easily understood, even though verifiable results exist (226).

That conservativism, something I seldom experience in daily life, keeps creeping in as we work on this article. It tells us that because we can't scientifically demonstrate the results from the use of manipulatives (constructive toys), we shouldn't proceed. We're premature. We can't show the causal links. But I also remember from my studies in sociology that we can seldom be certain of causality in complex systems like human interaction. So we proceed. Just because we don't know which neuron connects to the excitement felt when playing with toys, nor can we distinguish what chemical reactions take place in the body when the hand is active in creating threedimensional models, we can still recommend that others try this technique because the results with the students we've worked with are remarkable enough to warrant continued exploration.

A Placebo Story

Sarah stopped by my office one day as I was having lunch. "I don't want to interrupt you," she said, but she didn't walk away. "What's up?" I asked.

"Well, I was thinking about the toys. And I'm wondering, do they act as a placebo?"

D:

A placebo? For the life of me I couldn't understand what she was getting at. "Maybe I've got the wrong word," she said and went on to tell me about her yellow mechanical pencil which she needed to write. She explained that one day she found herself faced with an in-class essay, and for the life of her, she couldn't find the yellow pencil. She panicked. She didn't know what to do. If she only had the pencil, she knew her writing would be brilliant, but without it . . . "Oh," I said, "you mean a talisman. You mean something that you carry with you that works like magic to help you with certain activities." "Maybe," she said skeptically.

"Maybe," I repeated. I wasn't sure either. I still didn't quite see the connection. But I made a note of it on a piece of paper, thinking that Sarah's excitement meant her idea might be significant.

We carried on several conversations about the yellow pencil, about placebos, about talismans, about how any of that related to the toys. Finally we started writing a dialogue about the connections.

- S: I just saw a special on 20/20 about Parkinson's. They operated on a number of patients with the disease, but with the control group they didn't actually do any surgery, they just made the incision. Yet many of the control group improved.
- D: Belief is half the battle.
- S: Yeah, but it's more than that with toys. If I walk into a room and tell you that using toys to build a paper will help you write that paper better, chances are you'll try it. If you feel your try was successful, then you'll keep using toys. Maybe they aren't truly improving your writing, but they've given you new ideas; you think your writing is better. So you keep using the toys and practicing your writing skills. Perhaps it's the practice that's really helping, but you think it's the toys. That is the placebo effect.

- Spending more time on the process is certainly important. Practice makes perfect and all that, but again, that's not all of it. You mention writers getting new ideas from the toys. That happens. By "physically thinking" about their topic and its organization, writers bring in other areas of their intelligence, like spatial and kinesthetic intelligences. I know I often need to take a walk or clean the house while I'm thinking about articles I'm writing. When I'm physically busy, I activate thoughts through more than just words. I may not consciously think about my topic, yet the activity helps me work things out internally, unconsciously. I think the toys do that and more. For kinesthetic thinkers, the toys allow thought to be external. While physically manipulating objects, a writer focused on a topic develops ideas. The physical connection of two plastic pieces generates thought about how the ideas relate to one another.
- S: That makes it sound like the toys are not a placebo at all, but the opposite, a drug, a stimulant. The toys activate thoughts that might not occur without them.
- D: The toys are definitely a stimulant. Good point. In fact, we could say that it's the stimulant quality that encourages some writers to spend more time with the toys than they would otherwise spend on their writing. And that stimulant is fun. Don't you think?
- S: There it is again, my favorite "F" word, "fun."

Finally, we had identified several useful features of the toys that we'd been trying to get at. First, using toys actually does offer a different kind of thinking; they tap diverse intelligences that are often ignored in traditional strategies. Second, this activity could lend confidence to writers who feel better about building three-dimensional models than they do about writing. And third, the playfulness evoked by the toys might lead some writers to practice more.

No wonder we'd had such trouble with the terms "placebo" and "talisman": manipulatives offer so much more than either of these labels indicates. Rather than being an empty gesture as a placebo is, the toys create the sought-after effect—better writing. They do so by offering opportunities to use two often neglected intelligences—bodily/kinesthetic and spatial. And rather than the simple presence of a talisman, the toys need to be interacted with in order to stimulate the magic result. Practice occurs because the interaction is fun which leads to more writing and more confidence about writing.

Some bit of frolic often precedes our most productive work. (Sylva 59)

Multiple Intelligences

Multiple Intelligences (MI) was developed as a theory by Howard Gardner in his 1985 book, *Frames of Mind*. Basically, he suggests that intelligence should be viewed more broadly than we have. Gardner sets out seven intelligences: linguistic, logical/mathematical, spatial (sometimes referred to here as visual), bodily/kinesthetic, musical, interpersonal, and intrapersonal. The first two of these have been overly privileged in our academic system to the near exclusion of the others.

MI theory makes its greatest contribution to education by suggesting that teachers need to expand their repertoire of techniques, tools, and strategies beyond the typical linguistic and logical ones predominantly used in American classrooms. (Armstrong 48)

The suggestion that students need to be more actively involved in their education in order to learn was not new with MI theory in 1985. Armstrong demonstrates that many educational reformers have called for similar improvements from the 18th century to the present (49). Yet reform continues to be slow. MI, as catchy as it is among the

pedagogically savvy, as much as it recognizes diversity, is still far from the norm in the classroom.

Many student writers bring strengths from other intelligences-visual, kinesthetic, musicaland such intelligences can be used to further writing goals. Denise came to this realization after meeting Linda Hecker of Landmark College. As part of a workshop on teaching writing to learning disabled students, Hecker explained how to build papers out of manipulatives. 1 Students who struggle to write are often stronger visually and kinesthetically than verbally, so the techniques we use to teach them to write need to capitalize on that, whether the students experience learning diabilities or not. All struggling writers deserve tools that help them access their clearest and best thoughts so that they can capture the language and get it on the page. Using such techniques allows a diversity of students to benefit rather than just those labeled learning disabled.

Musical and Kinesthetic Intelligence: Denise's Story

I walked around an education classroom on teaching reading. The students were using toys to build the talk I'd just given and how it connected to their own experiences. Nearly fifteen minutes had gone by when I walked up to a young woman and knelt down by her desk. I asked what she'd built. She had a solid block of Legos about the size of a Rubic's cube. To be honest, it looked dull, like she'd just been putting the blocks together with no purpose. She told me that she had a learning disability, and this cube represented her process. She said when she started a paper, everything was all jumbled up, and she showed me that on the bottom of the cube she'd used the smallest Legos with no organization to the colors. Then as each layer progressed, the colors came more and more into alignment representing her thoughts coming together for a paper.

As she described the layers she told me how she used music both as a memory aid and also to organize her writing. She would pick a song early in the writing process and insert words into the lyrics that she needed for her paper. Later when she was ready to write, she'd play the music for the song and type the words into the computer. After doing that, she'd play the music again and go for a walk so the music could help her organize. When she returned to her computer, she'd have the format for her paper.

I was amazed. Not only had she made very clear connections to my talk about manipulatives and the need for an openness to unusual strategies for writing, but her own life experience was one of the best testimonials I could ask for. Here was a language arts major who had serious language disabilities, and yet she'd been able to reach her junior year and get into the school of education by using music to remember and organize words and phrases. She'd developed this strategy on her own out of her need. I wondered how many students resist such possibilities because teachers have not offered or valued such diverse strategies.

Playing with anything to make something is always paralleled in cognition by the creation of a story. (Wilson 195)

Student Responses to Toys

Do students respond well to the constructive toys? When we undertook this research, we were both in a university environment. We wondered how future teachers would perceive this activity, so we took the toys into three junior level language arts classes in education and asked the students to use the manipulatives to build papers they were working on for either this education class or other classes. Then we surveyed the students about the use of toys in writing. Sixty-four students submitted surveys.

The most significant data we've collected is that the majority of students appreciate this technique and say they would try it again.

Can you imagine using toys to build a paper in the future?

	Education
	Students
Yes	33
Maybe	8
No	12

Additionally, ten of the twelve students who answered "no" said that though they wouldn't use the technique again themselves, they would likely use it in a classroom. They said that though they were not visual learners themselves, their students might be. It is not surprising to find that many language arts students would be more verbal than visual. What is surprising is that over half of these English students found the technique useful for themselves.

How did these students find the toys helpful? We asked the following pair of questions:

- 1. How was using the toys most helpful in thinking about your paper?
- 2. What did you learn about your paper that was influenced by working with the toys?

Both of these questions elicit information which demonstrates the value students found in the experience. We did not limit possible answers for these questions, so they varied widely. Some students offered more than one answer. We've categorized the responses into four categories, indicating the major kinds of benefits from using the toys:

	# of
	comments
Organizing:	48
organization/connections/focus/	
fit of info./balance/variety of forms	
Thought/Content:	23
new ideas/development/deeper thought	·/
justification/idea works	
Ways of thinking/working:	22
visible/tangible construction/	
flexibility/way of thinking	
Enjoyment:	5
creativity/fun	

Organizing is one of the most obvious benefits of using manipulatives in the writing process. With forty-eight comments referring to some type of organizational concern, it is clear students recognize that physically manipulating a three-dimensional model makes organization visible and that such an activity is helpful.

"In some small way everything is connected."

"I found I need more research and I need to expand on some ideas and shorten on (sic) others to make it even."

Piaget tells us that the manipulation of objects is necessary for abstract thought to occur. While the university students we worked with are not in the developmental stages Piaget was describing, the principle at work is similar. For some students, the ability to manipulate their ideas physically leads them to think in new ways, abstract and concrete.

"The toys allow a deeper sense of thought. While your hands are busy, your mind is equally jamming."

"It made me think deeper instead of worrying about due dates and typing."

"It gave me greater new ideas that I had not thought about before doing it."

One of the reasons for using manipulatives is that they tap into the diversity of intelligences: visual, kinesthetic, and spatial. It can be difficult for those of us who are strong verbal thinkers to understand how other kinds of thinking work. After all, we easily put our thoughts into words—language appears to be the source of the thought. But other kinds of thinkers need ways to turn ideas into language. Color, shape, physical movement, location, and size all play roles in such thought.

"I could see my points and my extensions in real life. They came alive."

"I could physically see what I was saying in my paper. I could better understand what I was working on."

"I am a visual person and shapes and color helps."

And finally, a few students noted that this activity was fun or enjoyable. One student responded that it helped by "just letting my creativity flow." While the number who made such comments is fairly small, we should keep in mind that these surveys were filled out in an academic environment with the knowledge that they would be used as research. This may have inhibited students from confessing they were having fun instead of doing serious work. However, in all of the classrooms surveyed, there were smiling faces, laughter, and conversation during the building time, indicating that many students experienced fun even though they may not have made note of it.

Organization and content are two primary elements of any piece of writing. How a writer thinks and the ability to see and judge a project as a whole are vital to achieving *good* writing. So the first three categories above are central to students learning to write well. Granted, they needn't be achieved through toy use, but how astonishing it is that the building of toy models enhances these areas. And then there's that recurring experience: fun. What can we say? We think that a playful attitude toward writing leads not only to more effort, but more creative, thoughtful effort.

The body, as Oschner points out in the epigraph to this article, is the site and source of the pleasure of writing. Constructive toys tap into that rich source for students who might not otherwise be inclined to enjoy writing, thereby including a more diverse student body in writing activities. We invite you to mix up your own recipe of constructive toys and writing students, but don't forget to spice up your concoction with a healthy dash or two of fun.

Hecker also has a wonderful article she co-authored with Karen Klein titled, "The Write Moves."

Works Cited

- Armstrong, Thomas. *Multiple Intelligences in the Classroom*. Alexandria: Association for Supervision and Curriculum Development, 1994.
- Felton, David. "The Brain and the Immune System." *Healing and the Mind*. Ed. Bill Moyers. NY: Bantam Doubleday Dell, 1993. 212-237.
- Gardner, Howard. Frame of Mind: The Theory of Multiple Intelligences. NY: Basic Books, 1983.
- Hecker, Linda, and Karen Klein. "The Write Moves: Cultivating Kinesthetic and Spatial Intelligences in the Writing Process." Presence of Mind: Writing and the Domain Beyond the Cognitive. Eds. Alice Glarden Brand and Richard L. Graves. Portsmouth: Boynton/Cook, 1994. 89-98.
- Ochsner, Robert S. *Physical Eloquence and the Biology of Writing*. Albany: State University of New York, 1990.
- Sylva, Kathy. "Play and Learning." *Biology of Play*. Eds. Barbara Tizard and David Harvey. Lavenham, UK: Lavenham Press, 1997. 59-73.
- Wilson, Frank. The Hand: How Its Use Shapes the Brain, Language and Human Culture. New York: Pantheon, 1998.

About the Authors

Sarah Hochstetler, a Detroit native and writing enthusiast, teaches high school English in Southern California.

Denise Stephenson, an experimental academic writer and monologist, directs the writing center and WAC program at Grand Valley State University.