

# “LEFT BRAIN - RIGHT BRAIN GET YOUR HEAD TOGETHER ...”

*Not all students process information the same way.  
 Here's how to include activities for both the left- and right-brain processors  
 in your class*

**Barbara Prashnig, Director of Creative Learning Centre in Auckland, wants every teacher to know about the importance of different thinking styles in the human brain and how this translates into different learning styles.**

How do you give people directions to your home? Are you precise about distance, measuring it by miles, traffic lights or blocks? Or, instead, do you rely more on visual landmarks such as firehouse, gas station and the yellow house with the white picket fence to guide guests to their destination? How do you find your way around a new city? Do you immediately purchase a street map and trace your route from point A to point B each time you leave your hotel, or do you “feel” your way around, sensing where each place should be?

If you're exact about distances and rely heavily on maps, you are most likely a left-oriented hemispheric processor. On the other hand, if you have a good sense of direction and intuitively find your way around, you have the characteristics of a right-oriented hemispheric activators. If you alternate between map reading and following your nose, and intersperse visual clues with exact distances, you're probably able to activate both hemispheres of your brain equally well and do so almost

simultaneously. If so, you flex your processing style much more readily than a person at either end of the hemispheric spectrum.

What has all this got to do with you as a teacher or with the teaching/learning process itself? Over the past few year, there has been a proliferation of information about hemispheric preference and left- and right-processing styles. We now know that each hemisphere of the brain is associated with certain thinking traits. Left-oriented activators usually are logical, analytical and sequential - they are successive processors. Right-oriented activators usually are global, holistic and intuitive - they are simultaneous processors. Notice that neither group is referred to as “left-brained” or “right-brained”; each of us is a whole-brained person but with a preference for receiving information and stimuli through either the left or right hemisphere. Once the brain receives this information, it's transferred across the corpus callosum to the other hemisphere in a matter of seconds.

Research has shown that certain learning style characteristics are congruent with each processing style. In most cases, left-processors prefer a learning environment that is quiet, brightly lit and formally designed. They learn best alone or with an authority figure. In contrast, most right-processors prefer sounds, dim light, and informal design and peer interaction. It quickly becomes apparent that traditional classrooms were designed with left-processors in mind (by left-oriented designers, no doubt). It's necessary, therefore, to adjust classroom environments so that the learning style preferences of right-processors can also be accommodated. Interacting in small groups, and providing an area with cushions, carpeting and soft light is a first step.

Adjusting the classroom environment, however, is only a start. Planning and teaching lessons to accommodate left- and right-processors is even more challenging. A brief comparison illustrates this point:

Left-Hemispheric Processors	Right Hemispheric Processors
<ul style="list-style-type: none"> <li>• Respond to verbal instruction</li> <li>• depend on words and language for meaning</li> <li>• prefer a step-by-step lesson where details and facts build one upon the other in a logical order</li> <li>• succeed with well-structured assignments</li> </ul>	<ul style="list-style-type: none"> <li>• respond to visual, kinesthetic and demonstrative instruction</li> <li>• depend on images and pictures for meaning</li> <li>• prefer a holistic overview so they know where the lesson is going and can then learn by exploration and discovery</li> </ul>

## “LEFT BRAIN - RIGHT BRAIN GET YOUR HEAD TOGETHER ...” cont'd

As the above comparison shows, it will take some flexibility on your part to teach a classroom of students with different processing styles. Yet, there's not enough time to teach each lesson in two different ways in order to meet the needs of extreme left- and right-activators. One solution: Introduce the topic to the entire class, alternating your teaching style between an analytical, step-by-step approach

and a global, holistic approach. Then, provide your students with alternatives. By allowing them to choose particular activities, you will be accommodating the extreme left- and right-preferenced students and allowing each one to learn in a fashion that best suits them.

Below are suggested topics and activity alternatives for left- and right-processor at each grade level,

Kindergarten to grade eight. In each case, the teacher introduces the topic to the entire class; the student then chooses between the two activities. Remember, those students not extremely preferenced might choose either activity. Once you get the idea of what activities left- and right-processors respond to, you'll be able to come up with an extensive list of your own.

### Kindergarten: lesson on rhyming words

- Teacher: *brainstorm for one minute rhyming words that students know*
- Left-processors: *listen for words that rhyme as you read *Cat in the Hat* and recall and repeat them*
- Right-processors: *pantomime rhyming words that they know or hear in the story*

### First grade: lesson on the kinds of objects magnets pull

- Teacher: *pretend to be a magnet and attract objects held by the children*
- Left-processors: *examine available objects and list them on a chart in two categories*
- Right-processors: *fish for objects with magnets on a string*

### Second grade: lesson on sums of money to 99c

- Teacher: *review coin values with large visual chart*
- Left-processors: *complete the workbook page on adding money*
- Right-processors: *play “store” in small groups using examples from workbook page*

### Third grade: lesson on the order of the planets in the solar system

- Teacher: *show a filmstrip to the class*
- Left-processors: *write a silly sentence to remember the order of the planets*
- Right-processors: *individual students can draw the solar system in order; a small group may create a model*

### Fourth grade: lesson on the important mountain ranges in the U.S. and the states that they include

- Teacher: *introduce the lesson to the class with a chalk-talk*
- Left-processors: *make a chart listing the states in each range*
- Right-processors: *create an advertisement to lure tourists to each mountain range*

### Fifth grade: lesson on the important events in Columbus' life

- Teacher: *create a time-line on the chalkboard or overhead projector while tracing the events*
- Left-processors: *make a set of puzzle cards matching dates and events*
- Right-processors: *form small groups and dramatise an event*

### Sixth grade: lesson on your state's geography

- Teacher: *present lecture with available maps, pictures and photos*
- Left-processors: *create a dictionary that lists the important features of the state*
- Right-processors: *create a relief map of the state*

### Seventh grade: lesson on cell division

- Teacher: *use filmstrip to introduce the topic*
- Left-processors: *read the chapter and answer the questions*
- Right-processors: *create a skit on cell division and perform it in class*

### Eighth grade: lesson on drug abuse

- Teacher: *invite a youth counsellor to introduce the topic*
- Left-processors: *in small groups, write poems on the dangers of drugs*
- Right-processors: *pretend to be a drug and dramatise their effect on the body*

Once your students become familiar with a variety of alternatives, hold a “wild card” session where they design their own follow-up activity. Their left and right creative forces may surprise you!

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