

Style—A Manner of Thinking

The ships and sealing-wax syndrome seems particularly significant as we deal more and more with the concept of learning style. Often we are drawn into a semantic tangle in which factors as unrelated as ships and sealing-wax are lumped together and discussed as if they were, indeed, the same thing. In an effort to untangle this walrus-sized knot, we have divided learning style into two distinct and unequal categories: processing systems and input/output factors.

Processing systems involve ways of organizing ideas. They include such concepts as hemispheric specialization, global/analytical constructs, field dependent/field independent systems, and the Relational Thinking Styles model.

Input/output factors are ways in which content is best delivered to and expressed by the learner. Perceptual preferences and environmental factors would be included as would the learner's preferred means of expression.

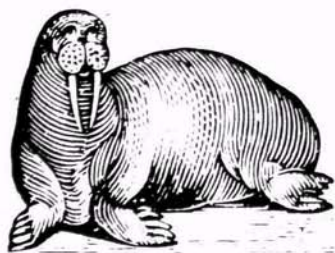
Although the input/output factors are important considerations and will make a great difference in how much content will be learned, they are not as vital as the overarching process model of the individual. A process model will determine (a) what learners will be able to do with the content, (b) how they will organize it, (c) how they will relate it to past content, and (d) what kinds of new connections they will be able to make. In other words, the way individual students organize their world is their thinking style, which determines the kind of world (or learning environment) they need. Once thinking style has been determined, it is time to start looking for the best input factors for the learner.

As Gregorc stated: "Learning style consists of distinctive behaviors which serve as indicators of how a person learns from and adapts to his environment [input/output]. It also gives

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Learning styles should open up more possibilities for learning and growth.

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*The time has come, the Walrus said,
To talk of many things:*

*Of shoes—and ships—and
sealing-wax—*

Of cabbages—and kings—

And why the sea is boiling hot—

And whether pigs have wings.

*Through the Looking-Glass
Lewis Carroll*

clues as to how a person's mind operates [processing systems]."¹ According to Fischer and Fischer: "Research on styles of teaching and learning is still in the embryonic stage. . . . We are not convinced that there is sufficient research to guide the practitioner."²

We cannot help but speculate that this lack of research might instead be a lack of definition. There are certainly a number of ways to determine if a learner is primarily visual or auditory, and it has been shown quite clearly that these factors do make a difference. Still there is a feeling that this isn't all there is to it, that there must be something more to learning and thinking than taking in information and putting it out again.

In the field of education, the primary focus in learning style research appears to be on this input/output category. However, research in styles is not limited to the field of education; there is a great deal happening in philosophy, linguistics, psychology, medicine, engineering, cybernetics, and the arts.

A process model which would organize these findings needs to be broad enough to encompass a variety of differences, but narrow enough to delimit categories; it needs to be flexible enough to invite and incorporate findings from a number of areas, but structured enough to provide an organizing form; it needs to be definitive enough to identify generic style groups, but loose enough to provide for individual differences within groups.

The Relational Thinking Style (RTS)³ model meets all of these criteria. RTS identifies five generic or general style categories that reflect different processing systems. Within each of these style categories there is a variance of needs for input factors. For example, a blind child and a sighted child could have the same generic thinking style and require the same kind of structure, teacher style, and curriculum, but their input factors would vary based on their perceptual and environmental needs. Each generic style has categories that identify the ways individuals set goals and make relationships characteristic to that style. These are the primary considerations when determining how an individual thinks and organizes ideas. The RTS system identifies five generic learning styles: transient, digital, multi-digital, multi-relational, and meta-relational.

Transient thinkers flit from idea to idea with virtually no focus. Their goals are short range and random; they have no guiding goal. The relationships they make are also random and haphazard. Their steps are non-sequential and follow no plan or pattern. This kind of thinker is easily frustrated and often disruptive.

Digital thinkers operate in steps

for digits) that follow one another in a linear sequence. They prefer a short-range goal that has been set by someone else and which has a predictable outcome. Relationships reflect simple likenesses and obvious differences and they are usually representational. The digital thinker follows directions very well, likes order and structure, and often will copy and imitate. This kind of thinker can be quite diligent and can organize in sequence and follow step-by-step procedures.

Multi-digital thinkers can relate several parallel "digits" or sequences. They can state both short- and long-range goals and change goals. External goals are not necessary for these thinkers and they can set and follow through on self-set goals and follow through on pre-set ones. Relationships reflect structured organization and the multi-digital thinker sorts, groups, and uses patterns. This kind of learner will adapt well to most situations and has a very long attention span.

Multi-relational thinkers usually organize the world in a highly creative, imaginative way. They hold many goals that can change and grow. External goals may be opposed by these learners, who want to set and reach goals in their own way. Relationships reflect complex organizational ability and unusual choices for options. Multi-relational thinkers are not easily frustrated and may work slowly as they experiment with ideas and materials.

Meta-relational thinkers can operate in any of the other styles deliberately. They can become transient learners for a brainstorming session, digital learners when faced with rote work, multi-digital when planning and organizational skills are needed, multi-relational when creativity is called for. They intuitively recognize the value of each way of operating; they know how to move easily within the framework of each style as they move toward a self-set or self-chosen goal.

When considering the exhibited behaviors of each kind of learner, most teachers would identify the digital and the multi-digital student as the good student and the transient and multi-relational child as the problem learner. These teachers would be both right and wrong. Digital students work well in the traditional classroom; they are the ones who are comfortable with a basic and structured

learning environment.

On the other hand, multi-relational learners need options like others need oxygen. They must have the opportunity to breathe aesthetic experiences, to create something out of nothing, to see the whole before the parts. They need to be allowed to design their own structures and to set and follow their own goals.

Transient learners, who also need aesthetic experiences and a warm environment, need a specialized structure. They cannot set their own goals because they can't focus on one long enough to get hold of it; they refuse to have goals set for them. They can't follow through on anything because they don't know how.

Viewing style this way, it becomes apparent why teachers have problems. Class size is not as important a consideration when the entire class is made up of digital learners because these students like structure and direction and hence function well in traditional settings, even in large groups. Difficulties arise as transient and multi-relational learners appear. Even a few of these students mixed into a traditional setting can disrupt the entire process and try the patience of even the most experienced teacher.

Learning styles, then, fall into two categories: processing systems and input/output factors. The child's natural processing system (or generic learning style) needs to be determined before his or her learning can be enriched. Input/output factors are then important in determining how content or enrichment is best delivered to the child.

The Relational Thinking Styles model effectively describes the child's basic processing system and provides form for examining other process elements such as hemispheric dominance, global or analytical focusing, and tendencies for field dependence or field independence.

Research into input/output factors that is now being done also works nicely with this model. Those findings will be ultimately more useful and their applications more effective when the RTS process model is employed as the primary organizing model.

Learning about learning styles won't alone solve the problems in education but once educators begin to recognize learning style as a way

of organizing the world, it will become possible to provide appropriate settings for all students without disrupting the entire educational system. There is much good to be found in a traditional setting—for some learners; alternatives are essential for others. Knowing who belongs where will give educators a better focus as they make placement and curriculum decisions.

What Does This Mean?

First, if we are going to accurately assess learning style, we need to start with the whole and not the isolated parts. We don't want to be blind men describing the elephant. This "elephant" is more than the sum of its parts.

Second, if the concept of learning styles is going to be of use to the classroom teacher, styles must be easily assessed, understandable, and must not require that the teacher pour through volumes of data. The entire process becomes unmanageable and self-defeating when this happens. At the same time, the learning style assessment should be prescriptive in general terms. Teachers can then choose and develop appropriate materials for their classes and for individual needs.

Third, a learning style should not be thought of in terms of "good or bad" but rather in terms of its usefulness in a particular situation. Children can learn some of the useful characteristics of styles other than their own, thus enhancing their natural styles.

Assessing learning styles should not trap individuals in pigeonholes but should provide avenues to facilitate learning and intellectual growth. Nor should learning styles be considered as limiting factors, but as elastic categories that allow for truly individual learning without straining the already overworked resources of the classroom teacher. ■

¹ Anthony Gregorc, "Learning/Teaching Styles: Potent Forces Behind Them," *Educational Leadership* 36(January 1979): 234-236. Brackets denote authors' terms.

² Barbara Fischer and Louis Fischer, "Styles in Teaching and Learning," *Educational Leadership* 36(January 1979): 246.

³ Dorothy S. Davis, *Relational Thinking Styles: Model and Assessment Tool* (Tucson, Ariz.: Educational Consultants, 1979).

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