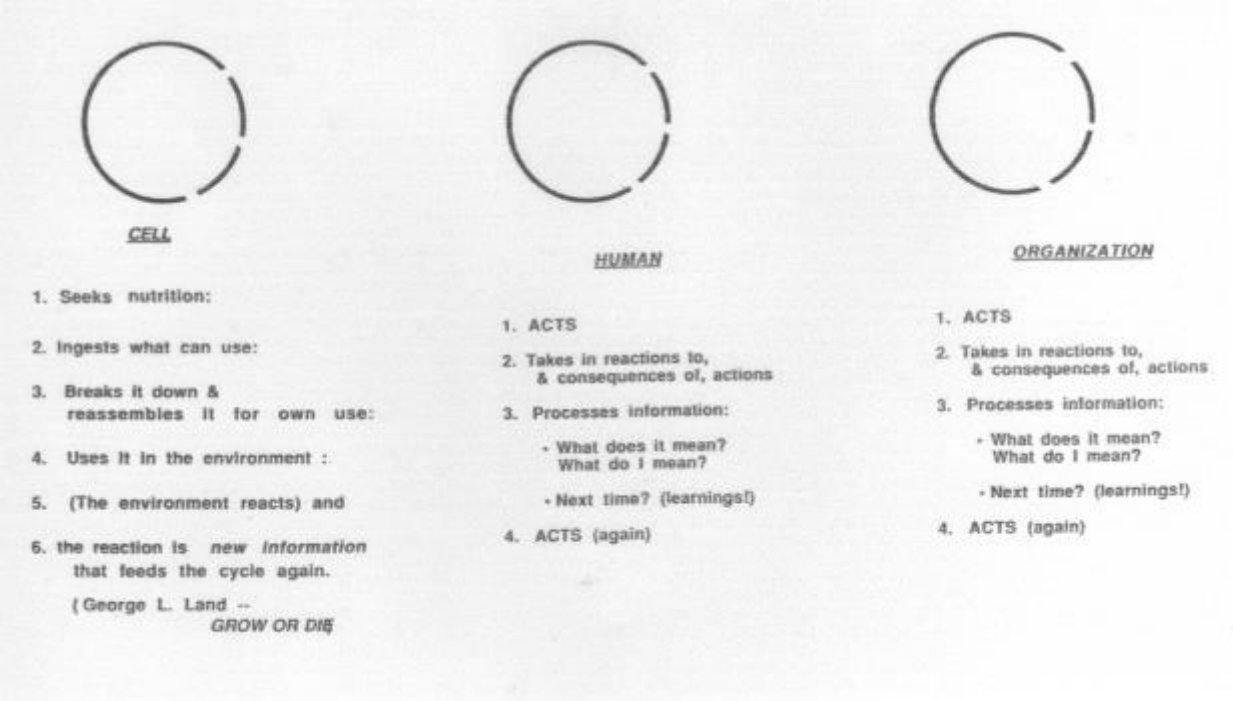
***GROWTH*: The Common Process**

Lewis A. Rhodes, (2002)

"In essence, the destiny of a cell, and a human is to reach out and to affect the environment . . . The single process of Nature that unites the behavior of all things is the process of Growth."[1]



Some 20 years ago, George Locke Land, suggesting that *psychological* processes are extensions of *biological* processes, noted the similarities in the ways that a simple cell and an individual human learn and grow. Each acts, then takes in and processes the environment's response to that act in a way that produces learning and growth, and then acts again.

[1]Grow or Die: The Unifying Principle of Transformation, George T. Lock Land, Random House, 1973

This single process, he suggested, unites the behavior of all living things. Here, we'll extend Land's perception one further step to suggest that *organizational processes* also are extensions of these biological/psychological processes; and that there is a common nature to physical, psychological, and organizational growth (learning.)

1. Both *cells* and *people* are purposeful organisms - i.e., their existence can be defined by their actions in pursuit of their purposes. Land suggested that growth in a simple cell or complex brain follows the same basic formula of action -response. It is an *actor* on its environment before it is a *reactor*. Their growth results from their environments reactions to their acts.

Cells This can be seen most simply in a cell --

The cell acts and the surrounding environment responds to the action.

The cell then takes in the environments response through an appropriate filter and processes that information by integrating it with what's already there, adapting it, if necessary and growing from it before acting again.

People: Humans grow from their acts in a similar way. The environmental responses to one's actions are taken in through a filtering device designed to screen out irrelevant matter. This filter might be thought of as a screen of beliefs that have been formed in answer to two intertwined queries -- ***What does it mean?/What do I mean?*** The mind constantly seeks answers to these two questions and from them establishes a belief system about what is "true, right, and good." Through these filters, the human organism takes in the information it needs for survival, progress towards its purposes, and personal meaning.

This information then is connected to what previously has been stored. In processing that new information, the mind does its major work that determines whether, and to what extent, growth takes place. Here, belief filters, understanding and skills are either established, reinforced or challenged.

In this mental workplace the mind draws upon information stored in two different parts of what is called the Long Term Memory (LTM) -- In one, (the Declarative) are stored facts, data, data strung together as information, and information strung together as concepts. In a computer this would be called a *database.* To continue the computer analogy, the LTM's second component (Procedural Memory) would be called its *programming.* This below-the-surface base of processes, strategies, skills and roles is constantly re-programmed by *experience* -- i.e., the related acts and choices that *work.*

And based upon the continued interaction among these processes, the mind learns how to shape its next action, or its actions next time there's a similar condition.

Thus, in both cell and human, learning and growth are processes that begin and end with purposeful action and which create *changes in capacity* through interaction of "*new information*" with that previously stored.

What then of *organizations*? Do they too function according to this bio-psychological model?

The Mind as Workplace

> **"Organizations are created when people must cooperatively assume roles and play out role relationships in order to transform inputs into outputs.**
>
> **Since cooperation is limited by people's limited capacity to process *information,* people seek ways of arranging themselves and the tools of production so that they can overcome, at least to some extent, their bounded rationality.**
>
> **A particular organizational form can be evaluated by its ability to help people achieve, despite bounded rationality, goals and objectives in an *effective* and *efficient* manner." (Weick and McDaniel)**[2]

Can any organization whose outcomes depend upon organized human effort not have psychology as its fundamental science or theory. Behind each work action lies (conscious or unconscious) human thought, driven by each person's search for meaning.

Organized public education consists of 3 primary work processes -- learning *(What does it mean/What do I mean?)*, teaching (providing the conditions for student learning and from those tasks developing one's sense of personal meaning,) and schooling (providing the conditions for learning and teaching and from those tasks developing one's sense of personal meaning). At the center of each work process are individual, cognitive, purpose-driven beings who continually process information and experience as they determine actions that will achieve their ends.

Are not these minds, then, the primary workplaces of schooling?

For example, we have seen that individuals store procedures, strategies, and other series of connected strings of decisions in a part of their memories that allows them to be called up and used without conscious thought. This allows them to respond seeming instantly to the content of a situation before them. In exactly the same way, an organization's decision processes depend upon a series of "belief filters" and connected "stored" decisions that are bundled into the organization's roles, relationships and which eventually - through its rules -- become its structure. This "procedural memory", seemingly frees the organization to focus,"without thinking," on the "content" of the tasks before it - the child and the curriculum.

Organizational "actions" are, in effect, the outcomes of human thought, driven consciously or unconsciously by each actor's search for meaning. When we try to change organizational actions and structures, we are really aiming at the "thought processes" behind them. From this perspective, change strategies take on a new dimension. How do we influence the thought processes of purposeful, meaning-seeking individuals?

Influencing the "Workplace"

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[2] "How Professional Organizations Work: Implications for School Organization & Management" Karl E. Weick and Reuben R. McDaniel, Jr. in Schooling for Tomorrow, Sergiovanni & Moore, Allyn and Bacon,1989

Civilization advances by extending the number of important operations we can perform . . .without thinking of them.

Alfred North Whitehead

As we've seen, the acts of educators as they respond directly or indirectly to the learning needs of children is the visible work of schooling. The actual work, however, is invisible -- taking place in educators' minds as they determine the most appropriate responses within the range of resources they have.

The *workplace* of schooling, therefore, can be found in the minds of educational practitioners. Any permanent changes in schools can only come from changes in that "workplace"-- where personal and organizational routines are stored in the form of beliefs, assumptions, and previously-effective strategies.

Until now, we've been able to largely ignore the different nature of the thought and decisional processes of education's classroom and building practitioners. (Part of the problem may be that we are like McLuhan's fish who could not understand "water" because it was so much a part of their existence). In fact, we've pretended that the 2000 to 3000 situational responses that teachers or principals make each day (within a real world of actual needs and accessible resources) are not decisions at all. At least, not decisions worthy of the types of support we provide for the calculative rationality of decision-makers "higher up" in the organization.

What cognitive research now helps us understand is that the most critical decisions in the schooling process take place, close to the child, in a seemingly-intuitive process where human beings *understand the moment* -- acting and processing information at the same time.

In this process (at a minimum):

- a situation is perceived within a framework of the individual's beliefs and values;

- it is compared to prior experiences, their results and consequences;

- it is related to both short- and long-term purposes; and

- resources are scanned for possible use in accomplishing the purposes.

The importance of this process could be overlooked until now because "professionals" always were people who had personal access to the knowledge necessary to diagnose and resolve problems. As long as the conditions they had to deal with remained generally constant, they could be left alone and trusted to make appropriate responses. But in today's society that no longer is true. Teachers and principals confront new experiences and conditions with little in the way of "guaranteed" solutions to draw from.

Industry's response to this same situation has been to create management structures that *assume* the uncertainty of constant change, and thus provide ways for all decision-makers in an organization to generate and have access to the information they require for appropriate, situational responses. The calculative rationality of top level decision-makers focuses on the development and

support of processes that connect and support the decisions of workers closer to the products of the organization.

Today *information* that informs the responsive decisions and choices is a primary resource for educational effectiveness. In general, access to this resource is limited because building educator's daily "work" (responding to situations as they occur) is done in isolation from peers and other adults. Interestingly, the school's culture, or psychological environment, now approaches the dictionary definition of a biological CULTURE:

"*a prepared nutrient medium within which growth takes plac*e."

And the "nutrient" leaders must provide to that culture of the school is information.

Today's leaders can influence that culture by creating a surrounding environment of regular organizational actions & interactions that *generate, provide access to, and help integrate* the various forms of information required for appropriate, responsive situational decisions.

This information that leaders can help create, or provide through their actions, allows others:

- to orient themselves and gain personal meaning; to understand how they personally "fit" or relate to the organization's purposes *(through vision, mission, goals, values)*
- to know the effects of their own actions so that they might self-correct*(through coaching, access to formative feedback, and opportunities to reflect)*
- to know what behaviors are expected, ideal, successful *(by modeling, rewarding)*
- to realize what can be done *(through opportunities for experience-sharing with peers and access to research)*
- to continually develop an understanding of the conditions and situations to which they respond *(through opportunities to analyze scanning data, trend analyses, and student data)*.