

Vision

The Journal of Educational Alternatives *Principles, Practices, and Leadership*

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Creating Shared Visions of the Future for K-12 Education

A Systemic Transformation Process for a Learner-Centered Paradigm

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Key Reflection Points

As you read the article, feel free to use the following questions to guide your thinking about the approaches to whole-system change that are presented and compared.

- What are the major advantages and disadvantages of each approach?
- What sort of school culture is best suited to any particular approach?
- What other situational variables are important for selecting any particular approach?
- What research studies would be most helpful for school districts' selection of an approach to systemic change?

Introduction

This article presents a variety of alternative approaches to the process of helping K-12 school districts to transform themselves from the industrial-age paradigm of education to a learner-centered, information-age paradigm. The purpose of this article is to generate discussion about the pros and cons of each alternative.

While the approaches are presented in dyads, this oversimplifies the complexity of the alternatives available to school change participants as they try to determine which approach or combination of approaches is best for their situation. We do not think that choices are typically dichotomous or that these represent the entire array of possible choices. Rather this structure helps to bring into relief and clarity the differences between some of the most important alternatives we have encountered.

The article begins with a look at idealized design as compared to leveraged emergent design, followed by an examination of school-wide versus district-wide transformation, followed by key-leader directed change versus broad-stakeholder directed change.

Each pair of approaches is defined, the key practices are identified, and a comparison between the two options is discussed. We hope that this article will generate lively discussion about alternative approaches to systemic change and will indicate productive avenues for future research.

Idealized Design vs. Leveraged Emergent Design

The primary approach offered in the literature is the idealized design approach pioneered by Ackoff in the corporate sector and adapted by Banathy to the K-12 education context. This is discussed next, followed by the leveraged emergent design approach – a newly developed alternative (Reigeluth, 2006).

Idealized Design – Definition

Those adhering to an idealized design approach to the creation of educational systems focus on the creation of a “guiding image” (Banathy, 1992, p. 178) that is created by the designers as they attempt to break free from the traditions, assumptions, and inertia of current schooling practices in creating more effective systems of education.

Ackoff (1979) refers to idealized design as “a design of the system with which the designers would replace the existing system now if they were free to do so” (p. 191). There is a palpable “stopping of time” as designers and stakeholders remove themselves from the day-to-day operations of the system and spend time focused entirely on dreaming up the ideal system.

Thus, idealized design is a design process initiated by creating a “picture” of what the system would look like in a perfect world. Nelson and Stolterman use the term *desiderata* to explain “the original expression of what is desired” (2003, p. 48). These desires differ from what many refer to as a vision in that *desiderata* are temporary, fuzzy gut-feelings of the way things could be which are refined throughout the design process.

This stands in contrast to a vision which, once created, remains a fixed point towards which the change is directed. So we could redefine idealized design as a design process initiated by articulating a “*desiderata*” of what the system would look like in a perfect world.

Idealized Design – How it Works

Nelson and Stolterman describe design as “the ability to imagine that which-does-not-yet-exist” (Nelson & Stolterman, 2003, p. 10). There is a conscious letting go of the particular realities which may have led to the initiation of the design process and a focus on the ideal. Nelson and Stolterman’s term

parti, defined as an “explosive appearance of an ... encoded solution to a complex design challenge” (p. 212), is a result of engagement with the design process. The *parti* is the new, creative breakthrough that propels the design process forward.

The *parti*, informed by the *desiderata*, serves as the seed for the entire design effort and may come from anywhere in the organizational hierarchy. The creation of this “seed” becomes the most important part of the idealized design experience.

Work in idealized design comes primarily out of the operations research work in the business sector pioneered by Russell Ackoff. He sought a proactive design sign paradigm that would create organizations based on participation, continuity and holism (Ackoff, 1979).

The *principle of participation* posits the idea that the planning process is more valuable than any plans for action that might come out of it. Thus, a broad base of stakeholders should be involved in planning for change. The *principle of continuity* states that planning and implementation should not be seen as serial processes, but should proceed continuously in parallel, each informing the other. Finally, the *principle of holism* concludes that “all units at the same level of an organization should be planned for simultaneously and interdependently” (Ackoff, 1979, p.190). Those that plan change in a way that does not abide by this principle run the risk of implementing change that is rejected by certain parts of the system.

This proactive design approach has been adopted by practitioners and researchers in a number of organizational contexts (Carroll, 2000; Omerod, 1995; Pourdehnad & Hebb, 2002). Ackoff’s groundwork in organizational planning, focusing on stakeholder inclusion, constant searching for improvements, and recognizing important interdependencies set the stage for Banathy to apply these ideas to the design of education systems.

Banathy (1991) recognized that society has undergone a dramatic paradigm shift, leaving our educational system out of synch with the needs and wishes of society. He calls for a systems design approach that will realign our lagging educational system with the constantly changing society of which it is a part. In true idealized design fashion, Banathy explains:

We should 'jump out from the system,' explore educational change and renewal from the larger vistas of the transformed society and envision a new design. Starting design from the perspectives of the overall societal context, we extend our horizon and develop the LARGEST POSSIBLE PICTURE of education within the LARGEST POSSIBLE SOCIETAL CONTEXT (1991, p. 15).

Starting with society as a whole frees the designers from the inertia of the current system and allows them to create a functioning system that is unlikely to be rejected upon implementation.

This design process begins with an idealized *image* and moves through a series of iterative stages for elaborating that image to progressively greater levels of detail and clarity, and then to implementation and institutionalization of the new design. Extensions of Banathy's work in the realm of education have been numerous (Carr, 1996; Joseph, 2003; Reigeluth, 1993; Squire, 1999).

Idealized design lends itself to certain types of design settings as opposed to others. It requires an unwavering commitment to the change process, as participants must be trained and continuously supported in their new roles as change agents (Borko, Wolf, Simone & Uchiyama, 2003). This requires a commitment of both financial resources and time.

Volatile organizations undergoing high leadership turnover (Corcoran & Lawrence, 2003), those undergoing

extreme changes in the number or type of clients (Arriaza, 2004), and organizations uncertain of the need for change (Fullan, 2000) are not likely to succeed with any type of change, let alone this rigorous model.

This is not to say that the need for change cannot be developed and shared amongst stakeholders, but all participants in the process must be willing to work together in good faith if consensus and commitment are to be developed (Reigeluth, 2006). Those organizations able to successfully implement idealized design are first able to generate a strong commitment from all stakeholder groups to both the organization and the process itself.

Ackoff (1979) outlines a five-step process for carrying out idealized design in an organizational context. His first step, *formulating the mess*, involves a holistic, systemic look at the organization and its environment. Second, *means-ends planning* involves creating an idealized vision of the future and determining what changes are necessary in the current system to move it towards that vision. Third, *resource planning* determines how facilities, people, money, information and other resources can be best utilized to meet the vision. Fourth, *organizational and management planning* determines what structures need to be in place for proper executive functioning of the system and for effective organizational learning. Fifth and last, *design of implementation and control* determines who will carry out what tasks in the change process and what the standards of quality implementation will be.

This process is similar to Banathy's (1996) four design spirals -- formulating the core definition, developing specifications, selecting functions, and designing the enabling systems.

While Ackoff's five-step process of idealized design begins with a close look at the present organization and its environment before moving to the creation of an idealized vision of the future, Banathy's model begins with an idealized vision

and then proceeds to develop specific functions to bring the ideal system into being. While they start in different places, both Ackoff (1979) and Banathy (1996) emphasize iteration, a systems perspective, establishing a shared vision, and managing the process of meeting that vision. These practices differ considerably from the practice of leveraged emergent design, to which we turn next.

Leveraged Emergent Design – Definition

An alternative to (or adaptation of) the idealized design approach is the leveraged emergent design approach developed by Reigeluth (2006) in a systemic transformation effort in Indianapolis. It is based on the following principles:

Leverage – In transforming an existing system to a new paradigm, it is hard to change everything at once. When you change one part of the system, it becomes incompatible with the rest of the system, which then works to change it back. Therefore, you must first change a part or parts of the system that can exert powerful leverage on the remaining parts of the old system – to overcome the force that the old system will exert to push the new parts back to what they were. Starting with a few high-leverage changes can make the whole systemic change process considerably quicker and easier. (Note that this is not piecemeal change even though you start by changing a small number of high-leverage pieces, because the changes will, if done right, result in a different paradigm of education, just as if the idealized design approach had been used.)

Visible Progress – It is important for participants in a systemic change process to be able to see progress often. This sustains motivation and wins over skeptics.

Emergent design – It is difficult to design such a complex new system from scratch, for it is difficult to predict what will work best. In an emergent approach, a few guiding principles or beliefs (“strange attractors” in Chaos Theory or “desiderata” in Nelson & Stolterman’s work) are selected, then a few high-

leverage changes that are consistent with the guiding beliefs are implemented, and finally the remaining changes occur through creativity, trial, and error – they gradually emerge over time.

Transcending Traditional Mindsets – A different paradigm requires a different worldview. Helping stakeholders transcend their traditional mental models or mindsets about education is critical to a systemic change process. Failure to transcend causes resistance, or at best an inability to implement the new system, due to a lack of understanding.

Ideal Seeking – As in Ackoff’s idealized design approach, thinking in the ideal helps participants to transcend the mental model of the current paradigm and imagine something potentially far superior. This makes it most valuable to use at the beginning of the change process, while preparing what Ackoff calls a “rough sketch” of the new system. That rough sketch is the guiding beliefs (which serve as “strange attractors”). To allow the principles of leverage and emergence to play out, the idealized design should end when the rough sketch is completed, after the participants have transcended their traditional mental models about education.

Broad Stakeholder Ownership – Given the importance of transcending traditional mindsets, it is essential to have broad participation in the change process, so that a sufficient number of stakeholder mindsets support the systemic change. However, to develop true commitment to the new shared vision (represented by the guiding beliefs) and thereby minimize resistance, participants must go beyond participation to a sense of ownership of the new vision. Ownership is developed by encouraging participants to revise the vision (ideal beliefs), which ties in with the principle of emergence.

Consensus Building – Broad ownership can’t happen without a consensus-building process, because participants begin with very different beliefs about what an ideal educational system would be like. The consensus building process helps participants

to understand others' perspectives and thereby evolve their mental models to a set of shared beliefs.

Leveraged Emergent Design – How it Works

Here is a tentative process for using the leveraged emergent design approach:

1. *Develop district-wide ideal beliefs.* A district Leadership Team is formed of about 25 opinion leaders in all stakeholder groups to develop a set of ideal beliefs for the entire school district, with broad stakeholder involvement.
2. *Develop district strategy and support capacity.* The district Leadership Team develops a broad strategy for the systemic transformation process. Primarily, this entails deciding how much of the district to transform at once: all "feeder systems" (a feeder system is all schools that feed into a single high school) or just one; all grade levels in a feeder system or begin with, say, K-3 and move up one grade level per year; all schools in the feeder system or just a few, and so forth.

This decision is influenced by the amount of district and external resources to support those who are transforming, and it should be made with broad stakeholder ownership in a consensus-building process. In addition, a Central Support Team is formed in the Central Office, to support the formation and operation of building level design teams.

3. *Create building-level design teams and strategy.* A School Design Team is formed in each building with broad stakeholder involvement. Each Design Team's first task is to decide, again with broad stakeholder involvement, on a building-level strategy for the systemic transformation process. Primarily, this entails deciding how much of the school to transform at once. If it is a large school, they may decide to form several small schools or learning communities within the building, and they may decide to start with just one or all of them. This

decision depends primarily on school size, teacher cohesion, and mindsets.

4. *Elaborate the beliefs.* One School Design Team is formed for each "new" school to be designed in each building with broad stakeholder involvement. Each Design Team elaborates the district-wide ideal beliefs in such a way as to tailor them to their school and neighborhood and develop broad stakeholder ownership of them. These will serve as "strange attractors." Duffy, Rogerson & Blick (2000) also recommend that a district-level design team be formed because the "core work process" should be viewed as the P-12 process, not a P-6 process, a 7-8 process, and a 9-12 process. This helps ensure systemic coherence.

5. *Decide on high-leverage, structural changes.* The Central Support Team helps each School Design Team to reach broad stakeholder consensus (mindset change) on a few high-leverage, structural changes that will implement the guiding beliefs for systemic transformation to a learner-centered paradigm. Sample high-leverage, structural changes are offered to help participants understand what they are, and different schools might choose different structural changes that they believe will be more consistent with their beliefs or will provide more leverage in their school. Samples might include:

- replacing the current report card with an inventory of attainments whereby each student must reach a standard of attainment before progressing to the next attainment,
- requiring a personal learning plan (or IEP) for every student whereby each student can immediately progress to the next attainment that is appropriate for him or her upon mastering the current one,
- requiring a change in the teacher's role to a coach or facilitator, and

