

Instructional Systems Development (ISD): Background & Position

Fred Nickols

Background

I first encountered the “training business” in 1968. The ISD model was more or less fully developed and articulated but not yet in widespread use. I was assigned to the Navy’s Instructor Training School in San Diego, California. I was trained there first as a classroom instructor and then as a programmed instruction writer. It was also there that I developed the Navy’s first course teaching the concepts, methods and techniques of instructional system development. It was a resounding failure. It worked just fine but there was no market for it and so we scrapped it. Later, as the market developed, it was rescued from the scrap heap. After leaving the Navy in 1974, I developed numerous training courses for clients such as AT&T, Blue Cross & Blue Shield, Lipton Tea, Ortho Pharmaceuticals and Xerox Corporation. In the early 1980s, I was hired by AT&T to evaluate its Training Development Standards (TDS), a proprietary version of ISD. I concluded that they needed an alternative, something a lot faster and much less cumbersome for situations in which a full-blown, by-the-book ISD approach was inappropriate. Over time, the focus of my consulting practice shifted from training to performance and productivity improvement and then on to general management consulting, but always with an emphasis on performance – individual, group or unit, and organizational. And training, of one kind or another, typically plays a role in my interventions. Since leaving the Navy my career has been about equally divided between my consulting practice (14 years) and positions at an executive level with two firms in the private sector, one for-profit and one non-profit (13 years). I recently returned to consulting on a full-time basis.

Position

My basic position regarding the ISD model and approach is that they are tools and, like all tools, they can provide tremendous value when they are the right tool for the task at hand and when they are properly applied. If they are neither the right tool nor properly applied, they can prove very costly. There are related issues and factors that argue against ISD being the right tool and that also argue against it being properly applied. These lead to reservations on my part in relation to the ISD model and approach. These related issues and factors are briefly outlined below.

I think ISD and its proponents are caught squarely between two huge forces in the workplace. One force stems from fundamental changes that have occurred in the workplace during the past 30 years or more. The other force derives from the training community’s desire for professional status and standing.

The Shift to Knowledge Work

One of the major changes that has taken place in the last 30 years is the completion of the shift to knowledge work. For many people this has meant a shift from materials-based physical processes to knowledge-based mental or cognitive processes. There are accompanying shifts as well:

- ***From Prefigured to Configured.*** Many people do not carry out repetitive, well-defined work routines that have been worked out by others. Instead, many people must figure out what to do – sometimes on a moment to moment basis.
- ***From Training to Learning.*** Learning has always been at the center of things but, when desired performance could be captured in behavioral descriptions, these descriptions quickly became prescriptions. Training was the vehicle for communicating performance expectations. Now, we’re back to having to rely on people’s in-born capacity for learning and, perhaps more important, for learning a lot on their own.
- ***From Copying/Cloning to Designing/Developing.*** We can no longer rely on getting trainees to simply emulate the behavior of so-called master performers. In many instances, the copying/cloning approach is no longer appropriate. We have to shift our attention to helping people design their own tasks in response to the circum-

tances they face and to helping management pay more attention to development as a strategy for building experience and expertise.

- ***From Knowing How to Figuring Out How.*** One way to sum up the shift to knowledge work and the shift from prefigured to configured work routines is to say that there is a corresponding shift from particular to general skills; from knowing how to perform a particular task to figuring out how to produce a specified result.

Automation & Mechanization

Another major change that has taken place in the last 30 years, and not unrelated to the first, is that a great deal of routine, repetitive work has been automated or mechanized. That routine, repetitive work was the very work around which ISD was developed. Much of the work that is left for people to do is simply not well suited to treatment using the ISD model and approach (see the last point below).

The Press for Professional Status

The preceding changes constitute one of the pressures on the ISD model. The other force stems from the members of the training community wanting to be viewed as professionals and having the standing and stature that comes with that status. One of the hallmarks of professionals is “adherence to good practice.” Currently, for many training professionals, ISD defines good practice. To criticize or challenge ISD is to call into question not just the model and the approach but also the professionalism and professional standing of its practitioners.

Looking in All the Wrong Places for All the Wrong Things

People are shaped by their tools and those who use the ISD tool are no exception. The ISD model leads us to look for certain things, sometimes the wrong things. The notion of a task analysis leads us to look for stable tasks that can be studied, analyzed and then communicated to people new to the job. The concept of a master performer leads us to focus on the individual and overlook the fact that much of what we learn we learn in a community of practice instead of in the classroom. Moreover, the concept of a master performer isn't of much use in situations where most people are caught up in novel tasks. That almost sacred tool, the behavioral learning objective, relies on being able to describe the key elements of performance in observable terms. What if the key elements are not observable? Criterion tests, another important element in instructional design, have an unstated assumption undergirding their use; namely, that what is measured will transfer to the workplace. That is a mighty big assumption.

Misplaced Focus

Second, to strictly adhere to the ISD model is to replace a focus on results in the workplace with what is at its very best no more than one possible way of achieving them. It is to substitute “how” for “what” and “why.” The substitution of means for ends can make those who do so look very, very non-responsive.

Sometimes, It Simply Doesn't Apply

Finally, there are numerous situations in which all or parts of the ISD model and approach simply don't apply. For example: the populations are small, the tasks are configured instead of prefigured, the lead times are miniscule, the interactions are with a changing cast of characters instead of with standardized materials or information, results are held constant in the face of changing inputs and conditions (meaning you have to do system and task design on the fly), and evaluation will look at business results instead of training results.

What about “Good Practice?”

Well, to me, “good practice” refers to the ability to vary one's practice to fit the conditions at hand. This stands in stark contrast to a practice in which conditions that don't exist are demanded as a prerequisite to action or one in which a method or procedure is blindly followed regardless of conditions. In short, “good practice” is defined by the ability to consistently produce results, not simply adhere to methodological or procedural dogma.