

LEARNING DESIGN FOR THE KNOWLEDGE ERA

When John Geier was first introducing the Personal Profile to a network of independent consultants and trainers, he frequently talked about the value of "instrumented training" in creating unique learning and performance outcomes. Geier attributed these improved learning and performance outcomes to the function instruments like the Personal Profile performed in bridging theory to application. By providing the learner with a method for personalizing the information, the assessment instrument made the information in the theory or model more relevant to real life situations. Using an assessment instrument also actively engaged the participant in the learning process that resulted in a more strongly motivated learner. In the years since Geier first introduced the Personal Profile, the term "instrumented learning" has not been used as frequently. Many people are unaware of the original purpose and value of using assessment instruments in a learning design. As we move into the new Knowledge Era paradigm of the learning organization, the concept of instrumented learning is even more essential than when Geier first introduced it to the Network in the 1970's.

It has been said that instructional design methodology as we have known it is an artifact of the Industrial Era. It has also been said that the learning design necessary for the knowledge and service worker must represent a rethinking and restructuring of learning. This rethinking of learning design is particularly relevant today because as Peter Drucker said in a recent article in the Harvard Business Review* only one fifth of the working population of the US. is employed in making or moving things. The remaining four fifths of the population are employed either as knowledge workers or service workers. This tremendous shift from industrial workers to knowledge and service workers represents the fruits of technological progress in all developed countries. The dream of the industrial era, that humans would not have to earn their living laboring physically doing the work machines could be invented to do has been realized.

In the wake of the achievement of this vision of machine labor instead of human comes the awareness that nature of work has now permanently changed, perhaps in a way that no one anticipated. The shift in the nature of work from the Industrial Era to the Knowledge Era is every bit as challenging to society as was the shift from the Agricultural Era to the Industrial Era. The shift we are experiencing currently may be even more challenging to us because in the prior two eras the outcome of our labors in either agricultural and industrial production was tangible, measurable and definable. Now, in the areas of knowledge work or service work, we are faced with earning our living doing work that generates intangible results that are much harder to define, measure and attach value.

Many people report the personal impact of this shift as they describe the difficulties they have in assessing their own performance. People report feeling frustrated that there is no tangible output that they can use to determine if they

did a "good day's work". Not to mention the challenges they experience in trying to measure someone *else's* performance. People are experiencing new forms of stress, self-doubt and low self-esteem as they attempt to apply old measures for performance to a new way of working. The tools and techniques that were developed to measure and improve productivity and performance in Industrial Era jobs simply do not fit the new kind of work. It is becoming increasingly clear that new techniques and methods are necessary for managing the performance and improving the productivity of the knowledge and service workers. No matter how effective the old techniques were in improving productivity in the work of the Industrial Era, they do not fit the new work of the Knowledge Era.

All of this has tremendous implications for the role of the HR practitioner in field of training and consulting. While it may be a stressful time of change for some, the shift from the Industrial Era to the Knowledge Era represents an exciting opportunity for the field of Human Resource Development and Management. Finally, the technology of human resource development and management can be seen as the critical organizational resource that it has always had the potential to be. As knowledge and service work have become the primary products of more and more companies, the **human** becomes the essential resource to be developed and managed. Rather than the financial and material resources which were essential to industrial production, the intellectual capital of the human is the essential resource of the Knowledge Era.

In the industrial era, humans were seen interchangeable parts in a structured production process and standardization was the goal of training and management. The instructional design methods of the Industrial Era were effective because they were based on a predetermined input (one standard human) and a clearly defined output. The desired output was a set of skills necessary for meeting production requirements as defined by industrial engineering methods. Instructional design consisted of breaking down the learning into a series of component lessons which, when added together in a linear fashion, resulted in a predictable and consistent outcome of skill development. The methodology of learning matched the technology of production; humans were considered "raw materials" to be turned into "finished goods" by educational technology. The world of industrial production was predictable and so was human behavior.

Then, the world changed into a complex, rapidly changing environment of diverse input and uncertain outcomes. In the new way of working, it seemed that by the time training needs had been assessed and curriculum was developed and implemented, the nature of the work had changed. People could not be processed through the system fast enough to meet the changing job requirements. And the input, the "raw materials", were becoming more and more diverse—no longer was there one standard human. Employees seemed to come in a wider range of shapes, sizes, colors and gender. People were no longer employed in jobs that could be broken into a series of standardized, predictable

tasks . The skills necessary for job effectiveness were harder to define, train evaluate and manage. Clearly a new design for learning was necessary.

So, what does a learning technology for the Knowledge Era require? First and foremost, it must be flexible and adaptable. It must provide enough structure to begin a process of inquiry, but not so much structure as to be unable to adapt to complexity and change. It needs to be learner-driven and adaptable to the needs of a changing environment while modeling the use of neutral, respectful language for discussing and managing differences. It needs to offer cognitive maps and mental models for processing information and increasing comprehension, while encourage questioning rather than predictability and conformity. It needs to evolve in response to the changing questions from learners rather than becoming rooted in fixed practices and organizational dogma.

In others words, learning design for the Knowledge Era needs to be an instrumented learning design where assessment instruments are used to frame the questions the learner wants answered using a cognitive map. The assessment instrument then provides feedback to the question which will determine the direction of the next question. It is as simple as using the Personal Profile to ask the question, "I wonder how I tend to behave in my work environment?" After receiving the response to that question in the form of feedback about his or her behavioral style, the learner then asks another question, "I wonder what the behavioral style of my boss (co-worker, spouse, children) is?" This question can be answered using a number of different instruments as well as learning to use the cognitive map, the DiSC model, for reading other people's behavior. Then the learner may ask, "I wonder what I could do to be more effective in my job?" which could be answered by a structured self-management process using the information provided by the Personal Profile Software System

Or, the question may be asked, "I wonder if my style is the behavior required for my job?" which would lead to a performance management inquiry process using the Role Behavior Analysis. And, of course there are a whole series questions the learner might ask such as "What do I value?", "How do I manage my time?" "What could I do to improve my listening effectiveness?" "How does my style affect how I approach customers or how I sell?" As quickly as the question is answered by the feedback from the assessment instrument, the learner is able to determine the next direction of inquiry keeping the learning process evolving in the direction of his/her motivation and interest.

Clearly, this is very different from the old paradigm where assessment instruments were used as "tests" which defined and predicted an individual's behavior for all time. In that paradigm, the goal was to eliminate diversity and complexity by using the results of the "tests" to control outcomes and eliminate the role of human judgment in selecting, managing and promoting people. As a

result of this past use of a testing and reporting paradigm, people have an initial tendency to undervalue the role of assessment instruments in creating powerful learning environments where the learner becomes the consultant to his/her own learning process with the learning design emerging as part of the process of inquiry. The use of assessment instruments to develop a process of structured inquiry and feedback results in exactly the kind of flexible, adaptable, 'emergent' design necessary for meeting the learning needs of the Knowledge Era where change, complexity and quick response time are essential requirements.

If the learning design for the Knowledge Era is different, how has the role of the trainer and consultant changed? The primary shift is from the role of professional "expert" who provides all the answers to the role of HR practitioner whose primary skill is in creating environments where inquiry can take place safely and productively. Many professionals become concerned when they hear this because they thought they were being paid for being "experts". And, they ask, if they let the instrument be the expert on application of the model and let the learner be the expert on his or her own experience, what will they do? Plenty! The skills necessary to create and sustain a learning environment—an environment of genuine inquiry and dialogue—require considerable expertise and professional development and the practitioners who develop mastery of these skills are highly valued.

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Peter Drucker; "The New Productivity Challenge" HBR, Nov-Dec 1991, Vol 69, No. 6.