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REVIEW

Don't Forget, Instructional Design Is About Problem Solving

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The rise in demand for instructional design has given way to a series of misconceptions about the discipline; two educators offer an informative view of their profession and its origins.

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"Can you fix my computer?" This simple question (or a similar one) has most likely been asked of every instructional designer (ID), indicating a misalignment about what IDs do and what others think they actually do. This confusion is nothing new, but what seems to be different now is that those of us in the field may have bought into the confusion — or are helping sustain the misunderstanding because we have lost our way or forgotten where we came from.

In this blog we offer a quick refresher on the origins of instructional design, which is especially valuable because the demand for what we do is increasing. As Kyle Peck reminds us, "a 'perfect storm' of forces both within and outside education are about to accelerate the evolution of learning and learning design, increasing the demand for well-prepared learning designers, learning-related tool builders, and learning-related researchers."[1]

The importance of employing those who design instruction has risen exponentially. This is due in large part to the need to convert traditionally delivered face-to-face content to online delivery. Hence, using technology to deliver learning is seen as the key (and sometimes, the only) reason to employ an educational/instructional/learning designer. Of course, as any

well-trained ID knows, this understanding is shortsighted and usurps the analysis portion of the **ADDIE process** ⎘ — the instructional design framework IDs use to design, develop, and implement instructional solutions.

The Origin and Purpose of Instructional Design

The discipline itself did not arise from humble beginnings. Ours is a field that came into formal existence around World War II, driven by a need to solve the problem of making military training more efficient. The main purpose was to solve performance-related problems. This foundational premise for the field is either now lost or has just become synonymous with the belief that anything with a plug should be the base of the instructional design knowledge/skill set. Not helping the matter is that the ID position is also challenged by the numerous naming constructions and descriptors (e.g., educational, instructional, or learning), seemingly united by a requirement that all activities be associated with some form of technology magic.

Understanding how to get a person to quickly and accurately "upskill" so that they can perform with little or no error was the initial requirement of the field's founders. The solution here is not, nor has it ever been, to focus on technology or, as some would say, the "tools." The onus has been and should always be on solving the problem of not being able to perform accurately when required.

Arguably, every job posting for instructional designers (or similar roles) today include the knowledge and use of specific

tools. Rather than seeking individuals who identify the problem, determine whether it is an instructional issue, and then decide whether technology is appropriate, job descriptions instead tend to request a person with information technology expertise who has worked in an educational setting. Such job descriptions suggest that the "skill of the tool" will solve the problem.

This misdirected message is further propagated in **day-to-day instructional design activities** and then creates further damage by **being the focus of research** [↗].[2] What does this mean? It conveys the message that the problems being addressed can and must be solved by the tools identified for the job when in reality, perhaps what is needed is a simple job aid or a realignment of responsibilities.

Where Does Technology Fit in the Equation?

A great reminder for all of us in the field regarding the many available and exciting technology tools is that *how you use the tools* is more important than *which (if any) tool* is used. A tool that is used to effectively deliver instruction can and will have *different* effects when used in a *different* institutional context that involves *different* learner characteristics, *different* content, a *different* teaching style, and even *different* information and communication technology infrastructure. By focusing on "which tool," the assumption being made is that a wooden desk can work in an art class just as efficiently and effectively as it would work in a chemistry class, thus reducing the role of instructional designers to merely being IT technicians in an

educational setting.

Our field is multidisciplinary; instead of drawing only from the foundations of education, it draws from engineering, psychology, philosophy, cognitive science, sociology, and many more. These combined disciplines are used to solve problems through one delivery medium — instruction — thus reflecting that the *way* the problem is solved is vital for this field.

As mentioned at the beginning, regardless of title (i.e., instructional designer, educational designer, or learning designer), the role of the individuals who are in such position is to come into a space, perform an analysis, and ultimately decide the best way to address the problem. Sometimes the solutions may include the latest technological tools such as augmented reality, or it may lead to a redesigned instructional sheet for a face-to-face workshop.

Please note that we are not trying to dismiss the importance of technological tools and the varying features that they provide to those who use them. It is well known that some of today's technologies allow us to develop learning experiences that are not possible in the physical world. So, yes, tools are important, but just employing them is not innovative or engaging; they are not an end in themselves. The goal is to use tools to solve problems in a unique way so that the intended learning experience (or more) is achieved.

Notes

1. Tutaleni I. Asino, "The Future of Our Field," *TechTrends*, *59*, no. 1 (2015): 20–30. ↩

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2. Barbara B. Lockee, John K. Burton, and Lawrence H. Cross, "No Comparison: Distance Education Finds a New Use for 'No Significant Difference'," *Educational Technology Research and Development*, 47, no. 3 (September 1999): 33–42. ↵

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Instructional Design