PERSPECTIVES

TODAY’S INSTRUCTIONAL DESIGNER: COMPETENCIES AND CAREERS

Cecelia Munzenmaier, MS

With a Preface by Allison Rossett

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PREFACE

I’ve been thinking about instructional design for decades. Not just one decade or two — more like four decades. And not just thinking about instructional design. Doing it. Researching it. Training on it. Writing about it. Worrying about it. Defending it too.

Glad you are interested, or you wouldn’t be reading Cecelia Munzenmaier’s report.

Still Popular After All These Years

Recently I attended a conference for hundreds of learning executives. I couldn’t perambulate without being asked to assist in locating a great person for their organization. Not just any person. They sought instructional designers. Still, somehow, after all these years and articles and presentations claiming that instructional-design-is dead, learning leaders express optimism about instructional design and designers.

They are looking for an evaluator. Is that an instructional designer? How about someone to work on guidance systems for their burgeoning online assets? An instructional designer? Somebody to do something about our wretched webinars? Will an instructional designer tend to that? LMS selection and installation? Scenario for online learning? Blends? Engagement? Mobile performance support? Capitalize on the big data in our system? Help us decide between Articulate and Captivate? From the sublime to the ridiculous, there is the expectation that instructional designers will deliver what is required — and the kitchen sink too.

Cecelia Munzenmaier has written an optimistic paper about the field and is not alone in her enthusiasm—as she notes, “In 2013, CNN ranked Instructional Designer as 76th of 100 jobs with ‘big growth, great pay, and satisfying work.’ The network cited the field’s 10-year job growth rate of 19.5 percent, its compensation rates (IDs with five years’ experience typically earn $70,300 a year with the highest paid designers earning up to $101,000), and the job satisfaction and flexibility IDs enjoy.”

This ID Thing Is No One Thing

Some see ISD as procedural, algorithmic, characterized by one box each for analysis, design, development, implementation and evaluation, with arrows linking the boxes and dependable steps directing what to do and in what order. They cling to the certainty. Many disagree. They emphasize what goes on inside the boxes, inclining towards a more heuristic approach, with rules of thumb applied in context. In the former, instructional design is a favorite recipe. In the latter, it’s about repeated tastings, guided by iterative questions answered by the literature, data, and work products.

Instructional design, as you will see in the report that follows, is many things, and most often it is what you want and need it to be. There are comforting verities for the field:

* Theory drives practice. There are reasons for the decisions that are made, and those decisions are based on the literature and best practices regarding learning, communications, technology and culture. Years back, when working on a sales training program, we included think-alouds
from expert sales professionals, an approach inspired by cognitive perspectives for learning and performance. We attempted to influence attitudes about cold calls through the literature on motivation and persuasion.

- **Data direct decisions.** Instructional designers make decisions based on data from many sources, including clients, job incumbents, the literature, work products, and error rates. When an exec says, “Fix those wretched webinars,” instructional designers look to narrow the problem by turning to data, such as evaluations, help desk logs, and participation logs.

- **Causes count.** Now that you know how the webinars are flawed, IDs want to know why. Is it that they don’t know how to design them? Deliver them? Is it that those tasked with the job don’t think it is worth doing or that doing it results in a hassle? Do the webinarians agree on the purpose for their effort? Once the causes are known, then a solution system can be tailored to the situation.

- **Instruction is good, but not all there is.** Wise instructional designers ask questions about cause in order to plan solution systems. They reserve instructional resources for where they can do the most good. Back to the webinar challenge. Do supervisors tout webinars for their marketing value, paying scant attention to the other possibilities? Training about webinars is only one way to enhance performance. Is everybody on the same page about the purposes for these offerings?

- **Outcomes are king.** While there is disagreement from constructivists about how very glorious outcomes are, most instructional designers subscribe to the importance of working with the end in mind. Those end statements clarify expectations for developers, clients, and participants, establish measures, and guide the selection and crafting of strategies and solutions.

- **Instructional designers work with others.** Cross-disciplinary teams, with content experts, programmers, artists, and clients, join instructional designers to create and install solution systems.

- **Instructional design is planful, not idiosyncratic.** At least, that’s the goal. That goal orientation and the ability to metric around it are why the military, government, and industry embraced instructional design during and since World War II.

Isn’t It Enough to Know HTML5?

I’ve heard that question several times. The answer is still no. For what, I’d say.

Many have declared the death of instructional design. They charge it with being too clunky and old, and failing to assist in leveraging the yummy technologies that surround us. Is instructional delivering the mental models we need today? It’s easy to find those who say nay.

That wouldn’t be me and it certainly isn’t Cecelia Munzenmaier, author of the report that follows. See for yourself as she shares her view of ID with you, from history to competencies to careers and opportunities.

—Allison Rossett

Author, *Fast Things First*
EXECUTIVE SUMMARY

From the numbers, the field of instructional design (ID) would appear to be healthy and growing. Projections of 10-year growth rates range from 14 to 19.5 percent.

Yet the more opportunities expand, the harder it becomes to answer a seemingly simple question: What should a competent instructional designer be able to do?

To find an answer, we looked first at the origins of instructional design. What problems were the first IDs trying to solve? How did instructional design become a discipline with its own theory and standards of practice?

We then asked: What do employers expect from instructional designers today? We analyzed 60 postings for instructional designer positions to identify the core knowledge and qualifications most desired in the current job market. We also reviewed Guild research about how rising employer expectations have changed the nature and scope of ID work.

In addition, we considered four competency models that attempt to define the skills needed by instructional designers. Of the four models, the standards of the International Bureau of Standards for Training, Performance and Instruction (ibstpi) come closest to matching employers’ expectations and to defining core knowledge, best practices, and ethical standards for the profession.

After exploring competencies from the theoretical perspective of the models and the pragmatic viewpoint of workplace trends, we considered a further question: How can novices and experienced IDs learn what they need to know to increase their competence? Options include:

- Using competency models to plan career development
- Enrolling in courses
- Following an emerging career path

Finally, we explore how competency models, expanding expectations, emerging technologies, and advances in the learning sciences might affect the future of the field and create new opportunities for those who want to begin or advance a career in instructional design.
INTRODUCTION

Looking at growth rates and salary ranges, the field of instructional design would appear to be healthy and growing. The Occupational Information Network (O*NET) projects an average growth rate of 8 to 14 percent from 2013 through 2022. Contract workers earning the median wage in 2013 made $24.14/hour. Salaried workers earning the median pay made $60,610 per year. (See the summary report at http://www.onetonline.org/link/summary/25-9031.01.)

Growth and salary estimates from CNN’s Best Jobs in America are even more optimistic. In 2013, CNN ranked Instructional Designer as 76th of 100 jobs with “big growth, great pay, and satisfying work.” The network cited the field’s 10-year job growth rate of 19.5 percent, its compensation rates (IDs with five-years’ experience typically earn $70,300 a year with the highest paid designers earning up to $101,000), and the job satisfaction and flexibility IDs enjoy. (See the full report at http://money.cnn.com/pf/best-jobs/?iid=BestJobs_sp_header.)

Yet the more opportunities expand, the harder it becomes to define what instructional designers do. Is an instructional designer someone who can keep up with all the latest technologies? Someone who can manage all phases of a learning project from needs assessment to completion? A professional who has the theoretical and practical knowledge to design effective instructional solutions?

Despite the optimistic growth forecasts, practitioners who want to build a career in instructional design need to be aware of these trends within the field.

- **Barriers to entry are high.** Instructional designers are often expected to produce everything from online courses to mobile learning. A master’s degree is not always required, but those with an advanced degree do have a competitive advantage.

- **Expectations keep increasing.** Each advance in technology expands the number of tools that IDs are expected to be familiar with and the number of platforms they are expected to publish to. Businesses that once expected designers to be familiar with adult learning principles and ADDIE are now asking for knowledge of human-performance technology and project-management experience as well. In addition, businesses expect to see a return on their investment in learning, so IDs need to know enough about business to show how their work contributes to an organization’s goals and earnings.

- **Career paths are changing.** Nearly 60 percent of employers in a variety of industries surveyed by McKinsey Global Institute in 2011 expected to use more part-time, temporary, and contingent workers for the foreseeable future. They believe contingent workers will give them more flexibility, but they also expect to use flexible work arrangements as a recruiting strategy. Increasing numbers of instructional designers will freelance or switch between full-time jobs and contract positions. Opportunities to work remotely will increase. In addition, practitioners will find that experience in fields such as project management or technical writing will qualify them to move into instructional-design positions.
Disciplines are converging. Instructional design is a way of thinking about problems, a framework based on theory and shared knowledge of best practice. Since the 1980s, both theory and practice have been increasingly influenced by other disciplines. About half of the 60 ads for instructional-design positions reviewed for this report required knowledge of human-performance technology. Many specified competencies in related disciplines, such as project management, business management, and organizational development. This blurring of the boundaries between the learning sciences creates new career pathways for instructional designers, but it also means that they must be prepared to show how they can contribute to performance solutions.

To understand how these trends are changing what’s expected of today’s instructional designers, it’s helpful to know how the field began and how it relates to, but differs from, human-performance technology and organization development.
WHAT ARE THE ROOTS OF INSTRUCTIONAL DESIGN?

During World War II, the US military had a problem. Large numbers of draftees had to be trained to operate unfamiliar equipment in stressful situations. The training had to be quick, results had to be consistent, and the ultimate assessment criterion was victory or defeat.

The military turned to psychologists and educators to develop training materials. As one of them, Robert Gagné, observed, the military needed to “transform farm boys into airplane mechanics in thirty days instead of two years.” Behaviorists like B. F. Skinner had the answer: break a task like cleaning a gun into small steps, put the steps in the right order, and provide practice and reinforcement until mastery is achieved.

The success of the behavioral approach led to ongoing research into objectives and programmed instruction (PI) during the 1950s and 60s. Military IDs like Robert Gagné and James Finn continued to do pioneering work in instructional design and instructional technology. Testing concepts pioneered to evaluate military training were further researched and developed. The needs of the military also drove the development of the ADDIE model.

The five steps of the ADDIE model are shown in Figure 1. Although it appears that the steps are carried out in sequence, evaluation is actually done at every stage of the process. In 1997, van Merriënboer identified ADDIE’s potential to serve as a “plug-and-play” model in various situations requiring instructional design. Since then, over 100 adaptations of ADDIE have been developed.

Figure 1: The ADDIE model
(Source: http://wikieducator.org/NIOS-OER-HOW_TO)
WHERE IS INSTRUCTIONAL DESIGN TODAY?

Like human-performance technology and organization development, instructional design began as an applied science. By the 1940s, distinct roles for individual designers and design teams had emerged. Researchers found new applications for the instructional and evaluation principles developed for the military. By the 1970s, graduate training in instructional design was available, three professional organizations had been founded, and the ADDIE model had been developed. Instructional design had matured enough to meet the six characteristics of a profession identified by James Finn in 1953:

- An intellectual technique
- An application of that technique
- A long period of training
- A professional association
- Enforced standards and a statement of ethics
- A body of intellectual theory that is developed by ongoing research

One consequence of ongoing research has been a blurring of the boundaries between ID and other disciplines that also have their roots in the 1940s. Since the 1980s, practitioners of instructional design, human performance technology, and organization development have increasingly recognized the complementary relationships among their disciplines. Each discipline has adopted terminology and tools from the other disciplines, and Dawn Aziz believes all three share a common purpose: “Positive change is the business that we are all in.”

Dawn Aziz has proposed a model that shows how practitioners of these three disciplines might work collaboratively to improve performance. Human performance technology (HPT) provides an overarching framework for analyzing performance problems. Once a performance gap has been identified, instructional designer and organizational development specialists could develop interventions. IDs would analyze and structure instructional interventions; organizational development (OD) specialists would handle noninstructional interventions. The evaluation criteria for each intervention would be based on HPT. In this collaborative model, “Each field brings a unique contribution to improving performance and has more to offer together than apart.”

Another example of the blurring boundaries between learning fields is the career of William Rothwell, who teaches in the department of learning and performance systems at The Pennsylvania State University and is recognized as an expert in both OD and ID. In addition, professional organizations are now offering cross-disciplinary certifications. The Association for Talent Development (ATD, formerly ASTD) has an HPI certificate program (http://www.astd.org/Education/Programs/Human-Performance-Improvement-Programs). ISPI offers certificates in Instructional Interventions and Organizational Design Interventions (http://www.ispi.org/content.aspx?id=490). At the moment, the question of which discipline is pre-eminent is not decided: some models define ID as a tool for performance improvement, but ID and OD have not ceded their claims to be independent disciplines with their own professional organizations and competency standards.
WHAT DO EMPLOYERS WANT FROM TODAY’S INSTRUCTIONAL DESIGNERS?

Given the current fluidity among disciplines, how can an aspiring instructional designer prepare for a career in ID? How can a practitioner with three-or-more years of experience advance? Three sources of guidance are the job descriptions in ads for instructional designers, the competency models of leading professional organizations, and the advice of those who have identified emerging career paths for instructional designers.

The content analysis of job descriptions is based on 60 advertisements for instructional designers placed on Indeed.com during June 2014. The jobs included 50 positions based in the United States and 10 in other countries, including India, the Philippine Islands, Saudi Arabia, Singapore, and the United Kingdom. The trends identified in the job analysis are consistent with MacLean and Scott’s 2011 analysis of instructional designer profiles reported in the British Journal of Educational Technology and Williams van Rooij’s survey of chief learning officers (CLOs) in 2012 in several key areas:

To advance, IDs need interpersonal skills. Instructional designers don’t work in isolation. Job descriptions analyzed frequently included working with subject-matter experts, leading project teams, and managing clients’ expectations, even if only one- or two-years’ experience was required. In situations where only one person handles instructional design, that individual’s job description is likely to include meeting the needs of internal clients. When IDs serve as team leads, interpersonal skills become “must have” traits. In Williams van Rooij’s survey of CLOs, skills such as listening to clients and team members, relating to clients, and holding people accountable ranked higher than ability to implement eLearning or meet deadlines.

Management skills are given high priority. This suggests that leadership skills will likely become increasingly important for instructional designers who want to advance beyond entry-level production jobs. In addition, jobs that required five or more years’ experience often included expectations like “direct ID teams” or “manage interdisciplinary teams.”

Different workplaces value different skills. Jobs in industry are more likely to require an understanding of how a project will advance an organization’s goals or contribute to its effectiveness. Some companies want to recruit candidates with experience managing a budget or controlling costs. Educational institutions generally expect less business background, but may require familiarity with a particular learning-management system or the ability to train faculty to use technology. Jobs in the military or health care tend to have the most specific technical requirements, such as “familiarity with Navy systems” or “experience with Medical Scientist Training Program (MSTP).”
Table 1 summarizes this most-desired skills research, while Figure 2 shows the results graphically.

<table>
<thead>
<tr>
<th>Most desired skills</th>
<th>Number of positions</th>
<th>Percentage of positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluate courses</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Manage projects</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Collaborate with SMEs</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>Conduct needs analysis</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Develop content</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Write objectives</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Manage courses</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Document/administer courses</td>
<td>5</td>
<td>8</td>
</tr>
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*Table 1: Skills most desired by managers advertising for instructional designers*

The range of knowledge expected of instructional designers is expanding. Many job descriptions included language related to performance improvement or organizational development. For example, job responsibilities were defined as “designing performance solutions” and “developing metrics to determine course effectiveness.” Some employers advertised for IDs with “business acumen.”
Table 2 suggests that employers considered knowledge of HPT more important than familiarity with the ADDIE model. These numbers are somewhat misleading. Thirteen employers identified knowledge of ADDIE as a basic qualification for the job they advertised. However, some expected knowledge of ISD, but did not specify a model. Others did not list ADDIE as a qualification, but framed their statements of job responsibilities to match the steps of the ADDIE model. Although ADDIE holds second place on the chart, knowledge of this model is a basic qualification for instructional designers.

### Core Knowledge Requirements

<table>
<thead>
<tr>
<th>Core Knowledge Requirements</th>
<th>Number of positions</th>
<th>Percentage of positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human performance technology</td>
<td>19</td>
<td>32</td>
</tr>
<tr>
<td>ADDIE model</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>Adult learning theory</td>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>Common learning management systems</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Instructional design</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Curriculum development methodologies</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Bloom’s taxonomy</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Kirkpatrick’s levels of evaluation</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Process mapping</td>
<td>1</td>
<td>2</td>
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</table>

*Table 2: Core knowledge expected of instructional designers*

**Project management skills are valuable.** Twenty-three percent of the ads specified project-management experience. One company advertised for a designer with at least five years’ experience who could “manage projects from initiation to completion.” Another desired a candidate with a master’s degree who could “lead and/or manage large project initiatives.”

Another implicit qualification for senior designers is knowledge of project management. Although project management rarely appears on the list of core knowledge requirements, project-management experience may be required. Job duties for senior ID positions might be defined as “manage course projects from inception to completion,” “establish milestones associated with specific projects; meet deadlines,” “participate in workflow design,” or “use project-management skills to integrate training plans with other work.” These results are consistent with a 2003 survey by Cox and Osguthorpe, who found that instructional designers spent about 23 percent of their time producing instruction and about 22 percent of their time managing or administering projects.

While table 2 summarizes this core-knowledge research, Figure 3 (on page 11) shows the results graphically.
One example of the increasing synergy between instructional design, performance improvement, and organizational development is the way Fiona Quigley, head of learning innovation at Logicearth Learning Services in Belfast, develops learning. “The first step is to understand the business problem and then to identify the best solutions,” she explained in the eLearning Guild report Degrees for eLearning Professionals: What’s Needed? She holds herself to “the expectation that anything I design will actually improve people and organizational performance.”

Project management (PM) and technical communication are two other fields now influencing—some would even say converging with—instructional design. Project management is increasingly recognized as a skill needed to implement the ADDIE model, as the number of employers advertising for that skill confirms. Yet the skills needed to manage schedules and control costs are not the same as those needed to design instructional content. As employers and practitioners become more aware of the complex skills needed to design effective instruction, new career paths will develop.

**Developing eLearning is an essential skill for instructional designers.** Many ads specified the ability to develop content for multiple platforms. Others required the ability to adapt existing content to interactive formats or to “publish online content to multiple platforms.”
Connie Malamud of the eLearning Coach thinks that “with the advent of rapid eLearning tools, the number of companies who have a team of one or two to design and develop eLearning is growing, and more people will be responsible for both design and production in the future.” She made this prediction in the 2012 eLearning Guild report Degrees for eLearning Professionals: What’s Needed?

The range of technical skills specified by employers in the job posting we analyzed supports this prediction, as shown in Table 3. A few employers asked only for familiarity with Microsoft Office, but a typical wish list for a candidate with three years’ experience would be “MS Office, Articulate, Captivate, Assima, Adobe Flash and/or similar, Adobe Photoshop, SnagIt and/or similar.”

<table>
<thead>
<tr>
<th>Software</th>
<th>Number of employers</th>
<th>Percentage of employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Office</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Authoring tools</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>Multimedia expertise (audio and video)</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Image editing</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Conferencing solutions (WebEx)</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>LMS</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Simulations/games</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

*Table 3: Programs employers want IDs to know (Source: The eLearning Guild)*
Today’s instructional designers are now expected to be conversant with and even expert in functions that were once typically performed by instructional developers and programmers. As Figure 4 shows, many instructional designers are now expected to use instructional authoring tools such as Captivate, Lectora, and Storyline; graphic tools such as Photoshop; audio and video tools such as Audacity and Adobe Premiere; other software tools; and even sometimes do programming using tools such as HTML, JavaScript, and PHP to produce finished eLearning.

The path of Nancy Reyes’s career, summarized in the most recent *Guild* authoring-tools research report, *eLearning Authoring Tools 2013: What We’re Using, What We Want*, is becoming more typical. In the past, “Like most instructional designers, she built the storyboards but others did the development. Over time, it became more efficient and cheaper to take over development, so eventually she became a developer as well as the designer.”

*Figure 4: Programs employers want IDs to know*
As we get closer to 2015, companies seem to increasingly expect that instructional designers can build what they design. The Guild's research report What's Changing in Your (Work) World? asked respondents to compare the variety of their work tasks now to five years ago. Almost all respondents agreed that their jobs have increased in variety of work tasks, and nearly 71 percent described the range as “greater” or “much greater.” One comment from that report is especially revealing:

Five years ago, I was an instructional designer responsible for only the front end process: writing the learning objectives, drafting the design document for the course, writing the script, and selecting images from stock photography sites or internal image libraries. Today I use rapid eLearning development tools and generally create the entire course from start to finish. It is a lot more satisfying to have this level of creative control over the project, but it is also harder.

While the expanding scope of ID jobs places new demands on designers, it also creates opportunities for those who develop expertise in emerging technologies. The e-Learning/Instructional Technology Specialist role defined by ibstpi later in this report is just one example.
HOW DO COMPETENCY MODELS ALIGN WITH EMPLOYERS’ EXPECTATIONS?

Position descriptions define what employers expect from instructional designers. Competency models define the standards professionals are expected to meet. A competency model identifies the knowledge, skills, abilities, and behaviors needed to design instruction and organizes these essential competencies into a framework that defines standards of professional performance.

Four Major Competency Models

We considered four models developed by influential professional organizations for evaluation in this report:

The standards of the Association for Educational Communication & Technology (AECT) are used to accredit college programs in instructional design and technology. Knowledge of these standards would be helpful for people who are trying to choose an academic program that matches their career goals, educators and school librarians who are building a portfolio of technology projects, and those looking for performance-based ways to demonstrate competency in using instructional technology. The complete standards document is available from the AECT website at http://www.aect.org/standards/initstand.html.

The competency model of the Association for Talent Development (ATD) was recently updated to reflect the trend toward integration of instruction throughout learning organizations. As a result of this integration, instructional designers frequently work across several areas of expertise (AOEs). Therefore, ATD’s competency framework is designed to be “a broad model applicable across a number of AOEs,” including instructional design, training delivery, learning technologies, evaluating learning impact, and managing learning programs.

This model could help IDs and design managers working in a corporate environment show how their work contributes to the organization. A description of the model can be found at http://www.astd.org/Certification/Competency-Model. A job aid to help practitioners use the model to create a professional development plan is available at http://www.astd.org/Certification/Competency-Model/job-aids.

The standards developed by the International Society for Performance Improvement (ISPI) may be considered the equivalent of a competency model. IDs may find the standards valuable because performance-improvement standards have influenced all of the competency models discussed here.

ID practitioners are now expected to be familiar with basic principles of HPT (see Table 4 on page 35), as are graduates of ID programs. Klein and Fox identified the most important HPT skill needed by instructional designers as the ability to “distinguish between performance problems requiring instructional solutions and those requiring non-instructional solutions.” Knowledge of HPT also gives instructional designers new tools for conducting needs assessment, promoting transfer, and designing performance support. “CPT Performance Standards” are available at http://www.ispi.org/pl/cpt/CPT-Performance-Standards.pdf.
Perspectives
TODAY’S INSTRUCTIONAL DESIGNER: COMPETENCIES AND CAREERS

The competencies developed by the International Board of Standards for Training, Performance, and Instruction (Ibstpi) are the most comprehensive and specific of the models considered. The first standards published for the industry, they are also the most widely accepted of the existing competency models. The standards have been adopted by a global community of users listed on the organization’s website (http://ibstpi.org/users-community/). Applications of the standards include redesigning graduate programs and officer training in the United States, developing a corporate university at Sanofi-China, and providing the framework for numerous research studies. ibstpi competencies have been internationally validated, as described by Tiffany A. Koszalka and her coauthors in Instructional Design Competencies: The Standards (4th ed.)

The Most Useful Model: ibstpi’s Instructional Designer Competency Model

ibstpi is a not-for-profit corporation with up to 15 international board members. Its mission is to “develop, validate, and promote implementation of international standards to advance training, instruction, learning, and performance improvement for individuals and organizations.”

With AECT, ATD, and ISPI, ibstpi was part of the Joint Certification Task Force that began working on instructional design standards in 1977. ibstpi became an independent body in 1983 to avoid any conflicts of interest with sponsoring organizations.

To date, ibstpi has published competency sets for evaluators, instructors, online learners, training managers, and instructional designers. Its standards for instructional designers, first published in 1986, were updated and revalidated in 2001 and 2012.

ibstpi defines instructional designers as “persons who demonstrate instructional design competencies on the job regardless of their job title or training.”

A competency is “a knowledge, skill, or attitude that enables one to effectively perform the activities of a given occupation or function to the standards expected in employment.”

ibstpi’s competencies are intended to be both idealistic and practical. They describe the work performed by instructional designers who practice in diverse settings. Because “the work environment often shapes design practice,” ibstpi sought input from IDs practicing in business, in education, or as independent consultants. IDs employed by government, the military, and not-for-profit organizations also helped research and validate the competencies.

In addition to developing benchmarks based on current practice, ibstpi also intended “to establish standards for expert behavior that will advance the field.” As a result, individuals can use the competencies as norms to assess their professional capabilities; managers can evaluate employees’ performance and identify training needs; academic departments can assess how well their programs cover core knowledge and prepare students to meet employers’ needs; and organizations can adopt a set of validated expectations to plan and assess enterprise-wide learning projects.
Competencies are organized into five domains, or clusters of related competencies:

- Professional Foundations
- Planning and Analysis
- Design and Development
- Evaluation and Implementation
- Management

Within each domain, competencies are categorized as essential (for all instructional designers), advanced (for experienced instructional designers), and managerial (for managers of ID functions or teams). (See Appendix 1.) The managerial level was introduced with the 2012 revision of the standards. Managers are expected to be familiar with essential and advanced instructional-design competencies and to possess the skills needed to manage an organization’s ID function.

Each of the 22 competencies is supported by performance statements that describe behavior that demonstrates the competency. For example, Competency 20 in the management domain is “Apply business skills to manage the instructional design function.” Skills specified in the performance statements include aligning ID with the organization’s strategic plans, developing a business case for ID, and obtaining stakeholder support.

Figure 5 highlights some of the unique features of the ibstpi model.

*Figure 5: The generic IBSTPI competency development model
(Source: Koszalka, Russ-Eft, and Reiser, *Instructional Designer Competencies: The Standards*)
Job Roles

The 2012 competency standards address the increasing trend toward specialization in the ID field. ipstpi has identified four job roles often filled by instructional designers:

1. **ID specialist**, who designs, develops, and implements instructional solutions and who has expertise in designing learning experiences and environments

2. **Analyst/Evaluator**, who has advanced skills in performance analysis, needs assessment, and assessment and evaluation

3. **ID manager**, who can manage an organization’s ID function and both internal and external designers and project team members

4. **eLearning/Instructional Technology Specialist**, who applies new technology skills to instructional solutions

Each role is associated with clusters of competencies tailored to that role, which are described by Koszalka, Russ-Eft, and Reiser in *Instructional Designer Competencies: The Standards*.

Ethical Standards

Of all the models reviewed, ibstpi places the greatest emphasis on ethics. ibstpi competencies do more than define the skills needed by instructional designers; they also form a code of professional ethics. Competency 5, considered essential, is “Identify and respond to ethical, legal, and political implications of design in the workplace.” For example, an instructional designer conducting a needs analysis should know how to collect reliable data and how to protect the confidentiality of that data. An ID developing content should seek permission before using copyrighted material.

Knowledge Base

Another competency highlights ibstpi’s belief that instructional design is a discipline with its own knowledge base. Many ID practitioners come from fields such as computer science, engineering, and media production that provide no training in how to design and develop instruction. As long as they are demonstrating design competencies on the job, ibstpi considers these individuals to be instructional designers. However, an advanced designer must be able to meet competency #2: “Apply research and theory to the discipline of instructional design.”

The expectation that advanced practitioners are familiar with “instructional design research, theory, and practice literature” reflects ibstpi’s position that instructional design is just more than an area of expertise or one among several converging learning sciences; it is an independent field with its own professional standards, its own theory, and its own body of research and best practice.

Dr. Tiffany A. Koszalka, lead author of *Instructional Design Competencies: The Standards* (4th ed.), explained why ibstpi emphasizes the need for practitioners to know the theoretical foundations of their discipline: “Our perspective, informed by evidence from a global population of TPI professionals, is that the design foundations of ID practice and process are critical to
ID professionals. ID models, learning theories, data collection and analysis processes, needs assessment and evaluation tools and techniques, and procedures are the ‘technologies’ of this field.”

Levels of Competence

ibstpi’s three-level classification system makes it possible to align competences with the stages of an instructional design career:

- **essential**—basic core competencies that novice instructional designers should have
- **advanced**—competencies that experienced instructional designers need
- **managerial**—competencies that design managers need

For example, the first competency in the professional foundations domain is “Communicate effectively in visual, oral, and written form.” This essential competency is supported by ten performance statements. “Use active listening skills” is classified as essential. “Use effective negotiation and conflict resolution skills” is considered advanced.

According to Dr. Koszalka, “The organization of the competencies is ‘designed’. It is presented systematically, clearly, and simply to help novices develop understanding of the job of the instructional designer and allow the most experienced IDs to identify areas that they may have neglected or want to fully develop or may be new to the field since they started their career.”

These classifications have been used internationally by:

- Individual designers to self-assess against a benchmark of competence
- Educators to identify instruction and assessments that develop competence in instructional designers
- Those who hire or manage instructional designers to describe required skills, assess performance, and identify professional development opportunities
- Managers of ID projects to create work plans and assign instructional designers to tasks based on their strengths
- Certifying bodies to develop competency-based standards

Case studies are available in *Instructional Design Competencies: The Standards*, and ibstpi conducts ongoing research to validate the competencies. Currently a study of how academic programs are applying the ID standards is underway, and an international study of implementation projects is in the planning stages.

In addition, ibstpi directors are active in their fields and are available to collaborate on research or implementation. The board also welcomes reports of experiences in applying the ID competencies. Currently the organization is developing new ways to collaborate with researchers. Anyone interested in collaborating with ibstpi can contact a director at http://ibstpi.org/contact-us/.
Emphasis on Performance Improvement

ibstpi defines itself as “represent[ing] those audiences in which performance counts,” such as education, medicine, and industry. In addition, ibstpi believes that the best result of instructional designers’ efforts should no longer be defined as a product or as knowledge acquisition, but as “individual performance improvement and organizational change.”

Because of this shift in perspective, the current competencies have been broadened to cover knowledge of “concepts, techniques, and theories of other disciplines” that can be applied to “learning and performance improvement.” This is consistent with the emerging consensus that ID, HPT, and OD have much to learn from each other. It also expands the range of contributions instructional designers can make to an organization, because only 10 to 20 percent of the solutions to a performance problem are likely to require instruction.
HOW CAN INSTRUCTIONAL DESIGNERS LEARN WHAT EMPLOYERS WANT THEM TO KNOW?

With competing competency models, new technologies, and pressure to prove the value the learning function brings to an organization, how can instructional designers develop the skills they need to be marketable?

Use Competency Models for Professional Development

One strategy is to choose a competency model to use as a benchmark of an individual designer’s skills. AECT’s model could be used to assess knowledge of instructional technology and higher education. ISPI’s standards identify tools that competent instructional designers should use to conduct front-end analysis, choose appropriate interventions, and evaluate effectiveness. ibstpi competencies are divided into categories appropriate to various stages of an instructional design career: novices should focus on mastering essential competencies, while experienced IDs might want to specialize in advanced or managerial competencies needed for the position they desire. ATD members can use the ATD Career Navigator to assess their current skills and to identify proficiencies they need to master in order to perform competently in their current or desired position.

ATD and ibstpi also provide guidance on how managers and HR departments can use their competencies to recruit, assess, and provide professional development for designers. Rothwell, Arneson, and Naughton discuss “Applying the ASTD Competency Model” and “Action Planning for Organizations.” Koszalka, Russ-Eft, and Reiser have a chapter on “Instructional Designer Competencies in Practice” that also covers how academics can use ibstpi’s competence model.

Enroll in Courses

Another path to advancement is taking courses in instructional design. In a 2012 eLearning Guild report, Degrees for eLearning Professionals: What’s Needed?, author Patti Shank concluded, “To get ahead and get the really good jobs, a wider skills set of foundational skills is needed, and the easiest way to gain those is through a Master’s degree in educational/instructional technology. There are few Bachelor’s programs in educational/instructional technology, so a master’s is how people get the credentials in this field.”

That said, while jobs in the field generally require a bachelor’s degree, most hiring managers do not insist that instructional designers have master’s degrees. Of the 60 job ads analyzed, only three specified that candidates have a master’s degree. Two required a master’s or equivalent experience. Three “preferred” a master’s. In contrast, 32 job ads specified the years of experience hiring managers wanted candidates to have.

These findings are consistent with Saul Carliner’s observation that technical skills are often picked up by experience. Dr. Carliner is an associate professor, Provost’s Fellow for e-Learning, and director of the education doctoral program at Concordia University in Montreal. Adapting a model first
proposed by Georgia State University professor Verna Willis, Carliner describes a bachelor’s degree as a “doer’s degree” that prepares an instructional designer to make an individual contribution. A master’s gives graduates a broader perspective and prepares them for a leadership role. Only those who intend to teach, research, or consult in the field need a PhD or EdD degree.

Is the investment in formal coursework worth it? The Guild report *Degrees for eLearning Professionals: What’s Needed* found that 49 percent of those who completed master’s degrees reported an increase in salary. Others gained increased flexibility to move to a desired position or to change job responsibilities. Seventeen percent attributed their promotion to completion of a master’s degree. The report provides “A Simple Cost/Benefit Analysis for Getting a Graduate Degree” in Appendix 2. Another resource is Saul Carliner’s “How Should You Continue Your Learning Journey in Technical Communication? A Self-Assessment,” which has a chart that would help practitioners in any learning-related field determine whether a certificate or degree program would best fit their needs and circumstances. ATD and ISPI offer certificate programs in instructional design. The eLearning Guild provides professional development in their Guild Academy programs.

What field should an ID who seeks a master’s degree study? Shank found that “not all [eLearning managers] that cared about master’s degrees cared that they were in eLearning-related areas.” One reason may be that skills and core knowledge listed in Tables 1 and 2 are interdisciplinary, including competencies from instructional design and technology, project management, and performance improvement. In addition, the industry trend is to define instructional designers by their roles, not by what they produce. “Marketing communicators are increasingly producing user guides,” observed Carliner. “Trainers are producing wizards and marketing materials. Technical communicators are producing tutorials and pre-sales literature.” As a result, IDs who have relevant experience can move from one communication-based field to another.

**Follow an Emerging Career Path**

eLearning is largely responsible for the changing and expanding roles of instructional designers, according to MacLean and Scott. The increasing focus on ID roles means that those who have both technical skills and relevant experience can take interdisciplinary career paths.

- **ID to ID project manager:** Traditionally, implementation has been considered a step of the ADDIE model. However, implementing complex, enterprise-wide projects requires specialized project-management knowledge. Williams van Rooij has described a career path to instructional project management in the professional-services sector that includes instructional-design experience and formal project-management knowledge.

- **Technical communicator to information designer:** Information designers must work beyond their discipline to find the best solution to a complex information problem, according to Saul Carliner. He proposes a role-based career ladder: production assistant, information developer, expert information developer, information designer, and project manager. Although Carliner writes specifically about technical communication, this career ladder is applicable to other communication-based disciplines.
“Indirect path” with formal education: Consultant Julie Dirksen believes her indirect path to instructional design is typical. After earning a certificate in teaching English as a foreign language, she became a corporate trainer. She enjoyed developing courses and discovered she wanted to know more about web-based training and usability. To pursue those interests, she first took a few courses and eventually earned a master’s degree. Dirksen is now an independent consultant and author of Design for How People Learn.

“Accidental” path: Cammy Bean thought she’d be a writer or a teacher when she grew up. However, she “stumbled into” instructional design because of her aptitude for writing. Her ability to explain an interface to customer-service reps earned her a position as a classroom trainer. She began writing a weekly newsletter that featured job aids. She was then hired as an instructional designer by a multimedia production company, even though she “had never heard of an instructional designer.” To date, she has not earned a degree in instructional design. If she does decide to pursue an advanced degree, it would probably be in a learning-related field like cognitive science. Bean summarizes her career path in the Learning Solutions Magazine article “The Accidental Instructional Designer” and in a book with the same title.
HOW CAN TODAY’S INSTRUCTIONAL DESIGNERS PREPARE FOR TOMORROW?

This question assumes that there will be a tomorrow for the field of instructional design. Will it converge with project management, organizational development, or technical communication, as various authors have suggested? Will it become a subdomain of performance improvement?

Certainly the trends that led to the latest revisions of the four major competency models are likely to continue. Technology will keep evolving, businesses will expect return on their learning investment, and scientists will develop new insight into how humans learn.

Like HPT and OD, ID began as an applied science with its roots in psychology and systems theory. Each discipline developed models, refined practice into a disciplinary toolkit, and defined competencies. Each borrowed from other disciplines, to the point that scholars began to write about “convergence” between different fields. Dawn Aziz has proposed a cross-disciplinary model in which instructional design and organization development are both methods of intervening to improve performance. (See the “Where Is Instructional Design Today?” section.)

Aziz notes that “the lines between fields continue to blur.” This is consistent with the current trend toward interdisciplinary courses and degrees in higher education. In the short term, this trend may take performance-related disciplines away from their theoretical foundations. As Richard Clark observed, HPT tends to “adopt [ideas from other disciplines] without translating them into performance-technology constructs.” However, the natural competition between emerging fields, described by Jerry Jacobs in A Defense of Disciplines, encourages them to refine their theories and validate their practices. In the long term, Aziz believes disciplines related to instruction and human performance will form “strategic partnerships” in which each brings their own contribution to a learning solution.

Where Is the Field of Instructional Design Going?

Instructional design has several characteristics of a profession: an established technique, standards of best practice, ongoing research, formal training, professional associations, defined competencies and codes of ethics, and a job market for practitioners.

Nevertheless, various authors have recently described the field as “emerging,” “evolving,” “adolescent,” “fractured,” “ill-defined,” and “in the middle of an identity crisis.” How might this crisis be resolved? Instructional design could move in three different directions:

1. Maintain its status as an independent discipline. As ibstpi notes, “The term ‘instructional designer’ seems to have become a generic phrase that now lends itself to a broad range of meanings, and yet, it is a definitive profession with a specific scope and focus.”

2. Converge with performance improvement. HPT competencies are already recognized as part of the core knowledge expected of instructional designers, and developing instruction could be considered a performance-improvement intervention.
3. Become part of a new interdisciplinary learning science. While this is possible, the author of *A Defense of Disciplines*, Jerry Jacobs, notes that the current competition among learning disciplines is normal and serves to define their boundaries. When disciplines do merge, specializations within the discipline soon develop.

An alternative to redefining the discipline is redefining the role of the instructional designer. Saul Carliner notes that “traditional names such as ‘instructional design’ and ‘technical communication’ no longer adequately position the two disciplines for the work they seek.” He proposes that practitioners redefine themselves with broader titles such as “information or content developers, designers, or architects.” Sims and Koszalka also propose alternative titles, including “interactive architect” and “learning environment architect.” These titles are in keeping with the current trend to define IDs by their roles instead of their disciplinary training or their products.

**How Can You Build a Career in This Rapidly Changing Field?**

In the end, the future of instructional design may be decided by how instructional designers adapt to their changing job roles and emerging technology. As Peter Drucker said, “It is the practitioner rather than the scholar who develops the discipline.” As individual designers build their careers, they will discover new ways of implementing learning solutions and forge new best practices. They will put research on how humans learn into practice. Professional organizations will refine those discoveries into competencies and ethical standards. Ultimately, it is practice, informed by validated competency models and professional standards, that will advance instructional design as a profession and determine whether it retains its value as a separate discipline.

In the interim, how should instructional designers cope with an emerging and converging field? No matter what direction the field moves, you can stay marketable.

- **Remember your roots.** Three key elements of instructional design, according to a survey by Cox and Osguthorpe, are that it is 1) a systematic way of making decisions, 2) based on learning goals 3) that includes repeated rounds of testing and revision.

- **Develop competencies.** Whether the job title is instructional designer, information architect, or chief wizard of a technology not yet invented, employers will need people with the skills to use emerging technologies to build learning products and systems.

- **Know your worth.** Be prepared to show how your knowledge and skills contribute to the organization.

- **Play well with others.** No one designer can do it all. Expectations that you will collaborate with SMEs, team members, cross-disciplinary teams, clients, and stakeholders increase with each upward move in your career.

- **Think beyond your discipline.** Instructional design, performance improvement, and organizational development are all applied sciences that are borrowing theories and tools from each other. As learning solutions become more complex, IDs will also need project-management skills to implement them.
Think beyond your title. Your role is to find and implement the best way for people to learn what they need to know. Your title may become obsolete; the need for learning-design skills will not. As Allison Rossett noted in the preface, “Many have declared the death of instructional design. They charge it with being too clunky and old, and failing to assist in leveraging the yummy technologies that surround us.” Yet practitioners continue to find new ways to help people learn, and the field continues to develop as a profession. In the next five years, IDs can expect that competency models will have been revised and that titles and job descriptions will have expanded to fit new career paths. Those agree with Rossett that instructional design “most often is what you want and need it to be” will find new challenges to keep them growing and new ways to enhance learning. Without question, the field is in the throes of transformation. The vital question, however, is not “Is instruction design dying?” but “Where does ID go from here?”
MAJOR TAKEAWAYS

Instructional design has come a long way from its beginnings in programmed instruction. Its knowledge base now includes models of the instructional design process, defined and validated competencies, and techniques from related disciplines. In the future, instructional designers may have new titles, but the need for people who can develop ways for people to learn efficiently will remain.

1. The field of instructional design is changing rapidly and will continue to change because of advancing technologies, pressure to show return on learning investments, and expanding roles of instructional designers.

2. The core knowledge employers expect of instructional designers now includes concepts and techniques from the related learning disciplines of performance improvement, project management, and organization development.

3. Instructional designers are increasingly being defined by their roles. These roles are expanding to the point where some suggest that titles like “information designer” or “learning environment architect” are more appropriate.

4. Several organizations have proposed competency models for instructional designers. Several have value to IDs in specialized fields of practice. AECT’s standards apply to higher education; ATD’s competencies are relevant to corporate practice; familiarity with ISPI’s standards exposes IDs to a range of noninstructional interventions.

5. Of all the models, ibstpi’s competencies are the most useful for instructional designers because they are comprehensive, based on instructional-design theory and the best of current practice, widely accepted in the industry, and internationally validated.

6. ibstpi’s ID competency model can be used by
   - Individual practitioners to self-assess skills and guide their professional development
   - ID or training managers and administrators to manage personnel and projects, set standards of excellence, plan professional development opportunities, and establish the value of ID to their organization
   - Academics to develop and evaluate programs, assess student outcomes, and identify research needs
   - Associations to assess needs and develop standards for professional development and certification

7. Confusing as the rapid changes in the field may be, emerging career paths are creating new opportunities for instructional designers and design managers.

8. Some expect that the discipline of instructional design will merge with other applied learning sciences. However, people with specialized skills in designing, implementing, and managing learning will continue to be marketable.
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News Articles

Research Reports


Additional Resources

Books


News Articles


Smith, Kennon, Jason Hessing, and Barbara A. Bichelmeyer. “Graduate Students’ Perceptions and Expectations of Instructional Design and Technology.” TechTrends, Vol. 50, No. 4. August 2006.


Other


Papers


Websites


APPENDIX 1: TIMELINE OF ADVANCES IN INSTRUCTIONAL DESIGN

Roots

1933 Ralph Tyler’s Eight-Year Study specifies behavioral objectives and introduces formative evaluation.

1940s The US Army and Navy pioneer the use of training films.

New roles of instructional technologist and instructional development team emerge.

1941 James Finn defines the field of instructional technology.

1943 American Society for Training and Development (now ATD) is founded.

1944 Kurt Lewin pioneers group dynamics at MIT.

1950s B. F. Skinner applies lessons from military instruction to programmed instruction and investigates learning scientifically.

1953 James Finn defines the field of instructional technology.

1956 Benjamin Bloom publishes *Taxonomy of Educational Objectives*.

1962 Robert Mager lays foundations for performance improvement with *Preparing Instructional Objectives*.

Robert Glaser uses term *instructional system*, which includes criterion-referenced evaluation.

1965 Robert Gagné introduces task analysis of learning tasks.

Lev Vygotsky’s constructivist theories are published in the West, which encourages interactive design.

1966 Jerome Bruner describes a “theory of learning.”

1968 Biologist Ludwig von Bertalanffy proposes general-systems theory, which influences IDs to develop systems in which interrelated parts work together toward an instructional goal.

1969 Problem-based learning is introduced by McMaster University.

1970s Computer-based training (CBT) becomes popular.

Graduate programs in instructional design are established.

Over 40 models of systems design are developed.

Cognitive psychology influences instructional designers to focus on mental processes as well as behavior.

1973 David McClelland writes “Testing for Competence Rather Than for Intelligence.”
1975  ADDIE model is published.  
Kirkpatrick publishes four steps of evaluation.  
1976  Roger Kaufman introduces needs assessment.  
1978  Dick and Carey model, most popular ISD model in education, is published.  

Branches  
1980s  Systems theory and cognitive psychology become important influences; situated learning focuses on social and cultural conditions of learning.  
1982  Gilbert introduces the term performance technology.  
1985  Robert Gagné applies what he learned in the military to Conditions of Learning.  
1990s  Human performance technology movement and constructivists such as Bruner, Jonassen, and Vygotsky influence instructional design.  
Electronic performance-support and knowledge-management systems are developed.  
Articles on relationships between performance improvement and instructional design, and training and organizational development begin to appear.  
1990  Tripp and Bichelmeyer introduce rapid prototyping in education.  
1991  David Jonassen advocates developing realistic learning environments.  
1997  Van Merriënboer notes ADDIE’s potential as a “plug-and-play” model.  
Revised Bloom’s 3-D model allows IDs to check that objectives include performance and that desired performance aligns to objectives and assessment.  
2000s  Web-based training and distance learning become increasingly popular.  
eLearning becomes an essential competency for instructional design.  
2000  AECT publishes performance-based standards.  
2001  Organizational-development competencies are updated.  
2004  ISPI publishes the Performance Improvement Model.  
2012  ibstpi publishes Instructional Designer Competencies.  
2013  ASTD releases new Competency Model.  

(Sources: Compiled from Carliner, 2001; Chen, 2011; Clark, 2014; Coffman, 2001; Galbraith and Kidwai, n.d.; “History of Instructional Design,” n.d.; “A Hypertext History of Instructional Design,” 2003; Jang, 2008; Larson and Lockee, 2004; McGovern and Bray, 2011; Miles, 2003; Requiñuth, 2013; Reiser, 2001; and Screnci, 2009)
## APPENDIX 2: COMPARISON OF INSTRUCTIONAL DESIGN TO HUMAN PERFORMANCE TECHNOLOGY AND ORGANIZATION DESIGN

<table>
<thead>
<tr>
<th>Discipline</th>
<th>ID</th>
<th>HPT</th>
<th>OD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>According to <em>The Instructional Design Knowledge Base</em>, “ID is the science and art of creating detailed specifications for the development, evaluation, and maintenance of situations which facilitate knowledge and performance.”</td>
<td>“A systematic process that produces worthy results and adds value while taking a systemic view and partnering with stakeholders to identify and remove barriers to individual and organizational performance” (ISPI membership brochure, 2007)</td>
<td>Richard Beckhard’s classic definition was published in 1969: “Organization Development is an effort (1) planned, (2) organization-wide, and (3) managed from the top, to (4) increase organization effectiveness and health through (5) planned interventions in the organizations ‘processes,’ using behavioral-science knowledge.”</td>
</tr>
<tr>
<td>Key question(s)</td>
<td>How can this material be designed to best meet the needs of the learner and the organization?</td>
<td>What is the gap between desired and actual performance? What is the gap’s root cause?</td>
<td>How can we improve the organization’s effectiveness? What is the best way to manage the needed change?</td>
</tr>
<tr>
<td>Focus</td>
<td>Instruction</td>
<td>Performance (rather than training)</td>
<td>Process</td>
</tr>
<tr>
<td>Level of intervention</td>
<td>Manager; learners</td>
<td>Any level, from organization to individual learner</td>
<td>Management</td>
</tr>
<tr>
<td>Seminal thinkers</td>
<td>Bruner; Dick &amp; Carey; Finn; Gagné; Mager</td>
<td>Gilbert, Rummler</td>
<td>Lewin, Rummler</td>
</tr>
<tr>
<td>Influential</td>
<td>Psychology: behaviorism, constructivism, social learning and cognitivism; systems theory</td>
<td>Systems theory; behavioral psychology (evidence-based)</td>
<td>Multiple disciplines related to “human systems,” including applied behavioral and physical sciences (data-driven)</td>
</tr>
<tr>
<td>theories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tools</td>
<td>Design models; instructional technology</td>
<td>Performance models, coaching, feedback</td>
<td>Action research, TQM, succession planning, coaching</td>
</tr>
<tr>
<td>Evaluation</td>
<td>How well did the training achieve its goals?</td>
<td>To what extent has the desired performance been achieved?</td>
<td>How do changes work in practice? How healthy is organizational culture?</td>
</tr>
<tr>
<td></td>
<td>How did the training add value for the organization?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 4: Comparison of instructional design to human performance technology and organization development (Compiled from Aziz, 2013; ISPI, 2012; Jang, 2008; Pershing, Lee, and Cheng, 2008; “Principles of OD Practice,” 2011; and “What Is OD?” 2011)*

ABOUT THE AUTHOR

Cecelia Munzenmaier is a freelance instructional writer and college English teacher. Her master’s degree in adult learning and organizational performance is from Drake University. Cecelia is the author of The eLearning Guild’s Perspectives report Bloom’s Taxonomy: What’s Old Is New Again. Her books on writing include Write More: Stress Less and Write to Be Understood.