

The Subject Matter Expert's Role in Training and Instructional Design



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Defining what a subject matter expert is in the modern era of instructional design requires moving past traditional ideas about SMEs. We can promote real progress by engaging and incorporating this important asset into our training family. Recognizing that SMEs exist in all disciplines—and that a content expert is the same as a graphic artist or programmer working on a project—opens unlimited avenues of cooperation and communication. The training professional who embraces this emerging concept reflects the new generation of practice that lifts instructional design to a new level of efficiency and standards.

The single most misunderstood and mismanaged asset in training and curriculum development is the SME. From time immemorial they have proved an enigma to generations of training professionals. Like Professor Moriarty was to Sherlock Holmes, they may prove to be a constant riddle to our best instincts, yet they are irreplaceable in our work. They make us better trainers and designers in areas no other resource can even remotely hope to influence, while still nudging us toward a higher level of achievement in our broad role.

Some of my most satisfying work in training has been the countless hours spent in the company of really bright and energetic content professionals working on a project. Their energy and enthusiasm has buoyed me in times of doubt and supported me in times of less than brilliant decisions. They have also proved to be my biggest challenge, as their level of achievement and knowledge demand my best, and anything less is obvious to all involved. Through it all, you quickly learn that SMEs are no different from you. As a professional, you have certain expectations and admire certain qualities in others you work with. So it is with content experts, and so it has been for generations of trainers.

SMEs are certainly not a new phenomenon—far from it. For countless centuries, experts in every aspect of life and work have shared their knowledge with others in an effort to enlighten the less informed on every imaginable topic. From the earliest voices forging oral histories and telling stories, to the digital storytelling resident in social media, the passing of knowledge has been an admired and cherished endeavor from the beginning of recorded history.

Beginning roughly 32,000 years ago, the first recorded training consisted of cave drawings that depicted which animals were safe to eat. In this way, tribe members could consult the walls of the caves to learn from those who came before how to safely feed themselves. This passing of knowledge from an SME to a learner has changed little in the intervening tens of thousands of years.

When you think about it, it would be difficult to learn anything at all without someone sharing what they have learned with you and others. To paraphrase Isaac Newton, we all stand on the shoulders of giants when we gain new knowledge. All of this knowledge is passed to us by someone who has learned and shared that information to those who followed. It wasn't until recently that we had a name for this knowledge sharer in the training world: SMEs.

Defining SMEs

There is no one single definition or type of SME. While most in our work of designing training are content-related SMEs, others are process-related SMEs, like writers and programmers.

SME is the universal designation for any individual who is considered to be an expert in one or more areas of endeavor. This expertise can be in content areas such as math or science, or a professional field such as law or accounting. An SME can also be a key non-content member of a training or instructional design team.

When we describe a content SME, or a technical subject matter expert (TSME), the term can accurately apply to a building trades crafts-worker with 40 years of experience hanging iron atop the world's highest buildings, or a village elder with no formal education sharing centuries-old herbal treatments for common ailments. The 14-year-old next door is an SME in the latest musical genre, and a 92-year-old World War II veteran will serve as an expert on the Battle of Stalingrad, which happened in 1942. In all cases, the SME provides specific, detailed information that is not considered to be common knowledge among a general population. No two SMEs look the same or sound alike, and there may be no other defining element besides their related subject matter knowledge.

SMEs earn this standing in countless ways depending on the circumstances surrounding their knowledge. Some have years of experience in a field and have written articles or books, and may teach or offer seminars in a specific field. Others may be recognized by their peers as the "best of the best" and earn the SME title by virtue of their reputation. A minority of people are self-proclaimed SMEs and offer little in the way of credentialing to substantiate their expertise. It is also sometimes a subjective art to label someone (or yourself) as an SME. There is no group called the International Order of Subject Matter Experts that crowns the worthy few with this credential.

For our purposes in training, a TSME has generally passed the associated litmus tests within their field. This is often based on academic achievement, licensure and certification, publishing in the field, or some other formal credentialing process. There should always be an experience component to ensure that even the best educational credentialing is supported by years of actual practice in a field. In some professions, the yearly in-service training required to continue licensure or credentialing supports SME status.

The title of SME should not be given without credentials that match the practice among professionals in a specific area. Many times these are also the generally accepted entry points for professional practice. In academic circles, this is generally a terminal degree. In law, it is a license to practice law and perhaps a JD degree. In medicine, it is a terminal degree and board certification. In the building trades, this can be journey-person status and having many years of experience as an apprenticeship instructor. The examples go on and really have no limit. It is important that there is some tangible, reliable, and documented evidence to support “expert” standing.

The genius factor

There are notable exceptions to these common standards and accepted guidelines. Without question, we occasionally encounter uniquely gifted individuals who represent the outliers in this labeling process. Musical prodigies like Mozart or Chopin join Enrico Fermi in physics, Bill Gates in software design, and Steve Jobs at Apple, all of whom unquestionably defied accepted definitions of “expert” at some point early in their careers. To apply a strict, credential-based standard to any of these geniuses would be laughable, and yet there are still some who argue the “line in the sand” standard must always be supported. Be open to some reasonable interpretation of this definition in your work.

The irony

As trainers and instructional designers, the irony in all of this is that we are also SMEs. We are SMEs in our chosen profession in the same way that our colleagues in other fields are content experts in theirs. It is the context that changes when we work with other content experts.

Rather than look at SMEs utilized during the curriculum design process as outsiders, it is a much more productive and mutually beneficial standard of practice to think of everyone on a project as an expert SME. In this way, we all share the same professional space and remove any traces of boundaries or artificial barriers that affect our work and eventual success.

Why SMEs are important to ISD

Often the term SME is tossed into a conversation as if it is just one single entity or function. As we have already discussed, it isn't, and the more you know about SMEs, the more important they become to your success. Best practice in ISD demands that SMEs take their rightful place as part of the design family with equal expectations and responsibilities as other people in the process.

The rapid maturation of instructional design over the last decade has curiously allowed a vacuum in the appreciation and integration of SMEs in the design team. This may be linked to a heightened focus on the key process elements of training and instructional design, whether represented by the ADDIE model elements of analysis, design, development, implementation, and evaluation—or other priorities, like online learning and social media.

This unenlightened view of SMEs is not intentional, but is nonetheless detrimental, since it minimizes the potential benefits of incorporating this asset where most useful. In a professional practice that strives on thoroughness and attention to detail, SMEs often languish as a disassociated element in the practice of ISD. In truth, they are often as essential to success as any other factor in our work.

SMEs in training occupations

It is difficult to find anyone associated with training and curriculum design who was not first involved in a non-training field, and by default, most likely an SME in something other than training and curriculum design. The same can be said for almost everyone holding the title of trainer, teacher, facilitator, professor, or various other coaching and mentoring roles. From the earliest oral traditions in education and training, skills and knowledge were passed from the most proficient to those following them.

Almost all academic programs teaching instructional design and learning and performance are offered to people who have experience in something other than training and education, and are now advancing their careers by learning more about the finer points of designing and implementing training. The ASTD Certified Professional in Learning and Performance (CPLP) certification is a perfect example of the transitional nature of skills in training from SMEs who work in a variety of professions to becoming a learning and performance SME. The University of Maryland Baltimore County master's degree and graduate certificate programs in instructional systems development do not have any requirements for prior experience or a specific undergraduate degree.

It is this path from SME to training role that has the potential to create uncertainty, since there are assumptions that someone who is good in one area of endeavor is also good in another. This questionable nexus between an individual's content expertise and their more general training or instructional design knowledge invites conflicted role perceptions and opens the door to the possibility of dysfunctional committees, groups, and projects.

SMEs generally work and fit best in the role of an SME. To expect more of them is to invite a variety of potentially negative consequences. At the same time, when an SME attempts to expand their role into an area that interferes with established non-SME roles, it may create equally negative results. It is the balance of role and expectation that creates the best and most productive fit in this environment. So going beyond the simplistic one-size-fits-all definition for SMEs works to our advantage.

SMEs are more than just content experts

The commonly accepted definition of the term SME is universally linked to an individual who has specific content knowledge in a defined field. We have SMEs in every imaginable content area, from alligators to zebras. This definition has served us well for thousands of years, but it is now time to move past this legacy view of SMEs in the field of training and instructional design.

As we have already learned, the term and classification of SME includes every professional partner in our training enterprise. The programmer, the writer, the teacher/ trainer, and the manager are also SMEs in ways that matter in our work. Identifying and working with all of these specific types of SMEs provides endless possibilities for improved products and processes.

Note: This article is excerpted from *SMEs From the Ground Up* by Chuck Hodell.

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Chuck Hodell has been writing, practicing, and teaching instructional systems design for many years. His books and articles have earned him the title of "The Man Who Wrote the Book on ISD." His bestselling four editions of *ISD From the Ground Up* and his *SMEs From the Ground Up* books are used internationally both in academic settings and in the practice of instructional design. He is also the author of many ATD Infolines, *TD* magazine articles, Best on ISD and is an *ASTD Handbook* contributor. He has appeared in ATD videos and participated in numerous online and ATD international conferences, including teaching preconference programs in ISD.

Hodell has designed thousands of training programs for the White House, major corporations, nonprofits, numerous apprenticeship programs as well as assisting clients in Egypt, Africa, Europe, and other locations around the world.

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