How Much Do *You* Know About Learning Technologies?

A recent *Training* magazine survey found that participants have a firm grasp on purchasing learning technologies used for courses and similar e- and m-learning projects. But grasp of technologies used to manage various aspects of the training function is more mixed.

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In its heyday, the tagline of one of the larger off-price retailers was: "An educated consumer is the best consumer." Given that trainers are in the education business, how "educated" are we about one of our most significant purchases: technologies for learning?

The *Training* team wanted to find out. So we conducted our first survey about technology from the consumer's perspective. We looked at two groups of technologies:

1. Ones used for courses and similar e- and m-learning projects —authoring tools, social media, and apps.

2. Ones used to manage various aspects of the Training function, including learning management systems, course management systems, learning content management systems, content management systems, and talent management systems.

To explore knowledge of technologies, we asked participants to match the technologies with their definitions, their ability to differentiate products and services in a given category, and to name some of the key products in a given category. To assess skills, we asked about their awareness of technologies and prices for each technology. To assess experience, we asked people about their role in the purchasing process for a given technology.

In general, we found that the 300-plus participants in the study have a firm grasp on purchasing in the first category of technologies: ones used for courses and similar e- and m-learning projects. Grasp of the second category—technologies used to manage various aspects of the Training function—is more mixed. The

following sections present the results. A companion article in the next issue of *Training* will provide broader insights into the roles of trainers in the process of purchasing technology.

GROUP 1: TECHNOLOGIES USED FOR COURSES AND E- AND M-LEARNING

This first group of technologies is used for courses and similar e- and m-learning projects and includes authoring tools, social media, and apps (applications that run on mobile devices such as smartphones and tablets).

Prices for authoring tools are generally the highest of the group; individual licenses for some products can run as high as $2,000 (though most are much lower). Prices for many social media applications are the lowest: Many are free, although site licenses for private applications can run into the thousands of dollars. Individual licenses for apps are typically low, either free or less than $10, although some specialized apps can cost more, especially customized apps.

In general, awareness of the technologies of authoring tools, social media, and apps is high, though comfort with—and participation in—the purchasing process is lower.

AUTHORING TOOLS

Most participants (76.2 percent) correctly responded that an authoring tool is "software used to create online courses." A slightly smaller majority—70.5 percent—feels comfortable using and defining the term with groups outside of Training. See Tables 1 and 2 for a summary of participants' ability to correctly identify the definitions of technologies and comfort in using the terms with groups outside of Training.

Participants primarily play an advisory role (61.2 percent) in the decision to purchase authoring tools, either serving as a primary advisor to the decision-maker (35.1 percent) or

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TABLE 1: IDENTIFYING CORRECT TECHNOLOGY DEFINITION

Technology	Percentage correctly choosing the definition
Technologies Used for Courses and Similar E- and M-Learning Projects	
Authoring Tools	76.2
Social Media	92.5
Apps	95.5
Technologies Used to Manage Aspects of the Training Function	
Learning Management Systems	76.0
Course Management Systems	17.5
Learning Content Management Systems	33.6
Content Management Systems	60.4
Talent Management Systems	94.2

TABLE 2: COMFORT USING TERMS

Technology	I am NOT familiar with the term	I understand the term for my own purposes	I feel comfortable using the term in conversations with peers in Training but NOT outside	I feel comfortable using and defining the term with groups outside of Training
Technologies Used for Courses and Similar E- and M-Learning Projects				
Authoring Tools	4.4	8.4	16.8	70.5
Social Media	2.0	6.0	10.4	83.2
Apps	0.7	5.5	10.9	83.2
Technologies Used to Manage Aspects of the Training Function				
Learning Management Systems	2.0	3.3	9.0	85.6
Course Management Systems	13.7	19.1	22.5	44.6
Learning Content Management Systems	10.4	13.7	21.1	54.7
Content Management Systems	10.4	19.1	20.5	50.0
Talent Management Systems	16.1	17.8	18.8	47.1

offering suggestions on a purchase (26.1 percent). See Table 3.

Nearly half, 46.7 percent, can easily differentiate products and services among vendors of authoring tools. Nearly a third, 31.9 percent, can differentiate some, but not all, of the products and services among vendors in this category. See Table 4 on p. 126.

In terms of awareness of authoring tool brands, two dominate this category: Articulate (publisher of both Presenter and Storyline), with more than 70 mentions, and Adobe (publish-

TABLE 3: ROLE IN THE PURCHASING DECISION

Technology	I make the final purchasing decision	I am a primary advisor to the decision-maker	I have offered suggestions on a purchase	I have NOT played a role in such a purchase
Technologies Used for Courses and Similar E- and M-Learning Projects				
Authoring Tools	23.0	35.1	26.1	15.8
Social Media	49.5	11.0	18.9	20.6
Apps	14.1	22.7	23.0	40.2
Technologies Used to Manage Aspects of the Training Function				
Learning Management Systems	11.7	38.8	26.5	23.0
Course Management Systems	10.6	23.0	15.8	50.5
Learning Content Management Systems	10.3	26.8	17.9	45.0
Content Management Systems	9.6	22.7	18.5	49.1
Talent Management Systems	7.1	15.1	17.5	58.2

er of Captivate), with more than 30 mentions. Also receiving several mentions were Camtasia and Lectora.

Comfort level with purchasing authoring tools is somewhat higher than other technology products. Some 50.4 percent feel they sufficiently know the technology and the prices to knowledgeably make a purchase (see Table 5 on p. 126).

SOCIAL MEDIA

Nearly 93 percent of participants correctly determined that social media refers to software used to easily share content and communicate with people and provide status updates. And 83.2 percent are comfortable using and defining the term with groups outside of Training. However, fewer than one-third of participants—29 percent—feel they can easily differentiate products and services.

Survey Methodology

Several e-mail messages were sent to members of the *Training* magazine community to invite their participation in the study during a five-week period between November and early December 2014.

To reflect the needs of different stakeholders, we offered three versions of the survey: one for Training practitioners and managers, one for vendors (who sell the technologies and related services), and one for full-time instructors and researchers.

We received 526 responses, of which 322 were usable: 11 from academics, 17 from vendors, and the rest from training practitioners and managers. The responses reported here are from the third and largest group.

Learning Technologies

TABLE 4: DIFFERENTIATING AMONG PRODUCTS AND SERVICES

Technology	I easily differentiate products and services from among vendors in this category	I can differentiate SOME of the products and services among vendors, but NOT all in this category	I have difficulty distinguishing differences among products and services from different vendors in this category	I have NOT participated in a purchase in this category
Technologies Used for Courses and Similar E- and M-Learning Projects				
Authoring Tools	46.7	31.9	3.3	18.1
Social Media	41.9	29.0	25.2	15.2
Apps	29.0	23.3	5.2	42.4
Technologies Used to Manage Aspects of the Training Function				
Learning Management Systems	37.6	31.9	7.1	23.3
Course Management Systems	9.5	25.7	16.7	48.1
Learning Content Management Systems	14.8	32.8	14.8	37.6
Content Management Systems	12.8	24.8	15.7	46.7
Talent Management Systems	14.8	19.5	11.4	54.3

TABLE 5: COMFORT WITH KNOWLEDGE OF TECHNOLOGY AND PRICES

Technology	I feel that I sufficiently know the technology AND the prices to knowledgeably make a purchase	I feel that I know the technology but NOT the prices, which affects my ability to knowledgeably make a purchase	I feel that I know the prices but NOT the technology, which affects my ability to knowledgeably make a purchase	I feel unaware of BOTH the technology and the prices, and cannot knowledgeably make a purchase	I do NOT make this purchase
Technologies Used to Manage Aspects of the Training Function					
Authoring Tools	50.4	19.3	4.4	5.5	20.4
Social Media	24.4	20.0	5.5	6.9	43.1
Apps	27.7	20.8	4.0	9.4	37.9
Technologies Used to Manage Aspects of the Training Function					
Learning Management Systems	32.8	30.3	3.6	5.8	27.4
Course Management Systems	13.1	28.5	3.3	14.9	41.2
Learning Content Management Systems	16.8	33.9	2.2	1.2	35.4
Content Management Systems	12.8	29.6	2.9	13.1	41.6
Talent Management Systems	9.5	26.6	2.5	10.6	50.7

Three brand names dominate in social media. With more than 70 mentions, Facebook had twice as many mentions as the next two brands, LinkedIn and Twitter, with just over 30 mentions each. No other brand scored more than three mentions.

Of those making the purchase, only about a quarter feel they sufficiently know the technology and its prices to knowledgeably make a purchase.

APPS

When asked to define "app," the overwhelming majority of participants responding (95.5 percent) correctly identified it as the name for software programs that run on mobile devices. A slightly lower percentage of participants, 83.2 percent, feel comfortable using and defining the term with colleagues who work outside of Training.

Slightly fewer than a third feel they can easily differentiate among products and services among vendors in this category. No app received more than 10 mentions. Those receiving multiple mentions are general purpose apps such as iTunes and iBooks that were not designed specifically for training.

Participants primarily play a consultative role (45.7 percent) in purchasing apps for training. Slightly less than one-quarter of participants feel they sufficiently know the technology and its prices to knowledgeably make a purchase.

GROUP 2: TECHNOLOGIES USED TO MANAGE ASPECTS OF THE TRAINING FUNCTION

This second category of technologies is used to manage various aspects of the Training function, including enrollments, student records, classrooms, and content that will be reused and tailored to the unique needs of learners. Specific technologies include learning management systems, course management systems, learning content management systems, content management systems, and talent management systems. Further complicating this group of technologies is the fact that many systems in one of these categories have capabilities that overlap other categories.

Prices for this group of technologies generally are significantly higher than for the first group, usually starting near $10,000 and, for a large organization, running in excess of $1 million. Even when open-source (free) software is available, it requires complex (and costly) customization and technical support.

In general, comfort with the purchasing process for all categories of technology in this group is mixed.

LEARNING MANAGEMENT SYSTEMS

The majority of participants, 76 percent, properly defined a learning management system as a system that automates the