

**Fixing the User Experience of the
Centers for Disease Control and Prevention Website
(Fixing the UX of the CDC Website) Deliverable #2**

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Deliverable: Learners, Contextual, and Task Analysis

For this part of the project you will conduct and document the learners, contextual, and task analysis. Your document must include all of the following elements:

- See assignment samples as a reference (if needed)
 - Due date: Feb. 15 by 9:50pm
 - Submit via the Blackboard submission link
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Learners Analysis - <https://www.cdc.gov/learning/local/pdf/elrngesstls.pdf>

General characteristics

The CDC uses the following fundamental questions to form the basis of an instructional analysis. Analysis of the learner is always the first step in developing any training. Answers to the following questions will drive the planning, identification of learning objectives, and design of a learning product.

1. Who is the audience? What characteristics identify the audience? Where do they work? How many will take the course? What is their level of education? How comfortable are they with using a computer?

2. Who will provide content? How will you ensure that content is accurate and complete?
3. Are subject matter and desired outcomes suited to instruction through e-learning?
4. What is the learner's' motivation for taking?
5. this training? Will continuing education (CE) be available upon completion? Will the course meet a job requirement?
6. What instructional approach is best to train this audience in the skills to be learned?
7. What specifically does the audience need to learn? Is it available from other sources?
8. What is the audience expected to do after completing the training? How will learners improve their job performance in a measurable way?

In an effort to bridge the fundamentals of instructional design and E-Learning, the CDC uses SMART (**S**pecific | **M**easurable | **A**ction-oriented (attainable) | **R**easonable (relevant) | **T**ime-bound) (Doran 1981) characteristics in developing the learning objectives for the CDC's E-Learning Essentials.

Interactivity is the primary distinction between e-learning and other media, such as Web pages, that are more suited for informational purposes. By applying interactive strategies that engage learners and stimulate recall of prior knowledge. The learner's response to stimuli, caused by interacting with the content. learners become active participants, triggering recall and improving understanding and knowledge retention. Because the interactivity of the material one must consider the use of Section 508 of the Rehabilitation Act of 1973. As amended (29 U.S.C. § 794 (d)) In 1998, Congress amended the **Rehabilitation Act of 1973** to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities.”(<https://www.section508.gov/content/learn/laws-and-policies>)

The Training Finder Real-time Affiliate Integrated Network, or TRAIN, is the nation's premier learning resource for professionals who protect the public's health. TRAIN is comprised of the national www.train.org site and participating TRAIN affiliate sites. Affiliate sites are managed by many state public health agencies, academic partners, and others. As TRAIN grows, it serves a larger portion of the U.S. public health workforce.

Learners can use TRAIN to:

- Search or browse the nationwide database for on-site or distance learning courses
- Sign up for e-mails about new courses
- Create a personal learning record of competency-based training
- Provide and view feedback about courses listed on the site
- Register online for many courses
- Earn CEUs (often at no cost)
- Course Providers can use TRAIN to:

- Efficiently publicize courses to thousands of TRAIN users through multiple websites – enter course information once (not dozens of times) and it is automatically visible to all participating TRAIN sites
- Manage online registration and student rosters
- Collect feedback from learners online
- Post course materials and discussion topics

TRAIN is a project of the Public Health Foundation with a grant from The Robert Wood Johnson Foundation and funding from participating states and the Centers for Disease Control and Prevention.

The TRAIN Learning Network is comprised of state and federal TRAIN Affiliates that operate branded TRAIN web portals, have administrative access to the TRAIN platform, and work together to coordinate and share workforce training efforts. Government agencies, academic institutions, and other nationally-recognized and respected organizations that post content to the TRAIN Learning Network to disseminate and track their trainings to the health workforce. Identified TRAIN learners from all US states and territories, as well as other 177 countries.

Most users of the Centers for Disease Control and Prevention (CDC) website do not necessarily only identify as medical professionals. The site is geared towards a variety of users which include more than one million public health, healthcare, and preparedness professionals from all US states and territories, as well as 177 other countries are registered users on TRAIN. Anyone can register as a learner on TRAIN at no cost. In 2015 alone, TRAIN learners completed more than 820,000 courses. More than 80% of learner course registrations resulted in course completions. *Source:*

http://www.phf.org/programs/TRAIN/Pages/TRAIN_Learner_Benefits.aspx

Anyone can register as a learner on TRAIN at no cost and access thousands of openly available course offerings, many which are free.

TRAIN Benefits Learners...

-  Learners can register on TRAIN at no cost
-  Thousands of courses available in multiple formats
-  Curricula and continuing education available on a variety of topics

Specific Characteristics

The precise learner group for TRAIN may include:

- Epidemiologists
- Public health officials
- Health educators
- Environmental health professional
- Administrators / Managers
- Social workers
- Nurses, physicians, other clinicians
- Emergency responders
- Military personnel
- Mental health providers
- Government and community leaders

Contextual Analysis

Orienting Context

The TRAIN Learning Network is comprised of the following three major components: [TRAIN Affiliates](#), [TRAIN Course Providers](#), and [TRAIN Learners](#). There are currently [29 TRAIN affiliate agencies](#), including 26 state health and preparedness agencies and 3 federal agencies — the Centers for Disease Control and Prevention (CDC), Medical Reserve Corps (MRC), and Veterans Health Administration (VHA). These agencies work together to coordinate and share workforce trainings and operate branded portals on the TRAIN LMS platform. The TRAIN Course Providers include government agencies, academic institutions, professional associations, non-profits, and other institutions post content to TRAIN. The PHF TRAIN team, as well as, TRAIN affiliate agencies, work closely with these course providers to build a catalog of thousands of online courses and other training content that is openly available to learners through TRAIN. More than 97% of these trainings are free. Many offer CEs and are aligned with the [Core Competencies for Public Health Professionals](#) as well as other nationally recognized standards.

The CDC offers continuing education (CE) courses through the CDC Train site. Find courses that offer continuing education(CE). Select the tab located midway through the page, and access a course from any of the following categories. By each category, I have listed the number of class offerings to date.

- Courses - 794
- Free Courses – 317
- AAVSB/RACE – 317
- ACPE-Contact Hours – 317
- CEU/CE – 243
- CHES – 125
- CME – 117
- CNE Contact Hours - 2
- MCHES – 775

Instructional Context

Connecting the public and healthcare workforce the CDC Learning Connection offers quality training opportunities and educational tools developed by CSC, CDC partners, and other federal agencies. CDC's Learning Connection involves public health and health care

professional around the world through social media messaging and a monthly e-newsletter. The Training Connections website offers training opportunities that line up with current public health measures. The CDC offers access to the training opportunities by using [CDC TRAIN](#).

CDC TRAIN is a gateway into the TRAIN Learning Network. The TRAIN Learning Network is a national learning network that provides training opportunities to more than one million professionals who protect and improve public's health. TRAIN is powered by the Public Health Foundation (PHF), and TRAIN Learning Network which brings together agencies and organizations in the public health, healthcare, and preparedness sectors to circulate, track, and share trainings for the health workforce in a centralized training platform.

Once a course is selected, filter by searching by courses or training plans. Once courses are selected a drop-down menu appears which offers the following:

- Format
- Common Filters
- Subject
- Scheduled Date
- Competencies and Capabilities
- Average Course Rating
- Show Advanced Options
 - Credit Type | Audience | Distance

Some of the related articles for training include Zika (15 records), Ebola Virus (23 records), Opioid Issues (31 records), professional associations, and non-profit organizations in the public health, healthcare, and preparedness sectors to build a catalog of thousands of online courses and other training content that is openly available through TRAIN.

Approved TRAIN course providers can:

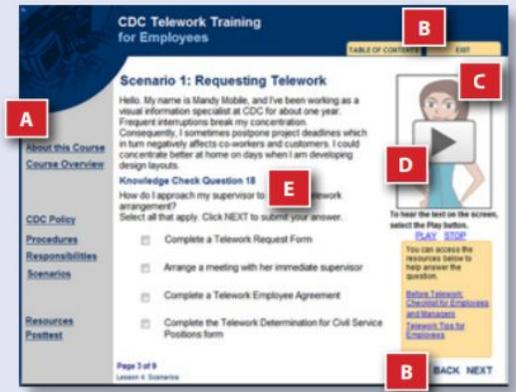
- Post course information (online and onsite)
- Generate and manage course rosters
- Communicate with course registrants
- Assign and deliver continuing education credits
- Develop and deliver evaluations to measure learner knowledge
- Award certificates to attendees
- Access data, including:
 - Enrollment and participation in courses
 - Pre- and post-assessment and evaluation data
 - Learner job roles and work settings
 - Demographic information
 - Learner geographic and professional information

Benefits of posting content to TRAIN include:

- Greater visibility to a large audience of learners
- TRAIN Affiliate agencies can use and track your organization's trainings for their staff
- Ability to contribute to public health training content

Figure 3
Examples of interactivities from
CDC Telework Training

- A** Hyperlinks
- B** Navigation
- C** Graphics and Animation
- D** Audio and video controls
- E** Exercises and assessments



Transfer Context

After completing the training learners will be able to apply their new knowledge, skills, and ability base in a variety of areas. Some areas will include knowledge statements learned which will refer to an organized body of information usually of a factual or procedural nature which, if applied directly to the performance of a function, makes adequate performance on the job possible. For example, a social worker may use this knowledge to protect vulnerable children and support families in need of assistance.

Skill statements refer to the proficient manual, verbal or mental manipulation of data or things. These skills will be readily measured by a performance test where quantity and quality of performance are tested.

Ability statements refer to the power to perform an observable activity at the present time. This means that abilities have been evidenced through activities or behaviors that are similar to those required on the job, e.g., ability to plan and organize work. Abilities are different from aptitudes. Aptitudes are only the potential for performing the activity.

Task Analysis

Fixing the user experience for the Centers for Disease Control and Prevention Website.
 Identifying the minimum systems requirements for the TRAIN Website.

- Minimum Systems Requirements
- Courses launched from TRAIN may have additional requirements. Please review the course description for each course for any additional system requirements.
- Minimum System Requirements:
- Web Browser Minimum Requirements:
 - Internet Explorer 9
 - Chrome Version 12
- Javascript enabled
- Cookies enabled
- Recommended System Specifications/Software:

- Internet Explorer 9
- Chrome Auto Update Enabled (Latest Version)
- Microsoft Office or compatible applications (Office 2000 or later recommended).
- Adobe Reader
- Users running other browsers could potentially experience problems when using TRAIN or accessing courses posted to TRAIN. Run the Environment Checker for additional troubleshooting
- Please note that some courses posted to TRAIN may require the following software:
- Adobe Flash
- Java
- ActiveX

Locate and Evaluate Information

- Locate information efficiently and effectively
- Evaluate information critically and competently
- Review information obtained for application
- Recognize the gaps in existing information
- Take steps to eliminate the gaps

Use and Manage Information

- Users are currently using the site/completing research using the CEC website
- Managing the flow of information, developing timeline interactions
- Walk through a series of periods and events
- Organize/reorganize information as appropriate to get a better understanding
- Highlight key milestones in a schedule
- Explain steps in sequence

Analyze the Information

- Understand how and why the TRAIN learning network was constructed, and for what purpose
- Examine how individuals interpret the information, how points of views are included or excluded and how the TRAIN learning network can influence beliefs and behaviors

Formative Evaluation In the context of e-learning, a formative evaluation is but one quality assurance check before a product is released to learners. Formative evaluation ensures that problems that can hinder learning are detected and corrected. Although some formative evaluations can be simple and informal, they can be quite effective (Clark 2004).

A formative evaluation is conducted during the design and development of a product. Because a formative evaluation is intended to improve a product before it is delivered, a mockup or prototype can be used to represent ideas before they are incorporated into a finished product. If a paper prototype is first used, as the product comes closer to completion, the developer might conduct more than one formative evaluation to gain input. Peer reviews, pilot tests, and usability tests are all formative evaluation methods that require only about five persons to complete. Those persons might include co-workers who review specific aspects of a

course, such as instructional strategies, usability, functionality, and the overall learning experience.

References

Anderson, Lorin W. and Krathwohl, David R., eds. 2001. A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives: Complete Edition. New York: Longman.

<https://cdc.train.org/DesktopShell.aspx>

<https://www.cdc.gov/>

