SERIES PURPOSE:
The purpose of the technology-based instructional design occupation is to develop, program, research, implement, plan & design technology-based learning activities.

At the full performance level, incumbents develop, program, research, implement, plan & design technology-based learning activities & user tests.

At the supervisory level, incumbents supervise lower-level technology based instructional design staff & manage design & development of technology based training.

GLOSSARY:
Technology Based Training includes any training that is delivered using electronic means, electronic performance support systems (e.g., wizards, on-line help systems, online documentation & other electronic tools users utilize on-the-job), training websites &/or other interactive multimedia instructional events.

Performance Needs Analysis is an in-depth, thorough review of a functional or organizational group, researching what the desired behaviors & outcomes are for that group or function, what the current behaviors & outcomes are & identifying differences between desired & actual states & then delving into fundamental causes for the differences. Once fundamental, underlying causes for performance gaps are identified, possible solutions are developed, analyzed, costed & prioritized & a plan for resolving the causes is developed, tested, & implemented. A performance needs analyst may recommend changes in procedures, policies, authority levels, feedback systems, reinforcement methods, documentation, software, calculators, other tools of the job, physical layout of a work area, training & many other areas that impact work performance.

When training is part of the recommended solution to a performance gap, this is the first step in instructional design, providing information critical to developing appropriate training including detailed information on precise skills or knowledge to be trained, timing of training, information on people who need this training (e.g., educational levels; existing skill levels; learner's willingness to adapt), availability of learners & resources available for training. Training needs analysis is the process of researching & identifying only the training needs in a particular function or area.

Electronic Performance Support Systems (EPSS) use technology to integrate knowledge & learning experiences with software tools to improve business performance by (a) bringing individuals up to speed in their work as quickly as possible & with the minimum of support from other people & (b) providing an electronic infrastructure to enable organizational learning. It integrates software tools, knowledge & learning experiences. A few examples of EPSS (e.g., computer wizards; on-line help systems; shared online knowledge bases); an EPSS might recognize that an employee had not performed a particular complex online task in the last 6 months & offer that employee several assistance options (e.g., online tutorial; step-by-step instructions for the task; a skill check to verify that task procedures are remembered accurately; a link to law, policy & procedures for the task; a link to an on-line bulletin board where others discuss this task; a link to an expert on the task).

NOTE:
This classification series is intended for positions involved in all phases of technology based training that includes research, development, planning & instructional design, programming & implementation.

Positions that utilize CD-ROM, DVD, interactive video, computer or web-based training, web sites &/or personal computer applications to enhance instruction and learner involvement should be classified in the Trainer series, 6465.

Positions that design electronic forms for inclusion in computer or web based training should be classified as Electronic Design Coordinator, 52661.
CLASS TITLE: Technology-Based Training Developer
CLASS NUMBER: 64691
PAY RANGE: 34
EFFECTIVE: 10/20/2013

CLASS CONCEPT:
The full performance level class works under general direction & requires considerable knowledge of technology-based learning interventions, programming, adult learning, verbal & written communication & project management in order to develop, program, research, implement, plan & design technology-based learning activities & user tests & independently analyze training & non-training performance needs, make recommendations for performance improvements & independently assess effectiveness of training.

CLASS TITLE: Technology-Based Instructional Design Supervisor
CLASS NUMBER: 64695
PAY RANGE: 15
EFFECTIVE: 10/20/2013

CLASS CONCEPT:
The supervisory level class works under general direction & requires thorough knowledge of technology based instructional design & supervisory principles & techniques in order to supervise lower-level technology based instructional design staff & manage design & development of technology based training.
### JOB DUTIES IN ORDER OF IMPORTANCE:

(These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Develops, programs, researches, implements, plans & designs technology-based learning activities & user tests & independently analyzes training & non-training performance needs, makes recommendations for performance improvements & independently assesses effectiveness of training, designs & develops overall architecture, navigability, usability & functionality for computer programs or web pages that deliver training, authors, programs &/or writes code for technology-based training, creates & integrates graphics, text & interactive multi-media in learning materials, recommends strategy for each learning intervention by selecting best combination of training methods to include media, technology & consideration of cost analyses, researches technology-based training field to use & recommend most appropriate types of technology-based training & to select vendors, create websites for instructional & reference purposes, identifies subject matter experts, customers, key managers & appropriate vendors & observes &/or interviews them to develop information for use in instructional design; writes training objectives, edits training & related materials, selects appropriate measurements for performance & training effectiveness assessments, uses statistics to design measurements & analyze results, designs surveys & analyzes & summarizes results & makes recommendations to improve performance, evaluates & measures courses to validate instructional design & methods & to determine success, utilizes participant feedback & revises instructional materials as necessary & creates on-line & other learner assessments.

Implements instructional interventions (e.g., computer-based training; web-based training; on-line testing & assessment; electronic discussion groups; EPSS, on-the-job training, classroom); installs, links, coordinates & maintains technology-based training (e.g., uses electronic software & hardware; diagnoses & helps resolve problems learners have with technology-based training; coordinates with technical staff); manages learning environment for learner success; uses training equipment & media to implement instruction; gives & receives feedback from learners & prepares instructional sites.

Designs, develops, tests, implements & maintains electronic performance support systems, (e.g., wizards; on-line help systems; on-line documentation) using advanced software tools &/or application systems (e.g., Articulate; Captivate; CourseMill; Lectora; MOODLE).

Attends workshops & seminars & professional meetings & reviews books & publications for professional development; makes minor repairs/adjustments to & troubleshoots equipment & software used for designing, developing & delivering training; prepares & maintains records & files; prepares correspondence & reports; answers inquiries regarding training policies & procedures; answers inquiries about using & creating technology-based training; disseminates information relative to training being offered; responds to inquiries & complaints by telephone, in writing or electronically; schedules classes & technology-based training.

### MAJOR WORKER CHARACTERISTICS:

Knowledge of performance analysis; instructional design principles; written communication for training & online reading; statistics; survey design; agency standards, policies & procedures*; foundations of learning, transfer, motivation & evaluation; public speaking or effective communication techniques; adult learning principles. Skill in use of & understanding of information technology & visual design of computer applications; operation of personal computer; programming & use of software &/or application systems (e.g., html; Frontpage; Dreamweaver; Authorware; Microsoft Word; Outlook; Photoshop; Javascript; dhtml; cascading style sheets; Fireworks; Flash Articulate; Captivate; CourseMill; Lectora; MOODLE); research, design, development, testing, implementation, evaluation & editing technology-based training & instructional materials; operation of video conferencing & audiovisual equipment & other technology used for technology-based & classroom-based training purposes; design & implementation of user acceptance testing & gathering feedback to ensure instruction meets performance needs & organizational objectives; training delivery & development. Ability to gather, collate & classify information about data, people or things; work alone on most tasks; work on a team on some tasks with people of varying skill & educational levels; deliver training & interact with variety of employees at different educational levels; handle routine & sensitive contact with departmental employees, supervisors & managers; deal with some abstract but mostly concrete variables; write & deliver training information.

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<th>CLASS TITLE</th>
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<tr>
<td>Technology-Based Training Developer</td>
<td>64691</td>
<td>14</td>
<td>10/20/2013</td>
<td>34</td>
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</table>
MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
Completion of undergraduate core program in education to include student teaching or 2 yrs. trg. or 2 yrs. exp. in assessing, researching, designing, developing, evaluating & delivering instruction & associated materials for adult learners; 2 yrs. trg. or 2 yrs. exp. in use of software &/or application systems to create & deliver technology-based training (e.g., Authorware; Articulate; Captivate; CourseMill; Dreamweaver; Lectora; MOODLE); 18 mos. trg. or 18 mos. exp. using Microsoft Word or Wordperfect; 1 yr. trg. or 1 yr. exp. creating web pages using programming languages (e.g., html; dhtml; xml; Javascript; CSS); 6 mos. trg. or 6 mos. exp. in web art manipulation programs (e.g., Fireworks; Shockwave; Flash; Photoshop).

-Or equivalent of Minimum Class Qualifications for Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
Not applicable.

UNUSUAL WORKING CONDITIONS:
May require travel that may include overnight stay; if travel is required, must be able to provide own transportation.
JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Supervises lower-level technology based instructional design staff & manages design & development of technology based training, oversees architecture & use of software for technology based training; coordinates project management for technology based training projects & develops technology based training policies & procedures (e.g., design, testing, implementation, hyperlink & website flow standards).

Researches technology based training; performs quality control &/or user acceptance testing & completes & manages instructional design for technology based training; manages training for trainers on technology based training; purchases technology based training-related products.

Acts as departmental liaison with information technology managers & staff, training department managers & trainers, webmasters, subject matter experts, vendors, customers, partners &/or agency training developers.

MAJOR WORKER CHARACTERISTICS:
Knowledge of business administration; computer science; web structure & design. Skill in operations of personal computer & web design. Ability to use research methods in gathering data; develop complex reports & position papers; administers user acceptance testing.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:
Completion of undergraduate core program in computer science; instructional design; education or business administration; 3 yrs. trg. or 3 yrs. exp. in supervisory principals & techniques; 3 yrs. trg. or 3 yrs. exp. in employee training & development; 2 yrs. trg. or 2 yrs. exp. in development of computer-based or web-based training to include use of web development tools (e.g., Authorware; Articulate; Captivate; CourseMill; Lectora; Moodle; Frontpage; Dreamweaver & programming in html).

-Or equivalent of Minimum Class Qualifications for Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:
Not applicable.

UNUSUAL WORKING CONDITIONS:
Not applicable.