

TechPROFILE:

School Web Developer

Design, develop, and manage a web presence.

PANEL MEMBERS

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ABOUT THIS TechPROFILE

This TechPROFILE is the result of a two-day occupational analysis that provides a picture of what the worker does in terms of duties, tasks, knowledge, skills, and traits, and in the tools the worker uses.

TechSETS is one of three Statewide Education Technology Services (SETS) to provide support and/or resources for California schools as authorized by AB 1761. These services are those that “are more efficiently and effectively provided on a statewide basis.” A contract was awarded by the California Department of Education to the San Diego County Office of Education, who has worked closely with the Imperial County Office of Education to develop TechSETS.

For more information on TechSETS, visit www.techsets.org.

For additional information on the other SETS programs, visit the California Department of Education’s informational site at www.cde.ca.gov/lset/rs/sets.asp.

PROFILE FOR SCHOOL WEB DEVELOPER

Duties

Tasks

Design Web Layout

A-1 Assess Client Needs	A-2 Determine Content Needs	A-3 Design Site Map	A-4 Determine Color Scheme	A-5 Determine Page Layout	A-6 Create Design Samples	A-7 Obtain Client Approval
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Develop Web Graphics

B-1 Acquire Web Media	B-2 Acquire Needed Permissions	B-3 Create Web Graphics	B-4 Create Web Animations	B-5 Create Logos	B-6 Manipulate Artwork / Graphics	B-7 Optimize Web Graphics
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Perform Web Development

C-1 Acquire Web Content	C-2 Convert File Formats	C-3 Convert Audio / Video	C-4 Generate Source Code	C-5 Establish Database Connectivity	C-6 Implement Web Authentication	C-7 Create Online Forms	C-8 Validate Source Code	C-9 Perform Compatibility Testing	C-10 Implement Accessibility Guidelines
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Manage Web Content

D-1 Publish Web Content	D-2 Solicit Content Updates	D-3 Implement Content Guidelines	D-4 Enforce Copyright Law	D-5 Perform Content Revisions	D-6 Survey Content Effectiveness	D-7 Validate Web Links	D-8 Promote Web Site	D-9 Create Site Documentation
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Provide System Administration

E-1 Determine System Requirements	E-2 Install Web Server	E-3 Configure Web Server	E-4 Secure Database / Web Server	E-5 Manage Access Control	E-6 Manage Web Server	E-7 Perform Backup / Restore	E-8 Monitor Web Server	E-9 Generate Web Usage Reports	E-10 Analyze Server Logs
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Provide Database Management

F-1 Install Database Server	F-2 Design Database Schema	F-3 Create Database Tables	F-4 Manage User Accounts	F-5 Optimize Database Performance	F-6 Manage Database Content	F-7 Maintain Database Software
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Provide User Support

G-1 Survey User Needs	G-2 Establish Support Procedures	G-3 Assist with User Requests	G-4 Provide User Training	G-5 Create User Documentation
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Participate in Professional Development

H-1 Utilize Reference Materials	H-2 Participate in Training	H-3 Participate in Special Interest Groups	H-4 Participate in Conferences
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General Knowledge and Skills

HTML

Client-side scripting

Server-side scripting

CSS

Web Graphic Formats

Industry-standard Software

Multiple platforms

Strong communication skills

Worker Behaviors

Creative

Detail oriented

People oriented

Organized

Flexible

Dedicated

Self motivated

Quick learner

Strong work ethic

Tools, Equipment, Supplies, and Materials

Industry-standard computer system

Reference materials

Development software

Secure remote access

Monitoring tools

Scanner

Digital camera

Email

Future Trends and Concerns

Accessibility/Equal access issues

Managing extensive site content

Development team versus individual

Need for various areas of expertise

Increased use of web for
administrative systems

Secure source code management

Content Management Systems (CMS)

System scalability/ fault tolerance