

Web Design Instructional Framework

An instructional framework provides educators with a list of benchmark statements aligned to Common Core and national content area standards for a given course or program. The Missouri Web Design Instructional Framework lists a sequence of content for computer applications, organized into distinct units of instruction with component evidence of mastery statements.

Codes for the National Standards for Business Education are:

CD = Career Development	IT = Information Technology
COMM = Communication	M = Management
CP = Computation	

Codes for Common Core English Language Arts and Literacy are:

L = Language	W = Writing
RI = Reading for Informational Text	WHST = Writing for Literacy in History/Social Studies, Science, and Technical Subjects
SL = Speaking and Listening	

Codes for Common Core Mathematics are:

G-CO = Geometry: Congruence	N-Q = Number and Quantity: Quantities
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Web Design Instructional Framework

A. Apply Introductory Principles	Common Core	NBEA Standards
1. Define terms related to Web projects	RI 11-12.4	COMM.I.B.1.4
2. Use Web-based resources (e.g., tutorials, Webquests, on-line resources, free download sites)		IT.VIII.1-2.1
3. Discuss E-commerce concepts as they relate to Web-based projects		ENTRE.VI.D.3.3
4. Differentiate among platforms and browsers in relationship to the Web		IT.VII.3.4
5. Explain how resolution affects Web page creation		IT.VII.1-2.4
6. Identify careers/self-employment and certification opportunities in Web design and production		IT.VII.3.14
7. Exhibit leadership skills through a student organization (e.g., FBLA, PBL)		COMM.II.A.4.5

B. Design An Effective Web Site		
1. Define Web page design principles and elements		IT.VII.1-2.3
2. Evaluate Web sites based on design elements and principles (e.g., alignment, color, navigation, user feedback)		IT.VII.1-2.3
3. Determine the purpose of the Web site		IT.VII.3.1
4. Identify the target audience		IT.VII.3.1
5. Select and develop content for site (e.g., research techniques, interview of client)		IT.VII.1-2.3
6. Plan an organized layout	W 9-12.5	IT.VII.1-2.4
7. Select an appropriate navigational structure	N-Q.1, N-Q.2, N-Q.3	IT.VII.1-2.6
8. Use Web-safe colors and fonts		IT.V.3.5
9. Employ proofreading and editing techniques	W11-12.5	COMM.I.D.3.6
10. Apply Web accessibility standards		IT.VII.3.2
C. Demonstrate Image Creation and Manipulation Skills		
1. Recognize the different image types and their extensions (e.g., gif, jpg)		IT.III.3-4.5
2. Utilize images from various sources (e.g., Internet, CD, scanner, digital camera)		IT.V.2-4.2
3. Use image editing program to create original raster images (e.g., collages, banners, buttons)		IT.V.3.5
4. Use selection tools in image editing program (e.g., lasso, magic wand)		IT.V.3.5
5. Use layering techniques in image editing program to better manage images (e.g., ordering, arranging, naming)	N-Q.1, N-Q.2, N-Q.3	IT.V.3.5
6. Use image editing program to adjust and transform images (e.g., crop, rotate, skew, color, image dimension size)	N-Q.1, N-Q.2, N-Q.3	IT.V.3.5
7. Optimize an image to improve load time	N-Q.1, N-Q.2, N-Q.3	IT.V.3.5
8. Slice an image into separate parts		IT.V.3.5
D. Demonstrate Page Creation Skills		
1. Use Web authoring software to create Web pages		IT.V.3.5
2. Identify and apply HTML tags and attributes for basic Web page design (e.g., title, metadata, table, link)		IT.V.3.5
3. Create and use a template		IT.V.3.5

E. Apply Effective Web Page Management Techniques		
1. Describe various Web publishing techniques		IT.VII.3.6
2. Compare and contrast Web hosting account options		IT.V.3.5
3. Explain the process of obtaining a domain name		IT.V.3.5
4. Create an electronic portfolio		CD.V.B.3.3
5. Organize all content files into folder management		IT.III.1.2
6. Implement time management techniques		CD.III.A.4.2
7. Create meta tags to be utilized by a variety of search engines		IT.V.3.5
8. Demonstrate ethical behavior		COMM.I.D.2.3
9. Conduct usability testing		IT.VII.3.12
10. Apply copyright laws in all Web-related projects	W 11-12.8	IT.VII.3.4
11. Describe security issues (e.g., viruses, firewalls, passwords, filters)		IT.XIV.3.4
F. Use Advanced Web Creation Techniques		
1. Create interactive design elements (e.g., rollover, swap image, slideshow)		IT.V.3.5
2. Incorporate browser plug-ins (e.g., Adobe Acrobat.pdf, Flash.swf, Quicktime.mov)		IT.VII.3.1 IT.V.3.5
3. Use Cascading Style Sheets (CSS) to control page elements (e.g., external, internal, inline)		IT.V.3.5
4. Apply animation tools and techniques		IT.V.3.5