



RLO DESIGN DOCUMENT

MAKING THE MARK

Print and Web Specs for Beginners

Helping Nonprofit Development Staff Sharpen Their Graphic Design Skills

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INSTRUCTIONAL NEED

The third-largest workforce (Newhouse & Salamon, 2020, p. 4) and generator of income and tax revenue (Newhouse & Salamon, 2020, p.7), the nonprofit sector continues to grow and evolve at a significant rate. According to Newhouse and Salamon at the Johns Hopkins Center for Civil Society Studies (2020), the nonprofit workforce increased by 18.6 percent between 2007 and 2017 (p. 9). Although the impact of COVID-19 led to a 13.2 percent decrease from pre-pandemic levels between March-May 2020 (2022), as of March 2022, the Center now projects that the overall sector will return to pre-pandemic levels within the next eight months (2022). As the visions of these nonprofit agencies evolve, so do the duties and expectations of their development and communications staff.

Nonprofit-related job listings with titles including “communications coordinator” and “development associate” often list graphic design under necessary job duties and preferred experience. At many agencies, nonprofit development and communications staff need to be able to design and maintain websites that cater to donors, clients, and new and existing staff. Staff also need to create graphics for social media and e-mail marketing campaigns. Finally, staff must be able to design event invitations and annual fundraising mail campaigns according to printer guidelines.

Yet, if staff members do not possess any education and background in graphic design, the quality and professionalism of the agency’s brand image often suffer. I found glaring errors when reviewing the websites and print materials of five healthcare-related nonprofits in Southern California. Website text was difficult to read or comprehend due to the font, colors, and spacing. Furthermore, some print materials included unintended white margins around the edges of the page, illustrating that staff members did not know how to apply bleeds. Many product research, marketing, and design-related blogs like Sageworld (2019), Axies (2021), and Visme (2015) list a lack of knowledge of design principles like hierarchy, balance, and color; improper file formatting; and inaccessible design as common novice errors. These reports echo my results from surveying three former and current graphic designers in the nonprofit sector. Interviewees listed web accessibility guidelines, principles of designs, and practical technical knowledge among top knowledge and skills they wish they had better possessed as entry-level employees.

In *Usability: Principles and Practices for Designing Digital Applications*, Schatter and Levinson (2013) attribute these knowledge gaps to the overlap of roles and diversity of disciplines (xii) from which professional graphic designers come. Given so many novice errors are rooted in both aesthetically pleasing and functional design, Schatter and Levinson (2013) call for better and more training in “visual usability” or “design grounded in principles and an understanding of people” (xii). At the intersection of user-centered design and usability also lies accessibility. The World Wide Web Consortium (W3C)’s Web Accessibility Initiative (WAI) (2022) states that accessible design “improves overall user experience and satisfaction, especially in a variety of situations, across different devices, and for older users.” The stakes for not adhering to web accessibility and visual usability guidelines are high, and there can be grave legal consequences as well.

Instead of hiring outside consultants or firing and rehiring new staff, nonprofit agencies can save significant time, costs, and resources by providing current staff members with the necessary training to help them excel at graphic design-related duties. This project aims to develop the training for development and communications staff to acquire the knowledge, skills, and experience necessary to abide by accepted industry design and accessibility standards. This project will also develop training to help staff members carry out tasks related to designing for the web and print production. Overall, this training ensures associates can fulfill their day-to-day duties effectively, helps nonprofit agencies enhance their visual brand images, and reduces the costs of hiring outside consultants for troubleshooting and additional support.

DELIVERY METHOD

This course will be delivered through computer-based training (CBT) eLearning modules on accessibility, file types, and design to reach as many learners as possible. SCORM-compliant means that agencies can fit their own LMSs. Given their diverse array of responsibilities, learners can take this course at their own time and own pace. Learners will also receive aids during the training to help them learn, practice, and retain their new knowledge, skills, and experience.

PRIMARY AUDIENCE

Nonprofit development staff

SECONDARY AUDIENCE

Development staff managers

Freelancers

Instructional designers

Entry-level graphic designers

GENERAL LEARNER CHARACTERISTICS

Experience: Entry- and mid-level

Education: Bachelor's degree

Design-Related KSAs: Beginner to intermediate experience with little to no formal design education

PREREQUISITE SKILLS

Project Management 

Mac/PC Platforms 

Email Marketing 

Social Media 

Website Management 

Canva 

Adobe Creative Suite 

ATTITUDINAL CHARACTERISTICS

Learners are motivated by:

- salary and job security
- public-facing work
- meaningful agency impacts
- professional growth
- future opportunities

TOP 3 COMMON ERRORS

Low accessibility

- No knowledge of WAI's perceivable guidelines (e.g., low color contrast)

Design knowledge gaps

- Issues with alignment, hierarchy, balance, and scale

Incorrect file formatting

- Color profiles
- Image resolution
- Margins and bleeds
- Web and print file types

OVERVIEW

In today's world, the KSAs of nonprofit development staff encompass many different professional fields. In addition to event planning and fundraising, staff members often design agency websites, social media assets, e-mail marketing campaigns, print advertisements, and event invitations. To be successful, staff members must have a comprehensive understanding of graphic design. Yet, without formal education or prior experience, staff members struggle to apply design principles, differentiate between web and print file specifications, and design accessibly for a diverse range of audiences. With their time and services already being pulled in multiple directions, they also struggle to effectively apply outside feedback when revising their designs.

CONTEXTUAL ANALYSIS

ORIENTING CONTEXT

Learner Goals: Learners want to successfully complete their graphic design-related job tasks without error and become adept graphic designers.

Training Purpose: This instruction equips learners with the knowledge and skills necessary to abide by industry design standards and W3C's Web Accessibility Initiative's (WAI)'s Web Content Accessibility Guidelines (WCAG). This instruction will also train learners how to format their files correctly according to web and print specifications.

Accountability: Attitudinal characteristics relating to professional growth along with the direct consequences of their public-facing work hold learners accountable.

Potential Misconceptions: New technology, terminology, and tasks that require memorization and dexterity may rouse insecurity and confusion. Time constraints alongside a steep learning curve may cause learners to feel unmotivated and less invested. Because these factors could decrease the chances of on-the-job knowledge transference, training will employ practice activities, job aids, and self-reflection questions to help increase learner confidence and post-training success.

INSTRUCTIONAL CONTEXT

Because learners wear so many different hats at their jobs and take on a range of tasks each day, this training will be delivered through self-paced eLearning modules to offer learners agency in managing their time and learning progress.

TRANSFER CONTEXT

Learners will directly apply design knowledge to their daily tasks, which include the creation of social media posts, event flyers, website banners, and e-newsletters. Learners will be given job aids following the instruction for additional support.

TECHNOLOGY INVENTORY

Learners have access to cell phones and desktop computers along with printers. Learners subscribe to Adobe Creative Suite along with Canva. They also have company social media and website logins.

TARGETED SPONSORING ORGANIZATIONS

This training targets nonprofit agencies along with freelancers, instructional designers, and other small business employees handling a myriad of tasks. The missions of these kinds of organizations often support local communities. To meet their annual budgets, these agencies rely on donations through seasonal web and print fundraising campaigns along with annual fundraising events. Nonprofit development staff members usually report to CEOs, development directors, and boards of directors, which help advance agencies' missions by managing their future and day-to-day decisions.

RLO DESIGN & DEVELOPMENT DETAILS

COURSE TERMINAL OBJECTIVES

1. Using Adobe Creative Suite, create designs that adhere to ten principles of design (*Emphasis, Hierarchy, Balance, Alignment, Contrast, Proportion, Movement, White Space, and Unity*).
2. Using Adobe Creative Suite, create designs that adhere to the World Accessibility Initiative's (WAI)'s perceivable Web Content Accessibility Guidelines (WCAG).
3. Using Adobe Creative Suite, create, alter, and save files according to designated web and print specifications.

MODULE TERMINAL AND ENABLING OBJECTIVES

Using Adobe Creative Suite, create, alter, and save files according to designated web and print specifications.

Enabling Objectives:

- Differentiate between print and web file specifications, including color modes, image resolutions, units of measurements, and file formats.
- Create, alter, and save files correctly using these specifications.
- Test, correct, and/or improve files by previewing designs through web applications and print proofs.

RLO OBJECTIVE

Differentiate between print and web file specifications, including color modes, image resolutions, units of measurements, and file formats.

COURSE LEARNING ASSESSMENT

- Pre-assessments
- Practice activities with formative feedback
- Scenario-based performance simulations with formative and summative feedback

RLO LEARNING ASSESSMENT

- Pre-assessment confidence check
- Knowledge check with multiple-choice questions

LEARNING THEORIES

INTERACTIVITY, ANDRAGOGY, AND TRANSFORMATIVE LEARNING

The design of this RLO will be informed by explorative learning and constructivist learning theories. As part of efforts to better involve the learner and invite deeper engagement, learners will browse topic carousels, flip flashcards, and click accordion menus to glean new knowledge. Both the freedom to explore and the self-directed pace reflect key assumptions about adult learning. Including animated video narratives that illustrate the real-life application and importance of this knowledge will also invite more of the “aha” moments that live at the heart of transformative learning theory. All in all, this level of interactivity aligns well with the terminal objective and promotes long-term integration.

HORTON'S ABSORB-DO-CONNECT ACTIVITIES

My instruction will structure activities through William Horton's “absorb-do-connect” methods, as outlined in his 2006 book, *E-Learning by Design*. In “absorb” activities, learners “absorb” new information (Horton, 2006, p.51). On the whole, these activities may sound passive, but they actually require learners to remain “mentally active” (Horton, 2006, p.51). Incorporating “connect” activities and interactivity into “absorb” activities helps learners better comprehend introductory knowledge and connect it to prior experience. Additionally, including “connect” activities at the beginning of the course and following the knowledge check will help learners gauge their current KSAs and reflect on their in-progress learning. By asking learners to reflect on and connect their past experiences and knowledge, they will hopefully recognize the value of their new learning and better integrate it into their long-term memories.

RLO DESIGN & DEVELOPMENT DETAILS

Sequenced together, these activities help transition new KSAs from working load into long-term memory, scaffold learning, and align instruction, providing learners with a clear path to success.

MAYER'S MULTIMEDIA PRINCIPLES

Mayer's multimedia principles will be especially helpful for creating the animated videos featured in this RLO. Though close captions will be available, I will include voiceover rather than on-screen text to adhere to temporal contiguity, modality, and multimedia principles. Conversational dialogue and use of a narrative will bolster conformance to personalization and voice principles. The sequencing of these videos will adhere to the pre-training principle to reinforce these new concepts.

MICROLEARNING

Like chunking, microlearning breaks down learning into smaller, digestible chunks to reduce cognitive load and invite deeper knowledge retention. While guidelines for print and web files could encompass a myriad of complex and diverse topics, this RLO focuses on providing learners with a basic and practical foundation. The RLO is also flexible and affordable for a broad range of sponsoring organizations, whose needs and resources vary wildly.

MEDIA

Text, animated video with audio, visual graphics (photos and icons)

508 ACCOMMODATIONS

This RLO includes a navigational menu, progress bar, and detailed automatic feedback. The learner also controls their pace and navigation. Following the WCAG Perceivable principle, this course's color scheme uses a high color contrast and multiple visual signifiers for text hyperlinks.

RLO COURSE STRUCTURE DESCRIPTION

1 Unit (Web and Print File Types)

6 Subtopics (Introduction, Image Resolution, Color Modes, Units of Measurement, File Formats, Altering Files)

Chunked into:

1. Prerequisite Knowledge
2. Introduction
3. Image Resolution
4. Color Profiles
5. Units of Measurements
6. File Formats
7. Altering Files
8. Knowledge Check (4 total slides: 3 questions, results slide)

COURSE SEAT TIME

Approximately four weeks

RLO SEAT TIME

30 minutes

NUMBER OF SCREENS

13

KNOWLEDGE CHECKS OR OTHER ASSESSMENTS

1 dichotomous (Y/N) confidence check question with automatic feedback.

RLO DESIGN & DEVELOPMENT DETAILS

3 multiple-choice knowledge check questions. Unlimited attempts allowed. Automatic formative and summative feedback will be provided.

RLO NAVIGATION



Close pop-up windows



Progress bar



Navigation menu (closed)



Navigation menu (open)



Multiple-select dropdown tab

BEGIN

Button #1 layout/color (dark background)

BEGIN

Button #1 hover state

SEND ↗

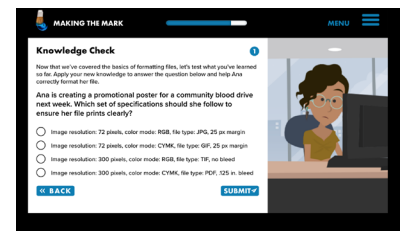
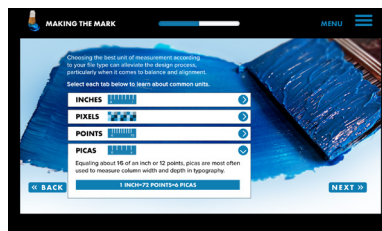
Button #2 layout/color (light background)

SEND ↗

Button #2 hover state

Buttons will be used to control the entire navigation of the course. (Y/N answers, Back, Next, Reply, Exit Course, Try Again)

SCREEN LAYOUTS



RLO DEVELOPMENT TOOLS

Mindmeister, Microsoft Word, Adobe Photoshop, Adobe Illustrator, Adobe XD, Adobe Audition, Adobe InDesign, Vyond, Articulate Storyline

OWNERSHIP

Winona León will develop and maintain this course for her 767 coursework and online portfolio.

RLO DESIGN & DEVELOPMENT DETAILS

DEVELOPMENT TIME OF RLO

6 weeks development time/60 hours for visual design mockups, text-based storyboard, XD prototype, video development, Articulate Storyline conversion, and user testing

SUPPORT REQUIREMENTS FOR RLO AND COURSE

RLO Development requires subscriptions to Adobe Creative Suite, Vyond, and Articulate Storyline. This RLO will be web-based and accessible from a hyperlink on common Internet browsers such as Chrome or Firefox. Users will need a desktop computer with wi-fi.

TOPIC ANALYSIS

Goal: Create, alter, and save files according to designated web and print specifications.

1. Differentiate between print and web file specifications.
 - 1.1. Image Resolution
 - 1.1.1. Web: Web files should be set at 72 ppi (pixels per inch) to ensure pixels remain barely discernable and graphics are clear.
 - 1.1.2. A changing future: As technology continues to rapidly improve, screen displays are also improving. Still, unless, you're working with some very web specific guidelines, 72 ppi is still your best bet as smaller file sizes reduce loading times.
 - 1.1.3. Print: Given their physicality, print files should be set at 300 dpi (dots per inch) to ensure graphics remain crisp and readable.
 - 1.2. Color Profiles
 - 1.2.1. Print files should be set in a CMYK (cyan, yellow, magenta, key/black) color mode.

Because this color mode uses layers of dyed pigments, or inks, to produce your designated colors, this 4-color process color mode is subtractive; together, all four colors produce black while their absence will produce white.

True Black: This term commonly refers to the richest and most concentrated shade of black achievable in a CMYK document. The most used values are C – 75, Y – 68, M – 67, K – 90, but check with specific printers to ensure their guidelines don't vary.
 - 1.2.2. Web files should be set in an RGB (red, green, blue) color mode.

Using colors of light to display colors on a screen, this color mode is additive; together, the three primary colors of red, green, and blue will produce white while the absence of color will produce black.
 - 1.3. Units of Measurements
 - 1.3.1. Inches: To accurately view the size of a print image, print files should be measured in inches.

Margins & Bleeds
 - 1.3.2. Pixels: Given that digital images are measured in pixel density (pixels per inch) on a screen display, it's easiest to measure web files in pixels. Each of these square units display a single color.

Margins & Padding
 - 1.3.3. Points: Points are commonly used to measure your size of type in a text box or document.
 - 1.3.4. Picas: Equaling about 1/6 of an inch, picas are most often used to measure column width and depth in typography.
 - 1.4. File Formats
 - 1.4.1. JPG: A jpg file is the best format to save a web file that can be easily compressed, accessed, and shared. Cameras often save images as this file type.
 - 1.4.2. PNG: A png file is the best format to save a web file with a transparent background and/or sharp contrast values (such as an illustration) given its lack of compression.
 - 1.4.3. PDF: A pdf file is the best format to save a print document file that can be easily accessed and shared.
 - 1.4.4. GIF: A gif file is the best format to save an animated web file that can be easily accessed and shared.
 - 1.4.5. TIF: A tif file is the best format to save a high-quality print file with multiple pages and/or a transparent background. A lossless image file, they do not compress images, meaning they create larger file sizes.
2. Learners can create, alter, and save files correctly using these specifications.
 - 2.1. Creating files
 - 2.1.1. Correctly set an image's size, resolution, color mode when creating a new file In Adobe Creative Suite.

Note: Resolutions don't matter in Vector-based programs like Illustrator.

Note: Be sure to use margins and guides to create distinct layouts.
 - 2.1.2. Set bleeds for print documents to ensure your image will print to the paper's edge without any margins.

- 2.2. Altering files
 - 2.2.1. Color Profiles Specifics
 - Illustrator: Edit>Color Settings, Edit>Assign Profile, Edit>Edit Colors, or File>Document Color Mode
 - Photoshop: Edit>Convert to Profile (preserves appearance)*
 - InDesign: Edit>Convert to Profile (preserves appearance)
 - 2.3. Image Resolution Specifics
 - 2.3.1. Photoshop: Image>Image Size
 - 2.3.2. InDesign & Illustrator: change during Export/Save process and check resolution of placed images using Photoshop
 - 2.4. Units Specifics
 - 3.4.1. View>Rulers>Show Rulers if hidden
 - 2.4. Learns know to save originals and copies.
- 3. Saving Files
 - 3.1. Package files
 - 3.2. Save the design document by Save as or Export.
 - 3.2.1. EYou can often change color profiles and resolution as well as specific file formatting settings in the Export process as well.

1. Title Page
2. Confidence Check
 - a. Ask learners about prior experience (Expert, Mid-Level, Novice) and show brief outline of course in feedback
3. Introduction
 - a. Play video with story illustrating the importance of formatting files correctly.
4. Image Resolution: clicking on icons will open pop-up windows
 - a. Print
 - b. Web
 - c. Other circumstances
5. Color Modes: image carousel
 - a. CYMK
 - b. RGB
 - c. True Black
6. Units of Measurement: accordion menu
 - a. Inches
 - i. Print
 - ii. Discuss margins, padding, and bleeds
 - b. Pixels
 - ii. Web
 - ii. Discuss margins and padding.
 - c. Points
 - i. Typography
 - ii. Discuss legible (9+ points) and large-size (18+ points) type.
 - c. Picas
 - i. Typography
7. File Types
 - a. JPG
 - b. PDF
 - c. PNG
 - d. GIF
 - e. TIF
8. Saving Files
 - a. Play video with story illustrating the importance of saving files correctly. Show screen-captured video of example.
9. Knowledge Check
 - a. 3 questions on web and print file; learners must choose the correct specifications. Learners should receive unlimited attempts
 - e. Summative results slide

Please sign below indicating agreement with the proposed course plan and approving start-up of the storyboard and development phases.

Instructional Designer

Project Manager/Sponsor

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