

Task Analysis for
Computer Software Skills and Technology Integration Course for Elementary Teachers
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Introduction

A private elementary school in the Phoenix metro area plans to deploy Apple Macintosh laptops for each student in the intermediate elementary grades for the 2022-2023 school year. As a result, the intermediate-level elementary teachers at this school need technical skills and classroom technology integration training. Instructional designers conduct a needs assessment report when "the introduction or rollout of a new product (Morrison et al., 2019, p.31). The intermediate-level elementary teachers at this school need technical skills training on how to use the computer software on these laptops. Further, these teachers need additional technical skills training on how to teach computer software skills to their students and "how to integrate this technology into their curricula" (Morrison et al., 2019, p. 30). The following task analysis will address the instructional problem of computer software technical skills training. Additional training sessions will need to address screencast software training and teaching technology integration skills to elementary teachers. Lastly, this task analysis includes both concept and procedural methods.

Task Analysis

- 1.0 MS Office: MS Word - Word processing & editing skills -entry level
 - 1.1 Working with fonts (concept and procedure) (6:03 minutes of instruction)
 - 1.1.1 Overview of MS Word font attributes (concept)
 - 1.1.2 Access MS Word template for exercises (procedure)
 - 1.1.3 Underline the word "font" anywhere in the template (procedure)
 - 1.1.4 Change the font to Arial in line 2 of the template (procedure)
 - 1.1.5 Change font color to Red in line 3 of the template (procedure)
 - 1.1.6 Change the font size to 24 in line 4 of the template (procedure)
 - 1.1.7 Modify font color, size, and size to learner specification in line 5 of the template (procedure)
 - 1.2 Working with pictures (concept and procedure) (4:50 minutes of instruction)
 - 1.2.1 Overview of MS Word picture attributes (concept)
 - 1.2.2 Access MS Word template for exercises (procedure)
 - 1.2.3 Access the Insert tab in the menu (procedure)
 - 1.2.4 Choose the Insert Pictures tab in the menu (procedure)
 - 1.2.5 Locate four online pictures of your favorite hobby (procedure)

- 1.2.6 Insert each online image into the template (procedure)
- 1.3 Working with bullets and lists (concept and procedure) (4:51 minutes of instruction)
 - 1.3.1 Overview of MS Word bullets and lists (concept)
 - 1.3.2 Access MS Word template for exercises (procedure)
 - 1.3.3 Identify words in the template for a list (procedure)
 - 1.3.4 Select the Lists icon in the menu (procedure)
 - 1.3.5 Select the Check icon (procedure)
 - 1.3.6 Insert a Check icon in front of each word from the template that needs to be in a list (procedure)
 - 1.3.7 Modify each Check icon into a Bullet icon (procedure)
 - 1.3.8 Modify each Bullet icon into the ABC icon (procedure)
- 1.4 Working with layering (concept and procedure) (6:36 minutes of instruction)
 - 1.4.1 Overview of MS Word layering attributes (concept)
 - 1.4.2 Access MS Word template for exercises, which contains text and pictures (procedure)
 - 1.4.3 Select a picture of the Dog and Format Picture appears (procedure)
 - 1.4.4 Choose the In Line with Text icon and Square icon (procedure)
 - 1.4.5 Move the Dog picture to the front of the first paragraph of the text (procedure)
 - 1.4.6 Select an image of the Horse and Format Picture appears (procedure)
 - 1.4.7 Choose the In Line with Text icon and Center icon (procedure)
 - 1.4.8 Move the Horse picture to the Center and below the second paragraph of the text (procedure)
 - 1.4.9 Select a picture of the Seal and Format Picture appears (procedure)
 - 1.4.10 Choose the In Line with Text icon and Center icon (procedure)
 - 1.4.11 Select the Modify the Color icon to Wash Out (procedure)
 - 1.4.12 Move the Seal picture to the Center and behind the third paragraph of the text (procedure)
- 1.5 Working with editing skills (concept and procedure) (5:05 minutes of instruction)
 - 1.5.1 Overview of MS Word editing attributes of Spell Check (concept)
 - 1.5.2 Access MS Word template for exercises, which contains two paragraphs of text with numerous words that are misspelled (procedure)
 - 1.5.3 Identify the first misspelled word in the template, which has a red line under the word (procedure)
 - 1.5.4 Highlight the word (procedure)
 - 1.5.5 Click on the word using the right mouse button (procedure)
 - 1.5.6 Examine the choices and choose the correct spelling of the word (concept)
 - 1.5.7 Select the correct spelling of the word by clicking on it (procedure)
 - 1.5.8 Examine to see if the red line still appears under the word, then repeat steps 1.5.5 through 1.5.7 until the red line disappears (procedure)
 - 1.5.9 Identify if the red line no longer appears under the word, which means that it is spelled correctly (procedure)
 - 1.5.10 Continue to correct the spelling of all misspelled words in the template by repeating steps 1.5.3 through 1.5.9
- 2.0 MS Office: MS PowerPoint - Design & editing skills -entry level
 - 2.1 Working with slide layouts (concept and procedure) (6:23 minutes of instruction)

- 2.1.1 Overview of MS PowerPoint slide layout attributes (concept)
- 2.1.2 Access MS PowerPoint template, which contains slides for the exercises in this section (procedure)
- 2.1.3 Add learner name under PowerPoint template title on slide one (procedure)
- 2.1.4 Proceed to slide two, which is a title and content slide layout (procedure)
- 2.1.5 Teach attributes of title and content slide layout (concept)
- 2.1.6 Proceed to slide three, which is a section header slide layout (procedure)
- 2.1.7 Teach attributes of a section header layout slide (concept)
- 2.1.8 Proceed to slide four, which is a two-content slide layout (procedure)
- 2.1.9 Teach attributes of two content slide layout (concept)
- 2.1.10 Proceed to slide five, which is a two-content with captions slide layout (procedure)
- 2.1.11 Teach attributes of two content with captions layout (concept)
- 2.1.12 Proceed to slide six, which is a title-only slide layout (procedure)
- 2.1.13 Select slide six by clicking on slide six in Slider Viewer (procedure)
- 2.1.14 Select Delete Slide in the menu options that appear (procedure)
- 2.1.15 Observe that slide six has been deleted, and slide seven has now become slide six (procedure)
- 2.1.16 Change the layout of new slide six by making it a Title only slide (procedure)
- 2.1.17 Select Layout in the menu and choose Title only slide option (procedure)
- 2.1.18 Proceed to slide seven, which is content with a caption slide layout slide (procedure)
- 2.1.19 Add a new slide after slide seven, by clicking on New Slide in the menu
- 2.1.20 Observation of slide eight as a new slide has been added (concept)
- 2.1.21 Proceed to slide nine, which is content with a caption slide layout slide (procedure)
- 2.1.22 Duplicate slide nine by right-clicking on New Slide in the Slide Viewer menu (procedure)
- 2.1.23 Observation of slide ten as a new slide has been added (concept)
- 2.1.24 Proceed through ten slide presentation
- 2.1.25 Edit slides in ten slide presentation by following the directions on each slide (concept)
- 2.2 Working with slide fonts and text (concept and procedure) (6:49 minutes of instruction)
 - 2.2.1 Overview of MS PowerPoint fonts and text attributes (concept)
 - 2.2.2 Access the MS PowerPoint template, which contains slides for the exercises in this section (procedure)
 - 2.2.3 Access MS Word template for exercises, which includes text and pictures (procedure)
 - 2.2.4 Proceed to slide one, which includes fonts and text (procedure)
 - 2.2.5 Teach attributes of fonts and text (concept)
 - 2.2.6 Add learner name to slide one (procedure)
 - 2.2.7 Change font color and size of learner name based on learner desire (procedure)

- 2.2.8 Proceed to slide two, which contains fonts and text (procedure)
- 2.2.9 Modify font and font color to match the image on slide two (procedure)
- 2.2.10 Identify that image on slide two is a loud lion (procedure)
- 2.2.11 Modify the font to match the image characteristics on slide two of a loud lion (procedure)
- 2.2.12 Proceed to slide three, which contains fonts and text (procedure)
- 2.2.13 Modify font and font color to match the image on slide three (procedure)
- 2.2.14 Identify that image on slide three is a happy crab (procedure)
- 2.2.15 Modify the font to match the image characteristics on slide three of a happy crab (procedure)
- 2.2.16 Repeat process 2.2.12 through 2.2.15 for the remaining six slides in the MS PowerPoint template

Objectives

Task	Objectives	Domain	Level	Content Structure	Performance
	Key	Psychomotor Affective Cognitive	(Imitation, Manipulation, Precision, and Articulation) (Receiving, Responding, Valuing, Organizing, and Characterizing) (Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating)	Fact Concept Rules/Principles Procedures Attitudes Interpersonal	Recall Application
1.1.1	The learner will display a willingness to learn the procedures and attributes associated with MS Word fonts	Affective	Receiving/ Responding	Attitude Concept	Application

1.1.2 1.1.3 1.1.4 1.1.5 1.1.6 1.1.7	Demonstrate how to modify font, size, and color in the MS Word template	Cognitive	Understanding Applying Creating	Procedure	Recall Application
1.2.1	The learner will display a willingness to learn the procedures and attributes associated with MS Word pictures	Affective	Receiving/ Responding	Attitude Concept	Application
1.2.2 1.2.3 1.2.4 1.2.5 1.2.6	Demonstrate how to modify a picture in the MS Word template	Cognitive	Understanding Applying Creating	Procedure	Recall Application
1.3.1	The learner will display a willingness to learn the procedures and attributes associated with MS Word bullets and lists	Affective	Receiving/ Responding	Attitude Concept	Application
1.3.2 1.3.3 1.3.4 1.3.5 1.3.6 1.3.7 1.3.8	Demonstrate how to apply bullets and lists formatting in the MS Word template	Cognitive	Understanding Applying Creating	Procedure	Recall Application
1.4.1	The learner will display a willingness to learn the procedures and attributes associated with MS Word layering	Affective	Receiving/ Responding	Attitude Concept	Application

1.4.2 1.4.3 1.4.4 1.4.5 1.4.6 1.4.7 1.4.8 1.4.9 1.4.10 1.4.11 1.4.12	Demonstrate how to layer text and pictures in the MS Word template	Cognitive	Understanding Applying Creating	Procedure	Recall Application
1.5.1	The learner will display a willingness to learn the procedures and attributes associated with MS Word editing skills	Affective	Receiving/ Responding	Attitude Concept	Application
1.5.2 1.5.3 1.5.4 1.5.5 1.5.6 1.5.7 1.5.8 1.5.9 1.5.10 1.5.11 1.5.12	Demonstrate how to use editing skills in the MS Word template	Cognitive	Understanding Applying Creating	Procedure	Recall Application
2.1.1	The learner will display a willingness to learn the procedures and attributes associated with MS PowerPoint slide layouts	Affective	Receiving/ Responding	Attitude Concept	Application
2.1.1 2.1.2 2.1.3 2.1.4 2.1.5 2.1.6 2.1.7	Demonstrate how to edit slide layouts in the MS PowerPoint template	Cognitive	Understanding Applying Creating	Concept Procedure	Recall Application

2.1.8 2.1.9 2.1.10 2.1.11 2.1.12 2.1.13 2.1.14 2.1.15 2.1.16 2.1.17 2.1.18 2.1.19 2.1.20 2.1.21 2.1.22 2.1.23 2.1.24 2.1.25					
2.2.1	The learner will display a willingness to learn the procedures and attributes associated with MS PowerPoint fonts and text	Affective	Receiving/ Responding	Attitude Concept	Application

2.2.1 2.2.2 2.2.3 2.2.4 2.2.5 2.2.6 2.2.7 2.2.8 2.2.9 2.2.10 2.2.11 2.2.12 2.2.13 2.2.14 2.2.15 2.2.16	Demonstrate how to modify font, size, and color in the MS PowerPoint template	Cognitive	Understanding Applying Creating	Concept Procedure	Recall Application
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Conclusion

The task analysis for the Computer Software Skills and Technology Integration Course contains instruction from both the affective and cognitive domains. Course objectives are written in the understanding, applying, and creating stages of Bloom's Taxonomy. The content structure is primarily procedural; however, instruction also has elements of learner attitude. Learner performance contains recall and application scenarios. The Computer Software Skills and Technology Integration Course will boost elementary teachers' confidence to instruct their students on Microsoft Word and PowerPoint skills effectively.

References

Morrison, G. R., Ross, S., Morrison, J.R., & Kalman, H.K. (2019). *Designing effective Instruction* (8th ed.). Hoboken, NJ: Wiley.