

Introduction

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Guidance for digital design

Digital design solutions should:

- represent authentic designs and creations and not be the result of template application or secondary source compilations
- provide students with the opportunity to explore, select and use information and communication technology (ICT) tools to solve real problems by creating a digital solution
- be sophisticated enough to enable students to demonstrate the acquisition of MYP year 5 digital design skills
- provide students with the opportunity to develop a series of practical skills such as:
 - o generating original digital material
 - programming software
 - o manipulating and combining images, text, video and audio
 - converting solutions to different formats.

The examples in tables 2–5 are suitable year 1, 3 and 5 digital design solutions that allow students to achieve the highest achievement levels of the assessment criteria.

Web design

The product/outcome of a web design situation will be a website.

Year 1: Personal website	Year 3: Promotional website for a local group	Year 5: Company website
 develops the requirements of a personal website to be used to introduce him- or herself to new classmates and to record his or her achievements in school. Presents the main points of an inquiry into the need and analysis of a website that is similar to his or her initial thoughts 	The student: • develops the requirements of a website for a local group by presenting the results of an inquiry into the need and analysis of the information gathered	The student: • develops the requirements of a company website commissioned by an external client by summarizing an in-depth inquiry into the client's needs and analysis of the information gathered

- lists the requirements of a suitable website, develops ideas for its purpose and look, and identifies digital components that he or she will use to create the website, including text, images and colour. Determines whether the design meets the stated needs, adapts and finalizes the design
- develops ideas and creates layout sketches of the web pages, gathering feedback from the group to inform development. Identifies text, images and other media suitable to the purpose of the website, demonstrating an understanding of graphic interface design through the use of space. Presents a final solution that meets the stated needs
- develops a wide range of ideas and creates detailed layout designs, gathering feedback from the client to inform further incremental development. Identifies text, images and other media suitable to the purpose of the website, demonstrating a good understanding of graphic interface design through the use of space and intuitive navigation. Reaches a final solution that meets the client's needs

- outlines a step-by-step plan to make the website and alters it where necessary. Makes excellent use of a simple web-design package to generate the basic structure of his or her design. Creates the website, lists any changes that were needed to be made.
- develops a plan for the creation of each page, including how the pages link, with a consistent layout and colour scheme. Edits the digital components to ensure they are in an appropriate format, explaining how the plans were altered in any way. Uses appropriate software to create the website, demonstrating excellent technical ability
- develops a template to provide consistency throughout the website. Edits the digital components to ensure they are in an appropriate format and optimized, modifying the plan and method if needed. Uses appropriate software and HTML code to create the website and assemble the components, demonstrating excellent technical ability

- tests the website themselves to ensure that pages link appropriately and asks peers to use it. After testing the website to ensure that pages link appropriately, asks peers to use the website and gathers feedback and uses this information to outline the success of the website, how it could be improved and how the website acts as a tool to introduce him- or herself to classmates and record his or her achievements in school.
- interviews the group the website is designed for and gathers feedback on the effectiveness of the website. Uses this information to explain the success of the website, how it could be improved, and how it has an impact on the group.
- interviews the client when the final website is completed to gather feedback about how it meets the design specification. Uses this information to justify the success of the website, suggest how it could be improved and explain how it has an impact on the company and its various stakeholders.

Table 2

Web design solutions

Note: A website created by online template services or exported to web pages by other applications would not be a sufficiently sophisticated product/solution for students in years 3–5.

Digital communication design

The product/outcome of a digital communication design situation will be a video or animation .

Year 1: Three-minute video to highlight an environmental issue	Year 3: Animation based on a short story	Year 5: Advertisement for the re-launch of a product
• develops the requirements of a three-minute video to highlight an environmental issue. Presents the main points of an inquiry into the need and analysis of a short infomercial or documentary that is similar to his or her initial thoughts	The student: • develops the requirements of an animation based on a short story for a target audience. Presents the results of an inquiry into the need and analysis of the information gathered	The student: • develops the requirements of an advertising campaign for the re-launch of a commercial product. Summarizes an in-depth inquiry into the need and analysis of the information gathered
• lists the requirements of a suitable video and develops ideas using storyboards, and identifies original and pre-made components that he or she will use to create the video, including text, images and sound. Determines whether the design meets the stated needs, adapts and finalizes the storyboard	develops ideas for the animation (including character design and backgrounds) and creates storyboards, gathering feedback from stakeholders familiar with the story to inform development. Identifies text, images and other media suitable to the purpose of the animation, demonstrating an understanding of graphic interface design through the use of space. Presents a final solution that meets the stated needs	develops a wide range of ideas and creates detailed storyboards, gathering feedback from the product's target market to inform further incremental development. Identifies text, images and other media suitable to the purpose of the campaign, demonstrating a good understanding of graphic interface design through the use of space and intuitive navigation. Reaches a final solution that meets the needs of the advertising campaign

- collects and creates all of the components needed for the video.
 Combines and creates the video, listing any changes that were needed
- creates the characters and backgrounds and follows the storyboard to create each section of animation. Combines and edits each section to ensure that the story is communicated appropriately, adding titles and effects as necessary, explaining how the plans were altered in any way. Provides a run-time version of the video.
- creates all video needed for the advertisement and follows the storyboard to edit the video to meet the needs of the advertisement. Combines video/animation with other elements, including sound and special effects, explaining how the plan or advertisement was changed in any way. Provides a run-time version of the video.

- after showing the video, surveys peers to determine its effectiveness and gathers feedback. Uses this information to outline the success of the video, how it could be improved and how it has raised awareness of the environmental issue and any outcome (action) that has resulted.
- collects feedback from stakeholders familiar with the story and the target audience. Uses this information to explain the success of the video, how it could be improved and in which ways the animation of the story has an impact on the target audience.
- collects feedback from the product's target market, using questions designed to identify how it meets the design specification. Uses this information to justify the success of the advertisement, suggest how it could be improved and explain how it has an impact on the awareness of the product and enthused its various stakeholders.

Table 3

Digital communications design solutions

Note: A product/solution of this type would include primary source information and/or content generated by the student and would not simply be a compilation of secondary source materials. Examples of primary sources are direct sources of information or research, may be interviews, surveys, direct observation.

Digital game design

The product/outcome of a game design situation will be a game or simulation.

Year 1: Language tool	Year 3: Two-dimensional (2D) fixed-screen game	Year 5: 2D scrolling game
The student:	The student:	The student:

- develops the requirements of an interactive digital language tool for beginners in a chosen language. Presents the main points of an inquiry into the need and analysis of an interactive digital language tool that is similar to his or her initial thoughts
- develops the requirements of a game to encourage young students to problem-solve.
 Presents the results of an inquiry into the need and analysis of the information gathered
- develops the requirements of a platform game, with a teacher as the client, to reinforce teaching a particular topic. Summarizes an in-depth inquiry into the client's need and analysis of the information gathered

- lists the requirements of a suitable language tool and develops ideas for its purpose and look. Identifies digital components that he or she will use to create the language tool, including text, images and colour. Determines whether the design meets the stated needs, adapts and finalizes the design
- develops ideas and creates layout sketches of the different screens for the game, gathering feedback from the target market to inform development. Identifies text, images and other media suitable to the purpose of the game, demonstrating an understanding of graphic interface design through the use of space. Presents a final solution that meets the stated needs
- develops a wide range of ideas, and creates the design brief and detailed layout designs, gathering feedback from the client to inform further incremental development. Identifies the content required to develop the game, demonstrating a good understanding of graphic interface design through the use of space and intuitive navigation. Reaches a final solution that meets the client's needs

- outlines a step-by-step plan to make the language tool and alters it where necessary. Generates the basic structure of his or her design, listing any changes that were needed. Makes excellent use of software to create the language tool, which is linear and has a single outcome but includes animations and sound that have to be activated
- develops a plan for the creation of each screen and the playing characters with a consistent layout and colour scheme. Edits the digital components to ensure they are in an appropriate format, explaining how the plans were altered in any way.

 Demonstrating excellent technical ability, uses appropriate software to create the game, which requires user input and leads the player to different outcomes depending on the choices he or she makes
- develops a storyboard to map the stages and events of the game and combines sketches and computer-aided design (CAD) to develop ideas for the characters and backgrounds in the game. Creates the digital components (characters and backgrounds) in an appropriate format, following the plan to create the game and assemble the components, modifying the plan and method if needed. Demonstrating excellent technical ability, uses appropriate software and code to create the game, which requires user input and has either a scrolling background or is played over many different screens

- after testing the language tool to ensure that pages link appropriately, asks peers to use the
- interviews the target audience to gather feedback on the effectiveness of the game and users' engagement with it. Uses this
- after running beta tests to find if the game works as intended, interviews the client when the final game is completed to gather feedback on how it meets the

language tool and gathers feedback. Uses this information to outline the success of the language tool, how it could be improved and how the it can impact the target audience.

information to explain the success of the game, how it could be improved and how it has an impact on the group.

design specification. Uses this information to justify the success of the game, suggest how it could be improved and explain how it has had an impact on the company and its various stakeholders.

Table 4

Game design solutions

Digital interface design

The product/outcome of a graphic interface design situation will be an interactive application or storybook.

Year 1: Interactive linear storybook	Year 3: "Choose-your-own-adventure" storybook	Year 5: App for a snake exhibit in a zoo
develops the requirements of an interactive digital storybook for young readers. Presents the main points of an inquiry into the need and analysis of an interactive digital storybook that is similar to his or her initial thoughts	The student: • develops the requirements of a digital choose-your-own-adventure storybook to encourage young students to engage in reading. Presents the results of an inquiry into the need and analysis of the information gathered	 develops the requirements of an interactive information application for use in a zoo, which allows children and adults to learn more about the snake exhibit. Summarizes an in-depth inquiry into the target market's need and analysis of the information gathered

- lists the requirements of a suitable storybook and develops ideas for its purpose and look. Identifies digital components that he or she will use to create the storybook, including text, images and colour. Determines whether the design meets the stated needs, adapts and finalizes the design
- develops ideas and creates layout sketches of the pages, gathering feedback from the target market to inform development. Identifies text, images and other media suitable to the purpose of the storybook, demonstrating an understanding of graphic interface design through the use of space. Presents a final solution that meets the stated needs
- develops a wide range of ideas and creates detailed layout designs, gathering feedback from a range of stakeholders to inform further incremental development. Identifies text, images and other media suitable to the purpose of the application, demonstrating a good understanding of graphic interface design through the use of space and intuitive navigation. Reaches a final solution that meets the target market's needs

- outlines a step-by-step plan to make the storybook and alters it where necessary. Generates the basic structure of the design, listing any changes that were needed. Makes excellent use of software to create the storybook, which is linear and has a single outcome but includes animations that have to be activated
- develops a plan for the creation of each page, including how the pages link, with a consistent layout and colour scheme. Edits the digital components to ensure they are in an appropriate format, explaining how the plans were altered in any way. Demonstrating excellent technical ability and using appropriate software, creates the system, which is non-linear (or branching), requires user input and leads the reader to different outcomes depending on the choices he or she makes
- develops a template to provide consistency through the information application. Edits the digital components to ensure that they are in an appropriate format and optimized, modifying the plan and method if needed. Demonstrating excellent technical ability and using appropriate software, follows the plan to create the interactive information application, which is non-linear (or branching) and requires user input, and assembles the components

- after testing the storybook to ensure that pages link appropriately, asks peers to use the storybook and gathers feedback. Uses this information to outline the success of the storybook, how it could be improved and how it can impact the target audience.
- interviews the target audience and gathers feedback about the effectiveness of the storybook and users' engagement with it. Uses this information to explain the success of the website, describe how it could be improved and in which ways the storybook has an impact on the group.
- interviews or surveys potential users when the final information application is complete to gather feedback. Uses this information to justify the success of the information system, suggest how the it could be improved and explain how it has an impact on various stakeholders.

Table 5

Graphic interface design solutions

Note: A product/solution of this type would use primary source information and/or content generated by the student and would not simply be a compilation of secondary source materials. A linear interactive product with only one possible output would not be sufficiently sophisticated for year 5 students.

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