Graphic Designers and Illustrators

NOC 5241

Introduction

Graphic designers conceptualize and produce graphic art and visual materials to effectively communicate information for publications, advertising, films, packaging, posters, signs and interactive media such as websites and DVDs. They are employed by advertising and graphic design firms, by establishments with advertising or communication departments and by multimedia production companies, or they may be self-employed. Graphic designers who are also supervisors, project managers or consultants are included in this unit group. Illustrators conceptualize and create illustrations to represent information through images. They are almost solely self-employed. **This NOC also includes 2D/3D Animators.**

The most important Essential Skills for Graphic Designers and Illustrators are:

- Digital Technology
- Oral Communication
- Problem Solving

Document Sections

- Reading Text
- Document Use
- Writing
- Numeracy
- Oral Communication
- Thinking Skills
    - o Problem Solving
    - o Decision Making
    - o Critical Thinking
    - o Job Task Planning and Organizing
    - o Significant Use of Memory
    - o Finding Information
- Working with Others
- Computer Use
- Continuous Learning
- Notes

A. Reading Text

Reading Text

Tasks	Complexity Level	Examples
		Graphic Designers and Illustrators:
Typical	1 to 4	• read short notes. For example, graphic designers read notes on graphics from copywriters that describe changes. 2D and 3D animators read comments on shots from directors. (1)
Most Complex	4	• read emails from co-workers and supervisors, for example, requests for information or changes to a project, critiques on work and suggestions for fixing a problem. (2)
		• read project proposals that include overviews, project details, deliverables and timelines. (2)
		• read company style guides and branding manuals so that designs are cohesive and consistent in style and theme. (3)
		• read client websites to research companies. For example, graphic designers and illustrators gather information to help define the company's needs and to develop a style guide. (3)
		• read magazines, trade journals, blogs, forums, and Wiki pages to learn new techniques, shortcuts in software programs and about trends in graphic design and animation. For example, graphic designers read to learn how to fix design problems or special interests, such as fonts and typography. 2D and 3D animators read to learn about animation principles, such as techniques for moving characters, and to learn from more experienced animators. (3)
		• read technical updates. For example, graphic designers read about software updates. 2D and 3D animators may read technical updates to learn about gamers' likes and dislikes, or recent changes in technology. (3)
		• may read episode scripts. Graphic designers and illustrators in the movie industry read scripts to visualize what the audience will see in the film. 2D and 3D animators may read scripts to learn about characters and storylines. (3)
		• read software and hardware manuals, both online and paper-based, to locate instructions for specific tasks, troubleshooting information, or more efficient ways of performing tasks. (4)

Reading Summary

The symbols >, >> and >>> are explained in the Use of Symbols section.

Type of Text	Purpose for Reading			
	To scan for specific information/To locate information	**To skim for overall meaning, to get the 'gist'**	**To read the full text to understand or to learn**	**To read the full text to critique or to evaluate**
Forms				
Labels				
Notes, Letters, Memos	√	√		
Manuals, Specifications, Regulations	√		√	
Reports, Books, Journals	√	√	√	

B. Document Use

Document Use

Tasks	Complexity Level	Examples
		Graphic Designers and Illustrators:
Typical	1 to 3	• scan lists of employee phone numbers and email addresses. (1)
		• study screenshots that are used to illustrate processes in online tutorials. (2)
Most Complex	3	• locate and enter information in spreadsheets, such as work schedules that include assigned tasks, timelines and deadlines. For example, graphic designers in the movie industry use call sheets to locate when specific scenes will be shot. 2D and 3D animators read work schedules to plan and organize tasks, and may update information as they complete tasks. They track design changes, such as when and how problems were fixed. (2)
		• locate information in specification sheets. For example,

<table>
<tr><td></td><td></td><td>graphic designers in print shops read forms that give dimensions of graphics, font sizes, colours and quantities. 2D and 3D animators read model packs that give specifications for characters. (2)</td></tr>
<tr><td></td><td></td><td>• complete and verify information in forms. For example, graphic designers in printshops complete customer quotes. They check off items and enter details, such as descriptions of work to be completed, timelines and cost comparisons. (3)</td></tr>
<tr><td></td><td></td><td>• develop master sheets with the design elements, such as headers, footers, and page numbering for page layout in publications. There may be multiple master sheets depending on size and complexity of publication. (3)</td></tr>
<tr><td></td><td></td><td>• locate and review specific data on graphs such as bar and pie charts. For example, 2D and 3D animators in the gaming industry review data about gamer preferences to make decisions about game features. (3)</td></tr>
<tr><td></td><td></td><td>• refer to sketch layouts for information on how the space and colour create a specific effect for the scene in the storyboard. These details affect other features that are added to the scene later. (3)</td></tr>
<tr><td></td><td></td><td>• locate information in scale drawings. For example, graphic designers in the movie industry use floor plans, profile and section drawings to locate measurements, and information about colours and textures. (3)</td></tr>
<tr><td></td><td></td><td>• constantly "read" and pay attention to the world around them. For example, graphic designers read street signs, store signage, advertisements, logos, and banners to get ideas and to note trends in graphic design. (3)</td></tr>
</table>

Document Use Summary

- Read signs, labels or lists.
- Complete forms by marking check boxes, recording numerical information or entering words, phrases, sentences or text of a paragraph or more. The list of specific tasks varies depending on what was reported.
- Read completed forms containing check boxes, numerical entries, phrases, addresses, sentences or text of a paragraph or more. The list of specific tasks varies depending on what was reported.
- Read tables, schedules or other table-like text (e.g. read work shift schedules).
- Create tables, schedules or other table-like text.
- Enter information in tables, schedules or other table-like text.
- Interpret information on graphs or charts.
- Recognize common angles such as 15, 30, 45 and 90 degrees.
- Draw, sketch or form common shapes such as circles, triangles, spheres, rectangles, squares, etc.
- Interpret scale drawings (e.g. blueprints or maps).

- Take measurements from scale drawings.
- Read assembly drawings (e.g. those found in service and parts manuals).
- Read schematic drawings (e.g. electrical schematics).
- Make sketches.
- Obtain information from sketches, pictures or icons (e.g. computer toolbars).

C. Writing

Writing

Tasks	Complexity Level	Examples
		Graphic Designers and Illustrators:
Typical	2 to 3	• write notes. For example, graphic designers write notes on layouts to mark changes, or to remember key points and decisions made during a client meeting. 2D animators may write notes on storyboards for how to move the camera or to mark fade out points. (2)
Most Complex	4	• write emails and text messages to coworkers, supervisors and customers. For example, they email customers to update them on projects or to ask for information. They email coworkers to share problems and solutions, and to brainstorm ideas. (2)
		• enter text into log books. For example, graphic designers may use log books to track customer jobs and clarify priorities. 2D and 3D animators may use logbooks to document assigned and completed tasks. (2)
		• enter text into work orders and job quotes to provide a description of the work to be completed including quantities, materials, labour hours, and job details. (2)
		• may write captions. For example, graphic designers may write captions and titles to help steer the development of a logo, banner, or brochure. (2)
		• may write lists of revisions. For example, 2D and 3D animation supervisors may write lists of revisions that need to be made to different shots and scenes, such as changes to lighting or adding shots to make a transition smoother. (2)
		• write steps to outline a process. For example, the animated lighting artist may write steps on screenshots to outline the lighting process. (3)
		• write proposals that include a detailed description of the project and project details, delivery and timeframes, cost, terms and conditions, and confidentiality clauses. (4)

			write specification and design documents. For example, 2D and 3D animators in the gaming industry may write game design documents that provide a detailed outline of a game and design goals including the story, characters, level and environment design, art samples, ideas for sound and music, game rules, user interface including wireframes, screen dimensions, and game controls. Criteria for completion and milestones are included. Amendments and clarifications are made to the document as the project progresses. (3 or 4)

Writing Summary

The symbols >, >> and >>> are explained in the Use of Symbols section.

Length	Purpose for Writing						
	To organize/ to remember	To keep a record/to document	To inform/ to request information	To persuade/ to justify a request	To present an analysis or comparison	To present an evaluation or critique	To entertain
Text requiring less than one paragraph of new text	√	√	√				
Text rarely requiring more than one paragraph	√	√	√				
Longer text		√	√	√	√	√	

D. Numeracy

The symbols >, >> and >>> are explained in the Use of Symbols section.

Numeracy

Tasks	Complexity Level	Examples
Money Math	2 to 3	Graphic Designers and Illustrators:
		• may calculate expense claim amounts for travel expenses, such as car expenses and meals using established meal and established per kilometre and per diem rates. (Money Math), (2)
Scheduling, Budgeting and Accounting	2	• calculate costs on invoices and quotes. For example, graphic designers calculate costs of materials, time, and taxes. They include cost comparisons, for example, between different weights and types of paper or different types of binding. (Money Math), (3)
Measurement and Calculation	1 to 2	• schedule staff to meet deadlines and remain within budget. (Scheduling, Budgeting and Accounting), (2)
		• may monitor project schedules. For example, lead animators ensure projects are progressing on schedule. They adjust schedules, such as approving overtime or increasing staffing because of unexpected problems or events. (Scheduling, Budgeting and Accounting), (2)
Data Analysis	1	
		• develop and monitor budgets for large and small projects. For example, they calculate the cost for labour, taxes, materials and supplies, and other services such as photography and printing. (Scheduling, Budgeting and Accounting), (2)
Numerical Estimation	2 to 3	• calculate the number of frames required. For example, 2D and 3D animators, may calculate the number of frames needed for a 4 second shot. They multiply the number of frames per second by the length of the shot. They count, add and subtract frames to match character movement to sound or to show a specific emotion. (Measurement and Calculation), (1)
		• use the SI and imperial measurement systems. For example, graphic designers add and subtract fractions of an inch to determine the fold lines for brochures. Graphic designers in the movie industry may convert SI measurements to imperial measurements, or feet and inches to inches. (Measurement and Calculation), (2)
		• may calculate the amount of copy that can fit on a page. For example, graphic designers multiply the number of characters in an inch by the line length by the number of

		lines on a page. (Measurement and Calculation), (2)
		• calculate real measurements using scales in drawings. For example, graphic designers in the movie industry use scales such as 1/8 of an inch equals one foot to calculate lengths and heights of objects. (Measurement and Calculation), (2)
		• compare data about usage trends for different consumer groups using statistics for video games. For example, 2D and 3D animators in the gaming industry compare demographic data, such as who is playing, player ages, and percentage of male to female players. They draw conclusions about trends and make decisions about projects, for example, structure of user interfaces or developing a game that will appeal to females. (Data Analysis), (1)
		• estimate time. For example, they estimate the number of hours it takes to complete a series of tasks to meet a deadline. (Numerical Estimation), (2)
		• make estimates when developing budgets and schedules. For example, they may estimate the cost of materials and supplies, the time required to complete tasks, and the staffing requirements. (Numerical Estimation), (3)

Math Skills Summary

a. Mathematical Foundations Used

The symbols >, >> and >>> are explained in the Use of Symbols section.

Mathematical Foundations Used

Code	Tasks	Examples
		Number Concepts
	Whole Numbers	Read and write, count, round off, add or subtract, multiply or divide whole numbers. For example, counting, adding and subtracting frames in animated scenes, or counting number of frames to animate an action, reading screen resolutions.
	Integers	Read and write, add or subtract, multiply or divide integers. For example, calculating the costs as part of a budget.
	Rational Numbers - Fractions	Read and write, add or subtract fractions, multiply or divide by a fraction, multiply or divide fractions. For example, calculating where the folds are on a 3 or 4 panel brochure, or measuring dimensions in feet and inches.
	Rational Numbers - Decimals	Read and write, round off, add or subtract decimals, multiply or divide by a decimal, multiply or divide decimals.

		For example, calculating the cost of a job to give a quote, or measuring dimensions in millimetres.
	Rational Numbers - Percent	Read and write percents, calculate the percent one number is of another, calculate a percent of a number. For example, spacing on pages and screens, and colour mixing are described as percents. Calculate percentages for taxes on invoices.
	Equivalent Rational Numbers	Convert between fractions and decimals or percentages, convert between decimals and percentages. For example, SI and imperial, fractions and decimals, picas and inches.
	Patterns and Relations	
	Use of Rate, Ratio and Proportion	Use a proportion showing comparison between two ratios or rates in order to solve problems. For example, graphic designers use aspect ratio, or calculating the actual length of objects using a ration, such as 1/8 inch = 1 foot.
	Shape and Spatial Sense	
	Measurement Conversions	Perform measurement conversions. For example, converting measurements from feet to inches or converting between inches and millimetres.
	Areas, Perimeters, Volumes	Drawing, sketching and forming common forms and figures. For example, using specifications and dimensions layout of columns and sections of a page. 2D and 3D animators use software to generate curves, spheres and custom geometry.
	Geometry	Use geometry. For example, 2D and 3D animators use x, y and z coordinates for rotations and translations.

b. How Calculations are Performed

- In their heads.
- Using a pen and paper.
- Using a calculator.
- Using a computer (macros in spreadsheet programs).

c. Measurement Instruments Used

- Time. For example, using clocks and watches.
- Distance or dimensions, for example, using rulers, measuring tapes and ratios.
- Using the SI (metric) measuring system.
- Using the imperial measuring system.

E. Oral Communication

Oral Communication

Tasks	Complexity Level	Examples
Typical Most Complex	1 to 3 3	Graphic Designers and Illustrators: • listen to actors' voices to get a feel for and help with inflection and timing. (1) • speak with co-workers to ask for help with specific tasks, for example, 2D and 3D animators ask co-workers for help with specific animation difficulties. (2) • speak with workers from other departments. For example, graphic designers may consult with the copywriter about text. 2D and 3D animators may ask computer programmers for code to do something specific, or with storyboard artists to clarify something. (2) • speak with supervisors and project or team leads. They may ask to be assigned to new or different tasks to learn more and gain experience. For example, 2D and 3D animators ask the team lead for help with a problem, such as a broken "puppet" or a missing "asset". (2) • interact with clients to provide information about the project or to ask for information or feedback. For example, graphic designers meet with clients to listen to their vision, to gather and clarify information, and to negotiate changes. They may need to explain why it is not possible to use certain types of paper for a brochure due to budget limitations, or make suggestions for improvement to a layout. (3) • speak with internal and external management. For example, a 3D animator in a small gaming company may need to convince management that making significant changes are not worth the cost, or that something is not possible because of limitations of the gaming platform. (3) • attend team meetings. They discuss progress, deadlines, task assignment. They may discuss problems and limitations of software and hardware. For example, graphic designers for the web may need to explain the "visual" to the rest of the team including the HTML coder, copywriter and project manager. (3) • mentor and instruct new and junior workers. For example, 2D and 3D animators explain software shortcuts and techniques, such as different ways to set up a shot to junior animators. There may be designated mentoring times for senior animators to teach junior animators about

		specific topics, such as time management. (3)
		• deliver presentations to explain and discuss design elements. For example, graphic designers defend their choices about graphic elements and negotiate changes and alterations. They may need to convince managers why the choice of font and colour in their design works. (3)
		• network to build clientele. For example, graphic designers who own their own business network with clients and colleagues to get referrals. (3)

Modes of Communication Used

- In person.
- Using a telephone.

Environmental Factors Affecting Communication

None reported.

Oral Communication Summary

The symbols >, >> and >>> are explained in the Use of Symbols section.

Purpose for Oral Communication (Part I)						
Type	**To greet**	**To take messages**	**To provide/receive information, explanation, direction**	**To seek, obtain information**	**To co-ordinate work with that of others**	**To reassure, comfort**
Listening (little or no interaction)			√			
Speaking (little or no interaction)						
Interact with co-workers			√	√	√	
Interact with those you supervise or direct			√		√	
Interact with supervisor/manager			√	√	√	
Interact with peers and colleagues from other organization						
Interact with customers/clients/ public			√	√		
Interact with suppliers, servicers						
Participate in group discussion			√	√		
Present information to a small group			√	√		
Present information to a large group						

The symbols >, >> and >>> are explained in the Use of Symbols section.

Purpose for Oral Communication (Part II)						
Type	**To discuss (exchange information, opinions)**	**To persuade**	**To facilitate, animate**	**To instruct, instill understanding, knowledge**	**To negotiate, resolve conflict**	**To entertain**
Listening (little or no interaction)						
Speaking (little or no interaction)						
Interact with co-workers	√			√		
Interact with those you supervise or direct	√			√		
Interact with supervisor/manager	√					
Interact with peers and colleagues from other organization						
Interact with customers/clients/public	√	√		√	√	
Interact with suppliers, servicers						
Participate in group discussion	√	√		√	√	
Present information to a small group	√	√		√		
Present information to a large group						

F. Thinking Skills

1. Problem Solving

Problem Solving

Tasks	Complexity Level	Examples
		Graphic designers and illustrators:
Typical	2 to 4	• solve design issues with clients. For example, graphic designers explain to clients why they should choose a fabric banner instead of a vinyl one. (2)
Most Complex	4	• anticipate possible challenges and have alternate plans. For example, equipment malfunctions, or communications breakdown with clients. Graphic designers may offer the client a break on the price, something extra or something redone. (2)
		• resolve issues with series of shots not connecting smoothly or flowing well. For example, 2D and 3D animators may have to change the order of shots, add new shots, or delete shots. (2)
		• bring animated characters to life. For example, 2D and 3D animators figure out how to add personality, facial expressions, movement, and physical looks based on the story. They consider the speed of the animation, facial expression and personality of the character. In gaming, they have to consider the limitations of the gaming platform. (3)
		• resolve differences between client expectations and actual outcomes. For example, the client may want a specific look to a book but the graphic designer needs to convince them the design will not work. (3)
		• solve design, budget and timeline conflicts with clients. For example, graphic designers negotiate with clients who ask for major changes to a design just before production. (3)
		• figure out how to design, lay out and produce print and electronic media that meets the client's needs and expectations. They consider colour, fonts, illustration, photography, animation, and different layout and print techniques. They must find effective solutions to getting the client's message across to the public. (4)

2. Decision Making

Decision Making

Tasks	Complexity Level	Examples
		Graphic Designers and Illustrators:
Typical	2 to 3	• decide when to ask for help with a problem. They consider time constraints and the time needed to complete other tasks. (2)
Most Complex	3	• decide if a new or different asset is needed. 2D and 3D animators present reasons for changes to their supervisor who makes the final decision. (2)
		• may decide if changes to a project can be made. They consider the budget and deadlines. (2)
		• decide how a shot should look based on the reason for the shot and how it relates to the scene. 2D and 3D animators also consider the technical capabilities for making the shot. (3)
		• decide on materials, colours, fonts, graphic elements, layouts and other design aspects to create a specific look. For example, they consider customer specifications and budget. (3)

3. Critical Thinking

Critical Thinking

Tasks	Complexity Level	Examples
		Graphic Designers and Illustrators:
Typical	2 to 3	• evaluate the needs of clients. For example, graphic designers listen carefully to clients during initial meetings and ask questions to help clients articulate ideas. (2)
Most Complex	3	• make judgements when manipulating and combining elements of design. For example, contrast, scale, colour, pacing, and typography are combined to develop effective and appropriate visual solutions. They analyze visuals considering what works and what does not work, and how the visuals fit into the overall purpose of the project. (3)
		• may evaluate the performance of new and junior workers. For example, senior animators and team leads assign tasks to junior animators and assess their creativity and ability to meet deadlines. Their goal is to build an animation team with strong skills. (3)

		• evaluate the quality of products to determine marketability. For example, a senior animator in a small gaming company considers the story, characters, level and environment design, and user interface. (3)

4. Job Task Planning and Organizing

Job Task Planning and Organizing

Complexity Level	Description
3	Own job planning and organizing: • Graphic illustrators and designers schedule their own job tasks to meet project deadlines. They often have to coordinate and integrate tasks with others. They schedule time to attend meetings with clients, coworkers, managers and other others. Often there is a queue of projects and they may need work overtime or reprioritize tasks to meet deadlines. Planning and organizing the work of others: • Graphic illustrators and designers may assign tasks to junior members of the team.

5. Significant Use of Memory

Examples

- Remember "tricks" for the software to do something quickly and easily.
- Remember client history and background when making decisions about what clients may want in a design or animation.
- Remember specifics about products they use, such as standard paper sizes or typical film sizes.

6. Finding Information

Finding Information

Tasks	Complexity Level	Examples
Typical Most Complex	2 to 4 4	Graphic Designers and Illustrators: • consult with coworkers, supervisors, managers and colleagues. For example, 2D and 3D animators learn new skills by networking. They may use social media such as Facebook and LinkedIn to network and find information about industry related issues. (2) • meet with clients to get information on the client's background and ideas for projects. For example, graphic designers meet with clients to get information on the client's budget and vision for the product. (2) • observe what they see around them for ideas. For example, graphic designers note trends in colours being used for designs and may recommend these colours to clients who want a similar product. (3) • access forums and blogs as part of research. For example, 2D and 3D animators visit forums for answers to technical questions about software and to get help with solving a problem. They may look for reviews on games and learn more about their competition. (3) • conduct online research to locate information for specific projects. For example, graphic designers and illustrators in the movie industry may research specific time periods to check signage and font styles. (3) • watch movies, TV shows, animated films and cartoons, and ads as part of research to stay current in technology and trends. 2D and 3D animators may watch a film frame by frame to learn new animation techniques. (3) • use manuals, trade journals and magazines to find information about what they are designing. For example, 2D and 3D animators look at comic books and graphic novels while working on a project involving superheroes. (4)

G. Working with Others

Complexity Level	Description
3	Graphic designers and illustrators often work as part of a team that include other designers, copywriters, art directors, production artists, set designers, director and computer programmers depending on which part of the industry they work in. They complete tasks independently and then coordinate and collaborate with team members to complete a project. They may meet with clients and suppliers. Self-employed graphic designers and illustrators also spend time networking to increase their client base.

Participation in Supervisory or Leadership Activities

- participate in formal discussions about work processes or product improvement.
- have opportunities to make suggestions on improving work processes.
- monitor the work performance of others.
- inform other workers or demonstrate to them how tasks are to be performed.
- orient new employees.
- select contractors and suppliers.
- assign routine tasks to other workers.
- assign new or unusual tasks to other workers.
- identify training that is required by, or would be useful for, other workers.

H. Digital Technology

Digital Technology

Tasks	Complexity Level	Examples
		Graphic Designers and Illustrators:
Typical	2 to 3	• use communications software. They email attachments with graphics files, PDFs and Word documents. They may use file transfer protocol (FTP) sites to download and upload large files. (2)
Most Complex	3	• use search engines to research projects and find websites that have information on how to troubleshoot software

		problems. (2)
		• use spreadsheet programs like Excel to keep track of project information, such as completed tasks or issues with game levels. (2)
		• use online project management programs such as JIRA to track bugs, how they were fixed, and whether further testing was done. (2)
		• use social media such as Facebook, LinkedIn, Instagram, Pinterest, and Tumblr to network with colleagues. (2)
		• use computer graphics. For example, graphic designers use raster images in designs where photography is required, or when designing web pages. (2)
		• use CAD software to produce computer animation in movies and games. For example, 2D and 3D animators use CAD to design buildings and rigid structures or the background scenes of games. (3)
		• use word processing software to write documents. For example, 2D and 3D animators write outlines of the lighting process to other artists using descriptions and screen shots. (3)
		• use graphic design software such as Adobe Illustrator, InDesign, Photoshop and Pagemaker to design banners, logos, brochures, manuals, and other publications and products. (3)
		• visit forums and read blogs for industry-related questions, answers to issues, and keep up on trends. (3)
		• use animation software such as Maya to create 3D computer animation, modelling, simulation, rendering, and compositing. (4)

Computer Use Summary

- use word processing.
- use graphics software.
- use a database.
- use a spreadsheet.
- use communications software.

I. Continuous Learning

Continuous Learning

Complexity Level	Description
4	Graphic designers and illustrators must keep up to date with trends and changes in industry and technology. They research tends online by reading articles on websites and blogs to learn about graphics and design. They join forums to learn about competitors in the industry and find answers to issues. They read technical manuals, read online Wiki pages, or watch videos at the start of a project to learn about technology. Co-workers and supervisors answer questions about how to perform tasks or solve problems. Those who work for large companies may receive in-house training. 2D and 3D animators watch animated films and movies to spark ideas and find elements that can help with a current project.

How Learning Occurs

Learning may be acquired:

- as part of regular work activity.
- from co-workers.
- through training offered in the workplace.
- through reading or other forms of self-study.
    - at work.
    - on worker's own time.
    - using materials available through work.
    - using materials obtained on worker's own initiative.
- through off-site training.
    - during work hours at no cost to the worker.
    - partially subsidized.
    - with costs paid by the worker.

J. Other Information

In addition to collecting information for this Essential Skills Profile, our interviews with job incumbents also asked about the following topics.

Physical Aspects

Graphic Designers and Illustrators spend much of their time seated as they work in front of computers to do lay outs or design animations, research online, or sit at meetings. They need good hand and eye coordination for doing detailed work. They need a sharp eye to distinguish subtleties in detail, size and colour.

Attitudes

Graphic designers and illustrators need to be highly creative and imaginative when designing products. They need to be innovative and self-motivated to meet the demands of an industry which requires them to be up to date on technology so they can design products that follow and exceed trends.

Impact of Digital Technology

All essential skills are affected by the introduction of technology in the workplace. Graphic designers and illustrators' ability to adapt to new technologies is strongly related to their skill levels across the essential skills, including reading, writing, thinking and communication skills. Technologies are transforming the ways in which workers obtain, process and communicate information, and the types of skills needed to perform in their jobs. In particular, graphic designers and illustrators need to use computer software to create animations for movies and computer games, or designs for electronic and paper-based products. They require greater oral communication and writing skills to communicate with clients and team members about project updates and issues, either by using communications software, or sending and sharing electronic files.

Technology in the workplace further affects the complexity of tasks related to the essential skills required for this occupation. Graphic designers and illustrators need the skills to use complex and specialized software. New developments in technology require these workers to keep current with computer software and technological trends in movie making, gaming, and publishing. On the other hand, the use of technology will have a strong impact on the industry, as changes in computer technology affects how games and electronic publications are designed.

K. Notes

This profile is based on interviews with job incumbents across Canada and validated through consultation with industry experts across the country.

For information on research, definitions, and scaling processes of Essential Skills Profiles, please consult the Readers' Guide to Essential Skills Profiles.