

3D Character Computer Animation

SECONDARY



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1 THE SKILLS FOR SUCCESS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

In response to the evolving labour market and changing skill needs, the Government of Canada has launched the new Skills for Success (former Essential *Skills*) model defining nine key skills needed by Canadians to participate in work, in education and training, and in modern society more broadly. SCC is currently working with Employment and Social Development Canada (ESDC) to bring awareness of the importance of these skills that are absolutely crucial for success in Trade and Technology careers. Part of this ongoing initiative requires the integration and identification of the Skills for Success in contest descriptions, projects, and project documents. The next phase and very important aspect of our Skills for Success (SfS) initiative is to provide a *Skills Report Card* to each competitor at the Skills Canada National Competition. The purpose of the report card is to inform the competition scores. With this knowledge, the competitor will be made aware which skill may require improvement. Full implementation is expected in the next Skills Canada National Competition.

The following 9 skills have been identified and validated as key skills for success for the workplace in the legend below:

¹Numeracy, ²Communication, ³Collaboration, ⁴Adaptability, ⁵Reading, ⁶Writing, ⁷Problem Solving, ⁸Creativity and Innovation, ⁹Digital

These Skills for Success have been identified in section 2.3 and/or 3.2 of your Contest Description and if applicable, in your Project and supporting documents.

2 CONTEST INTRODUCTION

2.1 Description of the associated work role(s) or occupation(s)

The animation industry is growing and vibrant, providing an opportunity for creative employment. It requires a combination of technical and artistic skills, the ability to manage time, communicate ideas and work together in a team environment. The purpose of this competition is to provide contestants with an opportunity to compete with others from across Canada to demonstrate key skills and their understanding of the animation process.

The fundamental concepts of animation will be emphasised and implemented throughout the two-day event. The competition will focus on the participants' ability to tell a story through expressive characters and engaging storytelling. Teams will present their story breakdown, pose test, animatic and final product to the judges at specific times during the competition. The final animations will be presented at the end of the competition.

https://www.skillscompetencescanada.com/en/skill_area/3d-2d-character-computer animation/



2.2 Purpose of the Challenge

To provide competitors with the opportunity to experience the production process and demonstrate their knowledge and skill.

2.3 Duration of contest

12 hours

2.4 Skills and Knowledge to be tested.

Employability Skills:

- Team work³
- Time management¹
- Reading⁵
- Planning
- Attention to detail
- Preproduction:⁸
- Composition
- Asset Design
- Storyboarding
- Writing⁶
- Character Pose Tests
- Animatic
- Production:⁹
- Cinematography
- Asset Construction
- Rendering
- Animation
- Exporting
- File Management
- Appeal of Final Product8

3 CONTEST DESCRIPTION

3.1 List of documents produced and timeline for when competitors have access to the documents on the Skills/Compétences Canada website

DOCUMENT	DATE OF
	DISTRIBUTION
Storyboard Panel Template	January 2023
Pose Test Template	January 2023
Competitors' Handbook	January 2023
Principles of Animation	
Storyboard symbols	

Animatic Example Storyboard Example	
Sound Library	January 2023

3.2 Tasks that may be performed during the contest

Competitors will be given 12 hours to plan and create an 11-15 second animation. Competitors will need to develop a story breakdown, pose test, animatic, and animation that includes character(s) and the following story plot breakdowns: **setup, conflict, and resolution**.

The story must have the following required character action – **Sit to stand OR stand to sit**.

Wild Card (30 marks)

During the orientation competitors will be given an additional wild card that must be included in the setup, conflict, and resolution of their story. The additional wild card must be a necessary part of the story plot. The single wild card will be selected from one of the following: **beverage container**, **bookbag**, **table lamp**, **mobile device**, **book/magazine**. Competitors will also be provided with audio clips (.mp3 and .wav) that must be used to support the wild card animation and be present in the setup, conflict, and the resolution.

- Wild Card Judging Criteria
 - Element Plot Integration The wild card element is visible and necessary in each story breakdown. The element has significance and has a creative influence in the character(s) sit to stand or stand to sit. The element is used in an unpredictable and engaging way within the animation.
 - Appeal The element is engaging and evokes emotion from the audience. Prop style of the wild card matches scene and has a good silhouette throughout the animation.
 - Performance of Element The element exhibits use of strong animation principles and must include the use of arcs. Timing and spacing used in animation of the wild card.
 - Audio Clip Inclusion Audio is included, is synced, and supports the action of the wild card element.



Competition Breakdown

Preproduction (25 marks)

[The story breakdown and pose test must be submitted at the end of the 1st hour.]

Pre-Production - Story Breakdown: Competitors are required to submit three storyboard panels. One demonstrating the setup, one demonstrating the conflict and one demonstrating the resolution. Storyboard panels must include captions and action notes. Competitors must use the storyboard panel template provided.

• <u>Story Breakdown Judging Criteria:</u> Competitors have an inspiring and entertaining plot that is original. The story plot breakdown demonstrates staging, has captions and is clear.

Pre-Production - Pose Test: Competitors are required to create a pose test for the protagonist character that demonstrates the personality of their character and shows a strong silhouette. A character name and bio must be included. Competitors must use the pose test template provided. Character pose tests can be screenshots from the program itself.

• <u>Pose Test Judging Criteria:</u> Competitors pose test is creative and consistent in design and style, demonstrates the character(s) personality, and includes a character bio.

[The animatic must be submitted at the end of the 3rd hour]

Pre-Production - Animatic: Competitors are required to create an animatic. Audio clips must be included in each storyboard breakdown within the animatic (setup, conflict, and resolution). An audio library will be provided with sound effects. Provided sound effects can be altered within the software. No outside sound effects can be used. Animatics can be created with screenshots from the program of choice.

• <u>Animatic Judging Criteria:</u> Competitors' animatic includes a clear story setup, conflict, and resolution. The animatic expected camera movement has purpose and does not distract or cause uneasiness, the timing and pacing is realistic and believable, the layout (staging) strongly supports the animation, and the characters are expressive with creative poses. Audio clips are included for each story breakdown. There is a consistent level of detail with the drawings. Additional frames plus plot drawings.



Animation (40 marks)

[The final animation and final product must be submitted at the end of the 12th hour]

Animation: Competitors are required to create an animation that follows the animatic submission, demonstrates the principles of animation in each section of the plot (setup, conflict, and resolution), has believability, entertainment value, and cinematography. Audio placement and usage matches the animatic.

- Animation Judging Criteria:
 - Story Setup Animation Character demonstrates principles of animation in the setup. The animation is smooth, believable and makes good use of pauses.
 - Story Conflict Animation Character demonstrates principles of animation in the conflict. The animation is smooth, believable and makes good use of pauses.
 - Story Resolution Animation Character demonstrates principles of animation in the resolution. The animation is smooth, believable and makes good use of pauses.
 - Required Action The REQUIRED ACTION of the sit-stand or stand-sit is present and creatively implemented. Action demonstrates principles of animation. Exaggeration used in action. Anticipation/reaction used in action. Timing showcases good weight and arcs.
 - Design Principles Effective visual depth is used to separate foreground and background. The layout strongly supports animation focus and interest. Design/colour harmony is present.
 - Cinematography Camera movement has purpose and does not distract or cause uneasiness. A variety of shots are used. Sets and props are used to establish shots. Visual depth is present.
 - Audio Clip Inclusion Audio is synced and clips enhance animation.
 Audio is in each story breakdown of the final animation and matches animatic.

Final Product (5 marks)

- There are two final video submissions:
 - Final animation with the provided slates/title.
 - Pose tests, animatic, animation, and provided slates/title compiled into a single final video.



- Videos must be submitted to the submission location by scheduled end of competition, Day 2. Consideration for upload speed and difficulties around submission should be taken, so please plan accordingly.
- Animation resolution must be formatted as 1280 x 720.
- Frame rate must be 24 FPS in the animation.
- File format must be .mp4
- Competitors are responsible for converting any animation file outputs to mp4 for final submission.
- Final Product Judging Criteria: -
 - Preproduction story matches final product. Resolution, frame rate, and file format match the above description. Story templates and slates used in final products.
- Competitors will be docked points for not submitting the final compiled video by scheduled end of competition.

Other Important Information:

Character Rigs:

• Competitors are allowed to bring two-character rigs to the competition. Character rigs cannot include pre-made animation or pose library.

Textures:

• The competition is focused on animation, textures used are at the competitor's discretion. Creative common textures are allowed to be downloaded and used accordingly; handmade textures can be created during competition.

Props and environment:

• Assets must be created during competition.

Skills for Success - ¹Numeracy, ³Collaboration, ⁵Reading, ⁶Writing, ⁸Creativity & Innovation, ⁹Digital

4 EQUIPMENT, MATERIAL, CLOTHING

- 4.1 Equipment and material provided by the competitor
 - Competitors are required to use their own device and software for the 2023 competition. Each competitor may choose their own device and software to ensure their workflow and process is to what they are familiar with. Competitors are only able to have a maximum of two computers running at a time. Backup computers are acceptable.
 - If competitors are using a computer or laptop from their school (instead of their personal computer), please ensure that the computer is unlocked to be able to access documents and software which can be saved/installed to the hard drive.



- Equipment (including ipads, tablets, laptops, desktops, monitors) is required to be set up during the orientation and it is required to remain at their site until the end of competition and only accessible during competition hours.
- Optimum Hardware Requirements:
 - o Table and Chair
 - o Intel Graphics Workstation i7 Quad Core Processors
 - **1 TB HD**
 - o 16Gb RAM
 - Dedicated video card (suggested 2GB) as approved by Autodesk
 - Flat Panel Display 1920 X 1080
 - Sound card
 - Operating System Windows 7 or 10 64 Bit
 - Wi-Fi enabled computer system
- Suggested software:
 - 3D Software: 3D Studio Max, Maya, Blender.
 - 2D Software: Adobe CC Animate, ToonBoom Harmony, ToonBoom Storyboard Pro.
 - Video and Graphic Software: Adobe Photoshop, Adobe After Effects, and Adobe Premiere Pro, Final Cut Pro (Mac)
 - Viewing Software: VLC
 - Audio software: Audacity
- Additional Equipment and material suggested.
 - Tablet and driver (Driver compatible with your system)
 - o Headphones
 - Drawing materials
 - Empty USBs (Recommended USB 3)

5 HEALTH AND SAFETY

5.1 Safety program

SCC has implemented a comprehensive safety program as health and safety is an integral part of our competitions. Our safety program includes guidelines and procedures to make the work environment in each skill area safer.

5.1.1 Safety manual

As part of our program a safety manual has been created to monitor and document health and safety within each skill area. It includes a definite plan of action designed



to prevent accidents. The safety manual will be provided for every skill and these instructions must be followed and respected by all participants and officials at the SCNC.

5.1.2 Safety workshop

During orientation, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety, and environmental rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

5.2 COVID-19 Protocol

The COVID-19 guidelines will be shared as soon as they are available. The COVID-19 guidelines will be subject to change based on the COVID-19 guidelines in place at the time of the competition.

- **5.3** List of required personal protective equipment (PPE) provided by <u>Skills/Compétences Canada</u>
 - N/A
- 5.4 List of required personal protective equipment (PPE) provided by the <u>competitor</u>
 - N/A

Note: Competitors who do not have the required protective equipment will not be allowed to participate in the competition

6 ASSESSMENT

6.1 Point breakdown

Note: This list is subject to change.

TASKS	/100
Preproduction	25
Wild Card	30
Animation	40
Final Product	5

7 CONTEST SPECIFIC RULES

Contest specific rules cannot contradict or take priority over the Competition Rules. They do provide specific details and clarity in areas that may vary from contest to contest. Any additional contest rules will be reviewed during the competitor orientation.

TOPIC/TASK	CONTEST SPECIFIC RULE
Use of technology - personal laptops, tablets and mobile phones	 Listening to music is permitted during competition hours on any personal device. See 4.1 for bring your own device specifications.
Drawings, recording information	All submitted artwork must be completed during the competition hours.
Tools / Infrastructure	 Sound library will be available alongside this competition document
Additional Competition Details	 Competitors will be disqualified if animation exceeds the required range of length. All submissions must be completed by the scheduled end of competition. If any technical issues arise during the competition, the NTC committee will decide if any additional time will be allotted. No files are allowed to be brought into the competition except for the suggested under section 3.2. No additional plugins and scripts can be used (other than those found in the final shipped version of the software) You can use the internet to transfer files via google drive and verify licenses. Contestants will be responsible to install and troubleshoot their devices.

8 ADDITIONAL INFORMATION

8.1 Interpreter

If a competitor requires the help of an interpreter once onsite during the competition, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service may not be guaranteed.

8.2 Ties

- Tiebreaker #1: The competitor with the highest score in the Animation criteria will be declared the winner.
- Tiebreaker #2: The competitor with the highest score in the Wildcard criteria will be declared the winner.
- Tiebreaker #3: The competitor with the highest score in the Animatic sub criteria will be declared the winner.

Contest Description 87 - 3D Character Computer Animation Secondary Page 10 of 11 Due to unforeseeable COVID-19 regulations/uncertainties, competition documents are subject to change.



8.3 Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, NTC shall change a maximum of 30% of the work content. Please refer to the Competition Rules.

8.4 Competition rules

Refer to the competition rules of the Skills Canada National Competition which can be found on our website.

9 NATIONAL TECHNICAL COMMITTEE MEMBERS

MEMBER ORGANIZATION	NAME
Prince Edward Island	Tiffany Baxter – Co-Chair
Nova Scotia	Suzanne Labrecque
Ontario	Alexi Balian
Manitoba	Justin McGillivray - Chair
Alberta	Greg Dreidger
British Columbia	Patty Chomseng

Contact the Skills/Compétences Canada national secretariat for any questions or concerns: Nathalie Maisonneuve (<u>nathaliem@skillscanada.com</u>).