

USING TECHNOLOGY TO DESIGN INCLUSIVE COMMUNITY SPACES



RECOMMENDED GRADE LEVEL: Grades 9 to 12

SUBJECT: Computer Studies

Suggested time: 150 minutes

Essential Question: Can a space be transformed to be inclusive through the use of technology?

LEARNING GOALS

Students will:

- Discover how to create an inclusive learning space with the First Nations Medicine Wheel as the foundation
- Design their own inclusive community space through the use of technology

MATERIALS AND RESOURCES

- Grid paper, art supplies, or computer software/Apps such as Minecraft
- CBC News. "Indigenous students share thoughts on new Gordon Oakes Redbear Student Centre." CBC News www.cbc.ca/news/canada/saskatoon/3-indigenous-students-on-new-gordon-oakes-redbear-student-centre-1.3438024
- Gordon Oakes Redbear Student Centre aboriginal.usask.ca/gordon-oakes-red-bear-student-centre.php#About
- Hill, Andrea. "Student centre lauded as symbol of reconciliation." Saskatoon StarPhoenix. thestarphoenix.com/news/local-news/student-centre-lauded-as-symbol-of-reconciliation
- MinecraftEdu www.minecraftedu.com
- Murray, Jacqui. "Minecraft in the Classroom Teaches Reading and More." Teach Hub. www.teachhub.com/minecraft-classroom-teaches-reading-writing-problem-solving
- Youth Spark Hub for Tech Learning and Engagement www.microsoft.com/about/philanthropies/youthspark/youthsparkhub/

- Wing, Jeannette M. "Computational Thinking" www.cs.cmu.edu/~CompThink/papers/Wing06.pdf
- Wing, Jeannette M. "Computational Thinking: What and Why?" www.cs.cmu.edu/~CompThink/papers/TheLinkWing.pdf

1.

RECOMMENDED ASSESSMENT FOR LEARNING: Distribute printed copies of the articles or the URL links to students. If students are working on computers or tablets, they may watch the video individually, otherwise show the news clip to the class once they have finished reading articles.

- Hill, Andrea. "Student centre lauded as symbol of reconciliation." thestarphoenix.com/news/localnews/student-centre-lauded-as-symbol-of-reconciliation
- "Indigenous students share thoughts on new Gordon Oakes Redbear Student Centre." CBC News. www.cbc.ca/news/canada/saskatoon/3-indigenous-students-on-new-gordon-oakes-redbear-student-centre-1.3438024

2.

Provide students with the following questions to be answered independently or with a partner:

- What is the purpose of a community space?
- Why is a community space that truly serves its community important for community members?
- How does the Red Bear Student Centre serve the community? Reference specific examples from the article in your answer.
- What is the significance of having Indigenous architect Douglas Cardinal design the space?
- What role does the architect play in creating a community space?
- List some of the specific design details mentioned in the Star Phoenix article that makes the Red Bear Student Centre friendly for Indigenous ceremonies.
- How does the Red Bear Student Centre show the university's commitment to reconciliation?

3.

Inform students that, just as the University of Saskatchewan and Douglas Cardinal collaborated to create the Red Bear Student Centre, they will be creating spaces that will serve their community using grid paper, art supplies or computer software/Apps such as Minecraft. Minecraft is used as the example program in the rest of the lesson.

4. Create a list of students who are experts in Minecraft, familiar with the software or novices in the program. Using the list, divide the class into small groups so that there is a mix of levels of proficiency with the program.
5. Encourage students to conduct research to gain a better understanding of how the Red Bear Student Centre works as a community space as well as other community centres' successes and failures. They will want to consider what their community needs are and how they may fulfill those needs with their community centre. Inclusivity should be a key component.

6.

RECOMMENDED ASSESSMENT AS LEARNING: Students should create a plan keeping the following considerations in mind:

- a. How will your community space serve the community?
- b. Where will it be located?
- c. How will it be accessible to all community members?
- d. How does your community space welcome Indigenous Peoples? Non-Indigenous people? People who are new to Canada?
- e. As the architects, what do you need to know about the community before you begin designing?
- f. How will you honour the traditional lands where the community space is located?
- g. How will the community space be used? Consider daily uses and occasional uses.
- h. How can you include members of the community including different groups such as Elders, parents, teenagers, children in your planning and developing of designs? (Conversations on needs and ideas, integrating feedback presented in the virtual space.)

Students will be assessed on:

- Create use of the space
- Inclusivity of Indigenous and non-Indigenous people
- Level of completeness
- Group interactions
- Community involvement (this may be set as a bonus depending on the time available to allot to this project)

7. Set a due date. What is not finished in class will need to be assigned for homework. On the due date have groups present their community spaces to the class. Students should answer or touch on the following aspects of their spaces:
 - a. What is the purpose of your community space?
 - b. How does it benefit the community?
 - c. Explain why you chose specific details including, but not limited to:
 - i. Location/setting
 - ii. Materials used
 - iii. Look and feel
 - iv. Architectural details
 - d. What events might be held in the space and how is it designed to serve/facilitate these events?
 - e. How does it reflect and honour the land and people who have lived there in the past?
 - f. How does it look forward to the future of the community?

8.

RECOMMENDED ASSESSMENT OF LEARNING: Have students complete personal reflections by answering the following questions in paragraph form.

- a. What challenges did you come across while building the community space with your teammates? How did you overcome them?
- b. How do you feel about the work you accomplished? Explain.
- c. How does your community space reflect a commitment to reconciliation?



ENRICHMENT: Invite relevant leaders of the community in to allow groups to be present and share their community spaces and ideas to see if they can be taken from the virtual world and implemented into the community.

EDUCATOR'S NOTE: Before students enter the Minecraft world, review school or class policies and expectations on responsible use of online technology. Groups should now be ready to begin building their community spaces in Minecraft.