

The January Game

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Wagner, D. (2021). The January game. *CMESG Newsletter / GCEDM infolettre*, 38(1).

Here is a game I invented to help people understand viral growth.

The January Game

Did someone tell you that “You are in the January game?”

Please play:

For the rest of January, every time someone

- talks to you, AND
- they are wearing something with a colour that you are also wearing

tell them: “You are in the January game.”

And ask them to play the game by doing the same thing you are doing.

Tell them how to play.

I suggest telling students about the game but not asking them to play, because not everyone will want to play. Rather, use the game as a context for exploration. We can ask questions like this:

1. If we were to start the game now, how many people do you expect to be in the game by the end of class? (Think about who will be in the game, where they go and who they talk with.)
 - by the end of the school day?
 - by the end of the day?
 - by the end of the next day?
 - by the end of the week?
2. If you are playing the game, what could you do to get more people into the game?
3. What could you do to slow the game down (fewer people in the game)?
4. Who are the most important people in the game?

Design considerations:

- I take seriously the concerns I have heard about re-traumatizing children already suffering in the pandemic. The game may be less traumatizing than work with pandemic statistics.
- I wanted the game to be simple enough that it could be understood and discussed by young children.
- I wanted the viral modelling in the game to include random-like elements: not every interaction results in transmission. Thus the bit about clothing colours. This also parallels the way clothing choices (wearing a mask or not) can influence transmission.
- I wanted the viral modelling to show how exponential growth is limited by interaction bubbles.
- I wanted the game to be finite, so I limited it to within a month. Of course, one could change the name of the game to match the month. (I invented the game in late October and at first called it The November Game.)
- Credit to Wes Maciejewski whose article “Teaching math in real time” (Maciejewski, 2021, *Educational Studies in Mathematics*, 108) inspired Question 4 above.

If you play or use the game, please tell me how it went: dwagner@unb.ca.