EscapelF Workshop with Dr. Scott Nicholson

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On June 16th, the Mobiles for Education Alliance hosted a virtual Storytelling Math Game Design <u>Workshop</u> with Dr. Scott Nicholson – Professor of Game Design and Development at Wilfrid Laurier University and the Alliance's very own Escape Games for Education Strategic Advisor over the last year.

[You can skip the first 9 minutes of the video to jump into Scott's presentation.]

In addition to the featured workshop described below, Scott also led an EscapeIF workshop in June and July with a number of teachers engaged with <u>AIMS</u> Rwanda.



He is the author of numerous <u>research papers</u>, <u>Everyone Plays at the Library: Creating Great</u> <u>Gaming Experiences for All Age</u>, and a co-author with Liz Cable of <u>Unlocking the Potential of</u> <u>Puzzle-based Learning: Designing Escape Rooms and Games for the Classroom</u>. Nicholson is also the designer of two board games – Going, Going, GONE!, and Tulipmania 1637.

Created by Nicholson in collaboration with the mEducation Alliance, the EscapeIF game system involves interactive fiction games that help educators reinforce foundational literacy and numeracy learning concepts in an engaging and interactive way for their students. On Scott's



website, he describes his game system as "taking interactive fiction and storytelling concepts and using them to help teachers deliver escape room type experiences in the classroom." These collaborative storytelling games are specifically designed to be low resource, making them easy to develop and implement without the need for expensive equipment. When each EscapeIF game is created, the teacher only needs a script to read from, offering

choices to the students about what to do next in the story. The students will then solve problems and challenges in order to move on and finish the game. The challenges are related to what they are currently learning in class in order to test the student's skills in that topic. These games are meant to be "as accessible as possible," because they are available in the creative commons to be downloaded, and are adaptable by the teacher to fit their lesson plan. Scott also offers <u>creation guides</u> to help you make your own games!

During the June 16th virtual workshop, Scott explained his EscapeIF system to attendees from across the world interested in storytelling-focused game design. Participants called in from

Qatar, Egypt, and California - just to name a few! After emphasizing the need to start an EscapeIF game with a story, not the math concept itself, Scott began to work with one volunteer from the audience, Aishwarya Shetty, an Education Specialist for <u>Education Above All</u> and a <u>Teach for India</u> alumna, in order to identify a particular math concept that an EscapeIF game would target. Aishwarya mentioned that when she taught 6th grade in India, her students had trouble understanding operations, such as multiplication or division, that involved negative and positive numbers. With this input, Scott and Aishwarya, alongside audience input, created the building blocks of an EscapeIF game that would reinforce this math concept.

Using a <u>worksheet</u> to guide the brainstorming process, the game *EscapeIF: Don't Be So Negative!* was born! After identifying specific learning objectives, such as "Compare and order

positive and negative decimals and fractions", and "Solve real-world problems involving the multiplication or division of two integers, including at least one negative integer," Scott collaborated with the workshop's attendees on the game design process. This included *creating the story world, genre*, its *three act structure* and deciding on



potential challenges or problems the students would need to solve. The resulting game introduced math operations with negative and positive numbers through a mystery story.

Don't Be So Negative

The student players are part of an underground organization called "See the Truth" that tracks down fraud in social media platforms. They must use their math skills to investigate the company "Footlock" who has been employing robots to manipulate social media metrics (e.g. the number of *likes*) without the user's consent. What's important about this game is that it ties the math concept to a real world phenomenon like social media.

No spoilers here.

Can't wait to hear how the story continues? Feel free to watch the <u>video</u> of the June 14th webinar to see how the story was constructed.

The EscapeIF format showcases the power of narrative and provides opportunities for students to learn critical problem solving skills.

Overall, we think it is a great tool in the classroom and a fantastic way to engage students as they learn new math concepts. Consider playing some of the games on Scott's website – or

even create your own and upload these onto the mEducation Alliance's <u>Education Storytelling</u> <u>page</u>! We hope to grow and share a rich repository of EscapeIF games over time.

Interested in our explorations with Scott on Escape IF education stories? Let us know by emailing us at <u>medalliance@meducationalliance.org</u>.