

Introduction:

Hello, we are Nicole Racca and William Aaron, two undergraduate students from Worcester Polytechnic Institute (a university in Massachusetts) who work with Fundesteam Corporation in Panama City, Panama for our Inter-Qualifying Project. Our project is to create tutorials and resource packs for creating virtual learning content, in order to help educators adapt to this new wave of online education. We would like to interview you about your experiences with online learning.

Date: 22-09-2020

Interviewee: Jorge Hernández Huerta

Job Title: Certified Public Accountant

Any information you share with us may be completely confidential and will only be used for research purposes with your permission. We will not identify you by name in any of our writing if you do not consent to being cited. If you prefer not to quote, you have the option to remain anonymous.

Questions of Consent:	Yes	No
Do you prefer to keep it confidential or can we use your name in our report?	Yes	
Would you like us to share our work with you once it is finished?	Yes	

If we ask you a question that you don't want to answer, feel free to skip it.

Interview Questions:

Question: What is your level of experience with education in general? (i.e., how long have you been teaching? Do you have any certifications or degrees in teaching?)

Response: In 2013 I was certified by the LEGO® Academy to teach with its materials.

Question: Are you currently teaching online classes for education or have you taught online in the last six months?

Response: Yes, since the pandemic started I have taught online classes from Monday to Saturday.

Question: How long have you been using online education? How long was your most recent time of teaching online?

Response: March to date.

Question: Through what process is your content distributed to students?

Response: Anything that needs to be sent to students is by mail.

Question: What age groups did you teach when teaching online, what demographic?

Response: 11-15 years

Question: What subject or subjects did you teach during this time period?

Response: Educational Robotics

Question: What are some examples of the types of content you have created for online education on this topic? (i.e. live lectures, videos, articles, interactive applications)

Response: I had to coordinate bringing robots and training tracks to my house to continue with the courses, and months later we implemented a virtual robotics simulator and in that way we continued learning for the children.

Question: Describe your typical "lesson" in this context.

Response: At this time it has changed a bit since the boys have started practice for a tournament with the simulator, so now we talk before the session if they want to practice with a physical robot or with a virtual robot.

The last training was with a virtual robot, therefore the boys were building a digital robot and I was guiding them in what they should use and that it is not recommended.

Question: What aspects of your online learning content, if any, involved asynchronous learning?

Response: Yes, we worked the simulator with the boys first with weekly challenges, so they had

7 days to solve it and send them the results.

Although there were doubt sessions a week, it was not mandatory for them to connect.

Question: What aspects of your online learning content, if any, involved synchronous learning?

Response: Fixed trainings with the physical robot are in this way since they are more complex challenges and there is always a coach in practice.

Question: What is your process to prepare for creating your online learning content? How long does this process take on average?

Response: It depends on which one, because the simulator for a week we not only prepared the challenge for our children, we launched it in a competition portal for everyone, so it takes us several hours to develop it.

The physicist does not take so long since you only have to have the material ready and in some cases anticipate to prepare some programming question that will be seen during the session.

Question: What, if anything, works well with creating your content online?

Response: Yes, the parents have continued with the courses and are grateful for always looking for ways for the children to continue learning and I think the most applauded by parents has been Virtual Robotics Toolkit.

For the students it was difficult to go to a simulator but what has helped them like it are the competitions at www.robotvirtualgames.com

Question: What are the resources that you regularly use to create this successful eLearning content?

Response: Zoom, Virtual Robotics Toolkit, EV3 Mindstorms, and email.

Question: What, if anything, are some of the challenges you face when creating online learning content?

Response: Well, you should seek to attract the attention of students since even at this moment many are fed up with taking classes online.

Question: Can you think of a resource that, if you had access to it, would help alleviate some of the challenges of creating content online?

Response: At the moment, I think we are looking to have the best tools available.

Question: How do you communicate with your students? Either / both synchronously or asynchronously?

Response: Synchronous and asynchronous

Question: What, if anything, works well with your communication with students?

Response: Well, since I have elementary school children, it is more complicated for them to pay attention to the communications by mail so in the sessions it is better to tell them things.

Question: What are some of the challenges you face when communicating with students?

Response: That they do not yet have that sense of responsibility and it is a process to introduce them to the fact that they must be more attentive and more responsible to what is sent or not activities.

Question: What is your method of determining how much a student has learned?

Response: Through challenges.

Question: As an educator, do you believe that online education is successful in teaching your students specifically? Do you think you are successful in general?

Response: I think that if it has worked and something that helps a lot is to introduce new things and skills, since the students due to the pandemic no longer want to continue taking everything online.

Conclusion:

Thank you very much for taking the time to send us responses and participate in our research.

Is there anything else we haven't talked about yet that you would like to cover?

If you have anything else you would like to add, you can contact us at the email address gr-fsteam20@wpi.edu. Thanks for your time.