

ChildArt

The Magazine of the International Child Art Foundation
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EDITOR'S NOTE

Dear reader,

The idea for this issue on Virtual Reality and Education sprung from a conversation I had with Marie Graham who teaches VR at the Mount Vernon Presbyterian School in Atlanta, Georgia. We thank Ms. Graham for taking the lead in producing this issue and are grateful to her brilliant students for serving as editors and interviewers. We thank her devoted colleagues for embracing the idea and Ms. Rikki Hagerty for designing this issue.

It is the notion that your sense of 'presence' is highest in VR than in any screen media like YouTube, movies or television that makes VR the future of education and intervention. While the prospects for VR, Augmented Reality or Mixed Reality are manifold as you will discover in this magazine, we also need to be careful that these new technologies are used sparingly so as not to misshape the brain and are not misused for brainwashing or indoctrination. Bearing this in mind, you can evaluate how you can best utilize VR to enhance your creative potential and freedom of expression.

Happy reading,



Ashfaq Ishaq Ph. D.
Chairman

INTRODUCTION

Virtual and augmented reality are exciting new ways to learn and engage in the world around us, but technology is only meaningful if it is used for the betterment of humankind. **How might we tell each other stories, heal those who are hurt, and find ways to help move closer to one another?** In other words, let's use these new virtual worlds we create to lift each other up and move our society forward. Our cultures and geography may be quite different, but so much of the human experience is shared: friendship, loss, family, and love.

This issue is a special one because it is written and edited by a team of students just like you! Eleven 14 and 15-year-old students were given the amazing opportunity to be guest editors of this magazine, and what a journey it has been! We have spoken to many interesting people, interviewed, listened, researched, written, and edited. We all learned so much from this process, and my students and I, along with the support of our school, Mount Vernon, in Atlanta, Georgia, USA, are beyond grateful for this opportunity.

We are reminded and would like to remind you that learning is best done by doing, by being unafraid of failure, in fact, of expecting and welcoming it. This magazine is the result of an opportunity, the students' willingness to risk, and of our supportive and enthusiastic community coming together.

Virtual and augmented reality is about the experience, and so I encourage you to jump right in wherever you can. Also, remember that creating is most important. If you have an idea, make it come to life! The field of creating VR and AR is new, and you do not have to be a professional to start; most of the software is free. My hope is that you feel emboldened by our taking the risk to edit this magazine, and that you will take risks of your own.

Sending best wishes from all of us at Mount Vernon School to you from Atlanta, Georgia! Happy Reading!

Marie Graham

Published since 1998, ChildArt is a commercial-free arts learning, self-discovery, and global education periodical expressly written for 10- to 14-year-old creatives, but useful as a teaching tool for educators and inspirational for creative individuals of all ages. Subscribe to ChildArt online at www.icaaf.org or mail your check to: ICAF, P. O. Box 58133, Washington, DC 20037. All rights reserved. Reproduction of the whole or any part of the contents without written permission is prohibited. ChildArt (ISSN 1096- 9020). Copyright 2018 International Child Art Foundation (ICAF), a 501(c)(3) nonprofit.

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VIRTUAL REALITY AND EDUCATION

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Thanks!

CURRENT VR RESEARCH AROUND LEARNING

TUCKER RAMSEY

AN INTERVIEW WITH LISA CASTANEDA

Lisa Castaneda is the CEO and founder of Foundry10. This organization develops research to investigate non-traditional learning and ideas of what learning can look like both inside and outside of school environments. One of these initiatives is virtual and augmented reality in education.

HOW DID YOU GET STARTED IN THIS FIELD AND WHAT MOTIVATED YOU TO BE A VR EDUCATOR?

A teacher in the Seattle area was teaching Computer Science and he reached out to me. He asked if his school's educators could get a few virtual reality headsets for their classrooms. Before agreeing, we asked if we could come to the classrooms to see if the students would be interested. The kids were really excited about using VR, which inspired us to put VR in more classrooms, not just in computer science, but in other subject areas, too. It sparked a passion for VR.

I started by letting grade-school children use basic VR headsets like Google Cardboard so they could have their first experience.



Then, we moved to older students, all the way up to college level. The older kids used HTC Vives which is a more advanced piece of technology.

I've learned that playing, using, and learning virtual reality is fun, but at the same time can be complicated. People are extremely passionate about VR and believe it will revolutionize the field of education.

HAVE YOU EVER HAD ANY JOBS OUTSIDE OF VR?

I used to be a teacher. I taught math, but I also taught hip-hop dance. This was like a fourth job to me, and in my organization, we sometimes do activities related to hip-hop and sometimes have jobs outside of VR, as well.

WHAT IS YOUR FAVORITE VR APP FOR FUN AND FOR EDUCATION?

My favorite non-educational VR application is called Superhot. I enjoy this because it is a human simulation that allows you to lose track of what is real and engage in crime and serious danger. My favorite school-related VR is Nature Treks. This application is excellent not only because the mechanics are exquisite and clever, but because it allows a person to experience complete relaxation in order to meditate.



WHAT DO YOUNG READERS SUCH AS PRE-TEENS NEED TO KNOW OR UNDERSTAND ABOUT VR?

Occasionally when middle school aged students use VR we will hear one of them say, "I am afraid of heights" or "I am terrified of roller coasters." Virtual reality gives people like this a chance to conquer their fears and try something out of their comfort zone. On the other hand, there have been some cases where a student believes they have no fear of heights, but to their surprise, when they use VR they become extremely anxious and scared. One thing is for sure, VR truly does feel real. The fear that these people experience is real. Another common fear we see often is being underwater. It is recommended to not go into the Blue experience if this fear applies to you, because you are put in a virtual reality that takes place while submerged. People have this idea in their mind that VR does not feel real. That could not be further from the truth. It is important to consider fears you have in real life before getting involved with VR.

WHAT DO YOU THINK THE FUTURE HOLDS FOR VR?

We've seen some really cool stuff, and we are doing some work with Oculus in Seattle. All sorts of industries are using VR, ranging from the healthcare industry all the way to construction companies. For example, construction workers are talking about how they can look at pipes through walls, as well as move and transfer structures virtually.

There are a numerous amount of intriguing applications that allow people to practice movement through learning. Virtual reality truly has so much potential, but it is very important to make sure the quality of the content is up to par. You don't ever want to feel like you wasted your money on something that is not the best it could be.

There is also so much opportunity in the field of visual art and music. In addition, there are applications in VR that help patients in hospitals who are bedridden feel like they are walking, or being outside.

WHAT ARE SOME OF YOUR HOBBIES?

Outside of VR, I am into martial arts. I think martial arts is very important. Currently I am not taking classes, but I've studied taekwondo, karate, and kickboxing. I do a lot of sports, and I am also an avid reader.

In addition, I recently got two rescue dogs, so I've been spending time with them and am very excited about that. Although I am a dog and cat lover, I truly have to say that I absolutely LOVE dogs! Cats always seem to be in their own world, but dogs are always thrilled to see you and love unconditionally!

In conclusion, there are many types of learners. Some are fast, some are slow, some are auditory learners, some are visual learners, some are great at memorizing, and some aren't. But one thing we all can attempt to do, is try learning with virtual reality. You can't knock it until you try it.

foundry10

"Learning is something all humans do. It can be flexible and can fit any individual. In order to maximize our potential to learn, we need to understand the process and how it happens, even outside of traditional settings and structures. We work directly with the people who are most impacted by education research: students and teachers. By reaching outside of standard institutions and with a philanthropic approach, we uncover new ideas, methods, and tools to bring greater value to learners all over the world."



PLEASE ADOPT THE ICAF AS YOUR CHARITY THIS GIVING SEASON!

Though many problems beset our nation and the world today, a sheer lack of creativity or empathy is too often their root cause. Creativity cultivates ideation, discovery and invention, while empathy grows compromise, consensus and collaborative innovation.

The International Child Art Foundation fosters schoolchildren's creativity and develops empathy through the arts—children's universal language.

Founded in 1997 as a 501(c)(3) nonprofit, ICAF is independently ranked among the 25 Top Children's Charities in the United States.

Currently, students around the world are participating in the school-based 6th Arts Olympiad—a free program that fosters their creative development. In July 2019, they will convene on The National Mall at their 6th World Children's Festival to develop mutual empathy.

Your support will help the ICAF democratize creativity and develop empathy universally as building blocks for global prosperity and world peace.

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