

Mission Report 2020 – On our way to create a 100 million ambassadors for planet Earth

Dear friend of SpaceBuzz,

Thank you for supporting SpaceBuzz to inspire children to be a positive force in the world through education and technology. With this Mission Report 2020, we want to provide you with more background information about our steps taken in 2020 to reach our mission.

Our mission wouldn't be possible without the support of all our sponsors, i.e. Friends of SpaceBuzz – a big shout out to all of them on behalf of all the children and teachers we were able to inspire! Thank you!

Team SpaceBuzz

Our mission: create ambassadors of planet Earth

The non-profit SpaceBuzz educational foundation is inspired by the 'overview effect', that – until recently – only astronauts in space were able to experience. From space, they see a beautiful blue dot in the blackness of the universe. A colourful planet shared by all living humans, animals, trees and plants. National borders seem to dissolve and the fragility of the Earth is abundantly clear.

We want every child in the world to experience the Overview Effect for themselves by launching them into space, to discover our planet. Thereby creating a young generation of ambassadors of our beautiful but also fragile planet Earth.

An award winning experiential learning program

SpaceBuzz is a – international award winning – XR outreach and education program, putting children in the footsteps of astronauts. We inspire children through our experiential learning program by teaching them about space, technology (STEAM), sustainability and planet Earth.

Just as with astronauts, 21st century skills like communication, problem solving, cooperation and creativity are important elements within the program. The education program includes a real-life space mission in the SpaceBuzz rocket.

Astronauts, education specialists, scientists, gaming and XR-experts joined forces to create this unique experiential learning approach. Maximum learning impact is realized through an integrated approach of XR technology, a real live rocket vehicle and a digital education platform 'Mission Control' empowering teachers in classrooms.

The effectiveness of this immersive learning approach is monitored by scientific research conducted by leading European universities.

SpaceBuzz is globally endorsed by the Association of Space Explorers (ASE), representing over 400 astronauts from 38 countries across the globe.

Our ambition: inspiring 100 million children worldwide

Our ambition is to inspire 100 million children across all continents to become Ambassadors of Planet Earth by virtually launching them into space and experience the beauty and fragility of our planet. Through a fleet of XR space crafts, both on the road to schools and in permanent settings like space centers, global convention like World Expo Dubai 2020, children's science centers and/or completely virtual.

From the start, SpaceBuzz has been built with a global ambition in mind. It has an open access philosophy. The XR outreach & education program is locally adjustable in terms of astronaut, language, rocket and curriculum. The program itself is free for children and is scalable making it available for children all over the world.

SpaceBuzz: harnessing the power of immersive technologies

Immersive technologies like virtual and augmented reality trigger deeper levels of learning, especially when topics are more abstract like technology and science. By using these technologies children become more engaged in the learning content and tend to forget they are actually learning. Virtual reality also enables children to explore the virtual world at their own pace and based on their own interests, allowing for personalized and self-paced learning. When considering the opportunities virtual reality offer, the educational benefits are immense.

SpaceBuzz uses these immersive technologies to develop new and effective ways of teaching children about space, technology (STEAM), sustainability and planet Earth.

SpaceBuzz is scientifically validated by Prof Dr. Max Louwerse, professor of Cognitive Psychology & Artificial Intelligence of Tilburg University and the University of Memphis Max Louwerse. The first results are very promising: Children benefit greatly, with no measurable differences between girls and boys (STEAM), nor between different level groups.

To further develop and optimize our XR education method, we build strategic partnerships with international scientist, universities and thought leader companies (serious gaming, artificial intelligence and intelligent tutoring systems) including astronauts as interactive virtual humans/tutors.

Partnerships

At SpaceBuzz we believe in partnerships, local and global. Our success has not been possible without our Friends of SpaceBuzz including Bencis, Deloitte, Dutch Space Office, Eligius, ESA, Esero.nl, Florencius, IMC Weekendschool, MediaMonks, National Geographic, Nationale

Postcode Loterij, NEMO Science Children's Museum in Amsterdam, World Wildlife Fund and many family and private sponsors.

Important milestones 2020

The year 2020 started very well for SpaceBuzz. For example, we had the kick off of the Dutch SpaceBuzz tour for more than 4,000 children, we started the construction of the second rocket SpaceBuzz 02, we received a wonderful donation of EUR 500,000 from the Dutch Postcode Lottery, the preparation of our European tour was in full swing and there was a lot of interest from countries around the world.

And then there was Covid-19... We soon realized that we had to take a step back, in order to be able to take two more forward. We used all lockdown months well to make the foundation of SpaceBuzz even more solid and in the mean time we also prepared ourselves for the future and managed to create a solid Covid protocol which made it possible to go back to the schools as soon as they opened up again for the children.

The children's radiant faces and the overwhelmingly positive response from parents and teachers has given us the inspiration in this challenging period to lean into the program and to set our sights on the future!

We are also pleased that teachers gave our educational program an average rating of 9.3 this year. This gives us energy and confidence to continue expanding the program to reach children worldwide.

Below you will find some more beautiful milestones which we are working toward and would like to share with you.

SpaceBuzz back on the road to schoolchildren in between lockdowns

Beginning in October, SpaceBuzz returned to classrooms throughout the Netherlands, thanks to a specially developed Corona-proof approach. With this protocol we made the SpaceBuzz program Covid future proof: as soon as schools open SpaceBuzz can return to the schoolchildren and their teachers.

For teachers, participating in this program this was a blessing. "Especially in these times, you are looking for lessons that offer something extra for the children. SpaceBuzz is a fantastic example of this as it also connects to global challenges but in a very playfull way," states Jorrit, a teacher whose students participated in SpaceBuzz. "The learning program combines the magic of space adventure with topics from the educational curriculum. It is also very nice that SpaceBuzz comes to our school, because external educational excursions are greatly reduced or not possible at all this school year." We are very happy that we managed to bring the program to 7,500 children and their teachers and could contribute in helping the teachers in this difficult year.

Contribution to home education with [Thuisinderuimte.nl](https://www.thuisinderuimte.nl)

Together with Andre Kuipers, Netherlands Space Office and Esero.nl/ESA, we were able to contribute to home education during the first lockdown with the launch of the website Thuisinderuimte.nl. The website features lessons, activities and information about the fascinating world of space travel, for all children, parents and teachers in the Netherlands. We have received beautiful pictures of happy and proud children who have done the assignments and lessons. Nice to mention that our SpaceBuzz lessons are in the top 3 of most downloaded activities.

Start construction of SpaceBuzz 02

In November, the go-ahead was given for the construction of SpaceBuzz 02. This is thanks to a wonderful donation that we have received. We are very happy with the arrival of the second rocket and hope to be able to solve part of the waiting list.

As SpaceBuzz has a global mission, extra effort will be put into the improvement of the scalability of the rocket vehicle.

Dutch awards: Innovation and user experience

In April we won 2 great Dutch awards in the field of Innovation and User Experience. These so-called Golden SpinAwards are the Netherlands' best-known prizes in the field of technology and creativity. We are extra proud of the feedback we have received from the jury. Here are some quotes:

Een ongelooflijk groots opgezet en baanbrekend digitaal educatieprogramma. Geweldig inspirerend om kinderen op deze passende en unieke manier les te geven en hun blik op de aarde te vergroten.

Het is zo goed te zien dat de organisatie inziet dat de VR-experience geen attractie an sich vormt, maar een naadloos onderdeel van een educatie-programma met lange adem is. Een innovatie met duurzaam karakter dat aantoonst dat onderwijs op een andere manier gegeven kan worden om zo niet alleen kennis, maar vooral een mindshift over te brengen.

International recognition: ten international awards and nomination 'World Changing Education Idea 2021'

In addition to Dutch awards, we are also pleased with the international recognition we have received with 10 European and Global awards. Including two Webby Awards and Lovies. The Webby's are also called the Oscars for the internet and new technology.

This year there were more than 13,000 entries from 70 different countries. SpaceBuzz has been nominated for the final round along with organizations such as BBC, National Geographic, Conde Nast and the Washington Post. We have won both the Expert Award and the People's Vote Award.

In addition, we have been named World Changing Idea 2021 in the field of Education by Fast Company, as 1 of the 12 finalists. We are proud to have been able to be in the same list as Unicef and Stanford University.

International Rollout to Italy, France, and Hungary

At the end of October we received the good news that, thanks to a grant from the European Union, we will be able to begin collaborating with three partner organizations in Italy, France, and Hungary. For us, this is an important step as we move toward a global rollout. It is also nice to note that the main reasons for getting this Erasmus+ grant were based mainly upon our innovative approach to STEAM education, coupled with our use of Virtual Reality technology to improve educational quality.

For this project we will be collaborating with three local partners: the renowned Center de Culture Scientifique Technique et Industrielle (CCSTI) in Grenoble, France; the bilingual school community Schulsprengel Bruneck in South Tyrol, Italy; and the tech-driven organization Vizuális Torony in Budapest, Hungary.

We give special thanks to the Deloitte Foundation. It is because of the efforts of their various expert teams that we were able to qualify for this grant.

