DISCOVER various Science Communication careers at Esplora







MINISTRY FOR EDUCATION, SPORT, YOUTH, RESEARCH AND INNOVATION PARLIAMENTARY SECRETARIAT FOR YOUTH, RESEARCH AND INNOVATION





INTRODUCTION

Welcome to Esplora Interactive Science Centre

On the 26th of October 2016 Esplora opened its doors as Malta's first Interactive Science Centre. Over 200 exhibits are housed in the main exhibition halls and landscaped gardens, making this science centre fun, and engaging to all age groups. In addition, there is an exciting Activity Centre where visitors can engage in handson workshops and watch fun science shows, bringing science closer to society and narrowing the gap between the science and human worlds.





In line with this, Esplora encourages visitors to EXPLORE, THINK, IMAGINE, APPRECIATE, and CREATE.

EXPLORE By implementing an inquiry-based learning approach, science activities are portrayed as entertaining, inquisitive, relevant, interactive, and engaging.

THINK Through the presentation of science as a stimulating, dynamic and continuous process, visitors are invited to observe and discover how true this is.

IMAGINE Engaging visitors in science by stimulating their imagination and enhancing their understanding of scientific concepts.

APPRECIATE Science is constantly evolving and shaping the world. Making the audience aware of the constant and rapid advancements in the various fields of science fosters a deeper appreciation of science and how it improves peoples' lives.

CREATE The development of activities which embrace the Arts as well as tinkering (i.e. making and exploring through trial and improvement) helps create a culture of scientific enthusiasm. In order to pursue a more comprehensive approach to Science, Technology, Engineering, and Mathematics (STEM) learning on a national level, Esplora Science Centre collaborates closely with other partners and working groups, such as the STEM Engagement Working Group. Finally, Esplora works to break stereotypes about science professionals through initiatives like the Erasmus+ RAISE project.

GET TO KNOW OUR STAFF

At Esplora there are various people coming from several STEM fields. This diversity encourages innovation and creativity in our activities and events which aim to instill a culture of scientific curiosity.









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Interview with Sarah Ghose Roy

Science Communicator

Can you describe what a typical day looks like at your place of work?

As a Science Communicator my day is filled with science shows and workshop outputs. This means that I am responsible for preparing the necessary resources such as chemicals, equipment and setting them up according to the set up required for that specific output. My colleagues and I are scheduled to deliver the output, clear up and reset once the output is complete. Every output tackles a different branch of science. Hence, a certain amount of time is dedicated to researching these different branches. Since Esplora does not focus on one specific branch of science I am free to investigate whatever interests me.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

There are instances when the work is stressful, but it is all worth it when someone says thank you, that they have enjoyed the show and learnt something today. Nothing compares to the feeling that you get from being appreciated.

What is your message for schoolchildren when it comes to STEM subjects?

As much as possible one should always follow one's passions. Science is all around us and forms part of our daily lives. I have always found that it was easier for me to learn something if I found it interesting. When it comes to STEM subjects there are many online resources that present STEM subjects in an artistic manner. I have always found these forms of science communication to be very helpful. Our brains work in different ways and what works for me might not work for you. If you are finding a particular concept or science subject difficult, try to look for alternative ways of communication. Sometimes notes on a whiteboard are not very engaging, but an online science video that uses puppets is.

What inspired you to choose this career?

In science, communication is key. One's research is worthless if it cannot be communicated effectively. Science communication allows for collaboration and appreciation of one's efforts. I chose this career to share my love for science. Most of the science and research that is carried out in Malta is very formal and academic. Science museums and science events are a great way to demystify scientific research by making it more accessible to the public.

Who/what has influenced you the most in your career choices?

I have always been driven by my love for science. At a young age I fell in love with biology and pursued it at a Masters Level. Throughout my formal education I was always drawn to the teachers and lecturers who could engage students. One in particular had a wonderful way of captivating students and keeping us engaged. This ability heavily influenced my choices to pursue my current career.





Interview with Benedek Forro

Can you describe what a typical day looks like at your place of work?

As a duty manager I am responsible to make sure that on days when we are open to the public the science centre is ready to welcome visitors, ensuring the best possible interactive experience at Esplora. Half of my job is customer-care oriented, and the other half focuses on operations, let it be the day-to-day overseeing that our science shows, planetarium films are running smoothly or communicating with the whole team at the centre so we can make sure that our visitors will have a safe and fun day interacting with our numerous exhibits.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

Having the opportunity to work at Esplora gives me a chance to interact and collaborate with like-minded people. We have so many different people here with such diverse backgrounds and disciplines, that whatever you might think of there will be a person with knowledge and skills to help you out or to just have a light-hearted intellectual exchange during lunchbreak. Working at a science centre also gives me a chance to pursue my personal interests that are not strictly related to my job. Right now, I am running a long-term experiment analysing how various species of plants react to and grow in soils that mimic Martian or Lunar soils as opposed to Earth soil.

What is your message for schoolchildren when it comes to STEM subjects?

In my opinion studying STEM subjects is a bit like being a private detective in a novel. You learn to look behind the surfaces and find out how things work and why are they the way they are. STEM education is aimed to develop logical reasoning, research questioning and problem solving, which are skills that allow for independent thinking and help to respond to challenges, whether on a global scale or even in one's personal life. STEM subjects will widen your horizon of the world around you and will empower you with practical skills and knowledge that can be applied on daily basis to improve the world and our quality of life.

What inspired you to choose this career?

I had many different careers in the past, but I always tended to gravitate towards education or entertainment. I enjoy sharing knowledge and see people grow and improve. Esplora is simply the best institute in my opinion to make this happen. Our goal here is not only to educate but also to inspire, spark, and foster interest is science in a fun way. Given my background this is simply just the perfect combination for me.

Who/what has influenced you the most in your career choices?

I cannot single out just one specific person who was the most influential in my career path. I had several teachers, mentors, colleagues, and friends who supported, guided, and helped me and without whom I would not be half the person I am today. I was also lucky enough to grow up in a family that had put a lot of emphasis on the value of learning and encouraged me to explore and try out new things. Therefore, when it came to career choices, I had the liberty and support to try out different things at University without the need to stick to a rigid choice.

My advice would be not to put such unnecessary pressure on making 'the perfect choice'. Rather make a choice that you are comfortable with and commit to it. Apply yourself to the best of your ability and immerse yourself in it. Your career is not something inflexible. You will grow and improve with each step so best to start the journey with an open mind and a keen attitude, and the rest will follow.





Interview with **Yanis Buttigieg** Explainer

Can you describe what a typical day looks like at your place of work?

My day would start at 7am, when all the Explainers would be in the office preparing for the day ahead, catching up on emails and revising materials such as information on exhibits, busking activities and research for our chalk boards. From 8am onwards we do our morning rounds of the exhibits and floors of Esplora, ensuring that all the exhibits and attractions are in working order. If not, we report them to our dedicated Maintenance Team.

At 9am we start to welcome schools and groups, and guide them around Esplora, teaching them about science

in an easily digestible way. Later, at closing time, we would do our last rounds of the day, and thank our visitors for comina.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

What I love about the workplace is our team, the Education team, whose members are always very supportive and helpful to one another. We are always prepared to help each other and can always provide a lasting experience to our visitors. A regular ritual, that I find very funny, happens every Monday, when we Explainers collectively resolve to eat healthy food and maintain our

diets. By Tuesday, come lunchtime, we normally end up ordering our usual copious amount of junk food.

What is your message for schoolchildren when it comes to STEM subjects?

STEM subjects are all about exploring the world around us and solving realworld problems. Be curious and ask questions about everything! Why does the sun rise? Why don't the planets just fall out the sky? Curiosity can lead to a new discovery. Learn by doing and do not be afraid to make mistakes, all scientists have made mistakes and it only made them progress further! And, most importantly, embrace challenge. STEM can be tough, but that's what makes it exciting. Every challenge you overcome makes you stronger and smarter.

What inspired you to choose this career?

What drew me to this career was the possibility to provide a foundation of

curiosity and knowledge to children, teens and adults alike who have an interest in science, and being able to provide them with just enough knowledge to spark that curiosity.

Who/what has influenced you the most in your career choices?

I have always been drawn to sciences, mainly biology, and wanted to further my knowledge and career within sciences. Thanks to that. I now can spark that interest in our future generations. Reading about Albert Einstein and his achievements was a great inspiration to me. He made areat breakthroughs in Science and Mathematics that we are benefitting from in modern day science. However, the personal inspiration comes from the fact that, like me, he was dyslexic. This made him able to look at, and solve, problems in a different way from regular persons, giving him the ability to think outside the box, something that I myself relate to very much.





Interview with Rebecca Buttigieg

Senior Executive (STEM Engagement & Quality Assurance)

Can you describe what a typical day looks like at your place of work?

I arrive at work after sending my kids off to school, and the first thing I do is to say "Hello" and check in with the rest of my team. Then we decide our work plan for the day. I usually have a couple of meetings to attend and, in between, I work through my day's task list, but that may be interrupted if something urgent crops up! My work generally involves writing project documents and presentations, planning initiatives, and writing lots of emails. Sometimes I get invited to speak about STEM Engagement at events, which I really enjoy. I always have a lot to do, but I like the fact that the work is very varied, and so I never feel bored!

Around mid-afternoon, I leave to go pick up my kids from Klabb 3 -16, and then I continue the last two hours of my workday at home – this is a familyfriendly measure which means that I'm able to work full-time without needing to leave my children in after-school childcare until late in the day. I catch up on emails and tasks, and the last thing I do is to prepare my work plan for the following day.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

Part of my job is to connect scientists and other STEM professionals with people who work in other sectors, like teachers, parents or politicians. One time I arranged for four scientists to speak to a room full of people who give career advice. When the mathematics professor said, "When I was a child, I didn't really like Maths," everyone gasped in shock! I'll never forget that sound! It was a really funny moment, but also satisfying for me, because one of the reasons we do this is to dispel stereotypes and misconceptions about STEM careers, one of which is "If you don't love science or maths as a child, then you can't be a scientist.

What is your message for schoolchildren when it comes to STEM subjects?

What you are taught in school is only a small part of STEM, and you can learn STEM in lots of ways outside school, especially online. I love STEM but I was not a good fit with the school system my brain doesn't like having to sit down and listen or do homework - my brain likes to DO things! I got bad marks in secondary school. 6th Form and even at university, but once I graduated and started working as an engineer. I was great at it! I knew that I loved engineering, and I didn't give up until I reached that goal. If you love STEM, but you don't love how things are going at school, don't let that discourage you - get creative and find other ways to learn STEM subjects, such as through videos, online courses, social media, and meeting people who work in the field you are interested in.

What inspired you to choose this career?

I have loved science and engineering ever since I was a toddler building things out of random objects, and I've always loved sharing this passion with others and telling them how cool STEM is. When Esplora opened, it was a dream come true for me to work here and do this as a career!

Who/what has influenced you the most in your career choices?

I think that my neurodivergence has influenced my career choices the most – my love of science comes from my autism, and my ADHD traits are what make me friendly, passionate about helping people, and a good communicator. When you put those things together, STEM engagement is a perfect fit! I enjoyed my first career as an industrial engineer, but it didn't have the 'people' element. Now, in my second career in STEM engagement, I feel like I've really found where I belong.





Interview with Katrina Triganza

Content Developer

Can you describe what a typical day looks like at your place of work?

My job as a Content Developer involves so many aspects that no day is ever really the same. However, more often than not. I would be jugaling multiple (verv different) projects at the same time meaning that my days are super dynamic, even if I'm at my desk. I'm usually researching and learning more about the topic of our next project, coming up with a programme for an Esplora event. writing scripts or workshops for our presenters, and organising brainstorming and feedback sessions with the rest of the team, so that we can share our ideas. together. However, my favourite days are the ones when we're testing out new experiments for our shows, plaving with new educational toys to see how we can use them in our education programme. and using our creativity to build new props!

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

One of the projects which I'm really proud of personally is our in-house scripted show called Ġina u I-Esploraturi, which aired on a local TV station. During the two seasons, we did everything from writing the scripts, to choosing the costumes, building the set, making props from scratch. Some of us even 'starred' and acted in the episodes themselves. It was extremely challenging to keep up with all the demands and make sure we were creating a product we were proud of. But it was really inspiring to see the team come together and give their all to something that we all believe in. It was great fun to work on such a massive project together and to see and hear how children were enjoying the episodes. The best and most inspiring projects are

always the ones where you get to see your audience enjoying the efforts of all your hard work.

What is your message for schoolchildren when it comes to STEM subjects?

STEM subjects are so interesting to study and, in this day and age, our society is desperate for more STEM professionals. It is crucial for you to gain and have that knowledge to advance in your career. Academic learning is extremely important, but essential skills like problem solving, critical thinking and time management are equally important and can only be gained with experience. STEM is so interdisciplinary that, without you even knowing it or expecting it. you'll be using all of the skills acquired along the way in your life; from your hobbies and personal interests to other extracurricular activities. Make sure you allow time for these things as well, in your academic journey!

What inspired you to choose this career?

From a young age, I was always curious about the world around me and, as I grew up, I realised that science was one of the only things that could give me answers to my questions. I have always looked at science with such wonder and awe, but as I furthered my studies in the subject, I was disappointed to learn that I was in the minority. Most people found science boring, uninteresting or irrelevant, especially if they didn't have a good experience with their science education at school. Science communication was the right career choice for me, as it gives me the opportunity to reintroduce science to the general public and show others the beauty of science and how enjoyable learning it can be.

Who/what has influenced you the most in your career choices?

I wouldn't be here without some of the teachers and lecturers whom I encountered throughout my studies. Their passion for science was contagious and the way they could convey such complex concepts with clarity was, guite frankly, impressive. They were able to bring the subject to life and really showed me how important it is to make science accessible. engaging and even entertaining. I always kept my experiences in the classroom in mind as I was making big decisions in my career - thinking about students like me who maybe had that same curiosity, but didn't have an environment in which they felt comfortable asking questions and exploring beyond the textbook. Science communication allows me to give these students the space to spark their curiosity.



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Interview with Sabrine Borg

Assistant Administrator – Marketing Officer

Can you describe what a typical day looks like at your place of work?

I like to start my day early, while the office is still quiet. I go through my emails and filter my 'to-do' list for the day. As a Marketing Officer, my job is to make sure the branding at Esplora is up to date, I am also in charge of dealing with external suppliers. These include anything related to adverts on TV, magazines and billboards, as well as when we have suppliers over to brand new areas, like installing new signage, and booking or accompanying photographers and influencers.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

One of the funniest moments happened during my first few months at Esplora. I was helping with a Christmas science show, and one of the demos involved climbing on top of buckets with strings attached, and racing like reindeer. My being new, and it being during the time of COVID, I didn't realise there was sanitiser on the floor. Right at the finish line, I slipped and splattered myself against the wall! The kids burst out laughing, thinking it was all part of the entertainment. My competitor, David, didn't realise what had happened, and the parents were just staring at me. I was mortified, with my face bright red, and all I could say was, 'I guess I'm Rudolph the clumsy reindeer!' It was embarrassing but also a great reminder of how much fun and laughter science can bring.

What is your message for schoolchildren when it comes to STEM subjects?

STEM subjects are incredibly exciting and open up a world of discovery! They are not just about textbooks and exams - they're about understanding how the world around us works, from the smallest atoms to the vast universe. Embrace your curiosity, experiment and don't be afraid to make mistakes, because that's how real learning happens. STEM can lead you to amazing careers, where you can invent, explore and make a real difference in the world. So, dive in, have fun and let your imagination soar!

What inspired you to choose this career?

My journey started as an explainer at Esplora, where I had the chance to share my love for science with visitors. Seeing their eyes light up with curiosity and excitement inspired me to think bigger about how we communicate science. I realised that, through marketing, I could reach even more people and make science accessible and fun for everyone. The blend of education, communication and creativity in this role was the perfect fit for me.

Who/what has influenced you the most in your career choices?

The biggest influence in my career has been my grandma. Even though she never had the opportunity to go to school, she was always incredibly curious about the world. She would spend hours exploring nature, asking questions and finding joy in discovering new things. Her natural curiosity and love for learning showed me that education isn't just about formal schooling - it's about nurturing a sense of wonder, and always seeking to understand more. Her example has been a guiding light in my career, inspiring me to make science accessible and exciting for everyone, just as she did for me.





Interview with Maria Demanuele

Educational Funds and Projects Manager

Can you describe what a typical day looks like at your place of work?

My work, although situated in an office setting, does still provide me with the opportunity to interact and get to know various people, even foreigners. This is facilitated through the use of technology, via emails, phone calls and online meetings. A typical workday is characterized by various tasks, mainly going through my emails, meeting our project partners to update each other on the project's outputs, developing new concepts in Erasmus+ projects, and organizing STEM- related events to be enjoyed by our visitors. Other than this, I get the opportunity to assist other teams from within the Education team at Esplora. Throughout my duties, this allows me to communicate with several people coming from all over Europe, forming part of various STEM related entities and organizations, creating a network whilst also collaborating with them for future collaborations.

Can you think of one anecdote from your workplace that is particularly interesting, inspiring, or even funny?

One experience which I will always remember occurred throughout one of the training events which took place in Czech Republic relating to outdoor education. One of the activities was a treasure hunt which involved trekking and searching for various items throughout our journey to the final destination. Whilst our group was competing with other teams, we wanted to arrive as early as possible so that we could be the winning team. Instead of following the road, we decided to take a short cut and took a rather different path with forest terrain. All of a sudden amidst the silence, we heard the sound of something coming from behind us at a very fast pace. We all stopped and suddenly, a deer sprinted past us. It was such a unique experience, and we were all amazed at the speed of such a delicate creature.

What is your message for schoolchildren when it comes to STEM subjects?

STEM is such a vast field, and many would not think that they would find anything which would engage them. However, if one explores and gets to know more on their favorite topics or hobbies, one might be surprised and discover that there is a relation between their interest and STEM subjects. My message is to never stop exploring and learning, and to follow your passions and be as creative and innovative as possible, so as to create something of your own.

What inspired you to choose this career?

I have always wanted to have a role where I can interact with different people, whilst working in an educational environment. Adding to this, my studies which are related to Earth Science, supported me throughout my career at Esplora. I have started my career at Esplora as an explainer, which gave me a great sense of satisfaction to be able to share and transfer my interests in STEM subjects to the youth. Later on, I was able to apply for a different role within the education team at Esplora, which I am grateful for, and through this I get to contribute to several Erasmus+ Project with various local and foreign institutions.

Who/what has influenced you the most in your career choices?

Whilst I always followed my interests, I would have not been able to achieve any of this without the support given by my parents. I do believe that with their support provided throughout my studies, I was able to make the right choices which led me to where I am now.







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