



Elif Bilgin is a young scientist and has been curious since she was first up on her feet. She has come up with interesting inventions and discoveries since then. Her curiosity for environmental issues, especially petroleum based plastic, caused her to think about an alternative. She spent 2 years researching and testing and just like Thomas Edison “she found twelve different ways to fail”. Eventually though she made her first sample of “bio-plastic from banana peels” when she was just sixteen years old.

What global issue was Elif concerned about?

The environmental problems associated with living in a big city made Elif want to do something to help combat climate change.

Why did it matter to her?

She found out that petroleum-based plastics were causing a huge amount of pollution and that bioplastics were a great low-cost alternative.

What did she do about it?

After much research, Elif developed a process for making bioplastic from banana peel which is so simple you could even do it at home.

“My aim was to develop a method for using banana peels in the production of bio-plastic as a replacement for the traditional petroleum based plastic. I was able to design a method and produce non-decaying plastic using banana peels. The method I designed is so simple, it is possible to say that one could actually do it at home. This way, anyone could use this plastic. Our beautiful planet will be spared from the consequences of the production of plastics with petroleum derivatives in them such as pollution of the air, land and water.”

What's next for Elif?

*“I want to get my degree in Biomedical Engineering and computer Science and move on to working with technology that benefits humankind”* Elif Bilgin August 2016



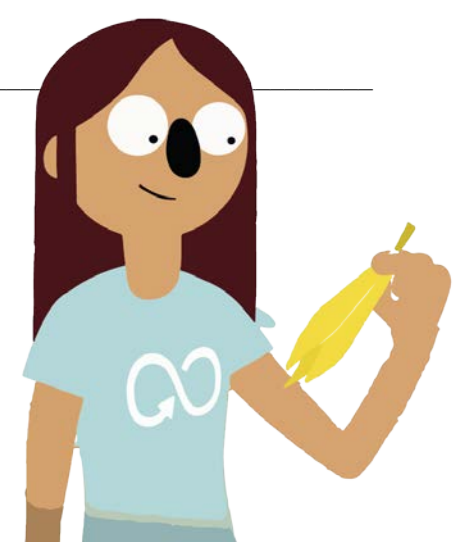
**Elif in action**

<https://www.youtube.com/watch?v=BMR-oMpCbjo>



Now it's your turn!

What will you do to make a difference for the Global Goals?



The Urban Creators is a grass-roots organization that inspires inner-city neighborhoods to transform neglected landscapes into dynamic safe-spaces that foster connectivity, self-sufficiency, and innovation. They are change makers; story-tellers, urban farmers, dot connectors, movement builders, and innovators, cultivating knowledge, skills, and local resources to take the health of our communities into our own hands. They engage diverse networks in neighborhood revitalization efforts that build self-sufficiency and pioneer grass-roots economic development, while igniting a unified generation of passionate change agents, social entrepreneurs, and urban creators.

What global issue were they concerned about?

The Urban Creators were unified by a vision to organize across socially-constructed barriers in order to harvest people-power, economic resilience, and food justice in our neglected communities.

Why did it matter to them?

Urban Creators began with the mission of pooling together a diverse network of change agents to address issues of blight, cyclical poverty, food insecurity, and inequality from the ground up.

What did they do about it?

They spent the first year organizing door to door in our neighborhood to gauge the interest and ideas shared by community members and stakeholders, and designing our theory of change. They spent the second year clearing away debris from a 2 acre plot of vacant land on the corner of 11th & Dakota street, and planting the first seeds of our movement to remediate the polluted soils of injustice in North Philly. The third year saw the transformation of this land into LIFE DO GROW; their urban farm, Community Resource and Innovation center, and their home.

What's next for Urban Creators?

Today, they provide organic produce to dozens of local families, sell to restaurants to sustain and scale our operation, and provide over 1,000 students and 50 ex-offenders each year with hands-on training in community organizing, sustainable design, agriculture, and entrepreneurship.



**3 GOOD HEALTH  
AND WELL-BEING**



**11 SUSTAINABLE CITIES  
AND COMMUNITIES**



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What will you do to make a difference for the Global Goals?



Fresh water availability is already a major environmental problem in several areas of the world and will become a global problem soon. That is why it is foolish to continue to flush billions of liters of treated fresh water down our toilets everyday. Since 40% of the 6 billion people on earth use toilets, it is a lot of water. Rohit embarked on a project to redesign the water closet / flush to reduce the consumption of water. He made this possible with a simple mechanism added to the conventional closet that creates a partial vacuum when the user pushes down the flush lever. He called it the Vacu-Flush.

What global issue was Rohit concerned about?

In parts of India the sanitation system is under a lot of pressure to keep up with rapidly growing population. In other parts of India there is little sanitation at all.

Why did it matter to him?

The lack of water, due to droughts, to keep the system working properly becomes a real problem and people fall ill through coming into contact with open sewage.

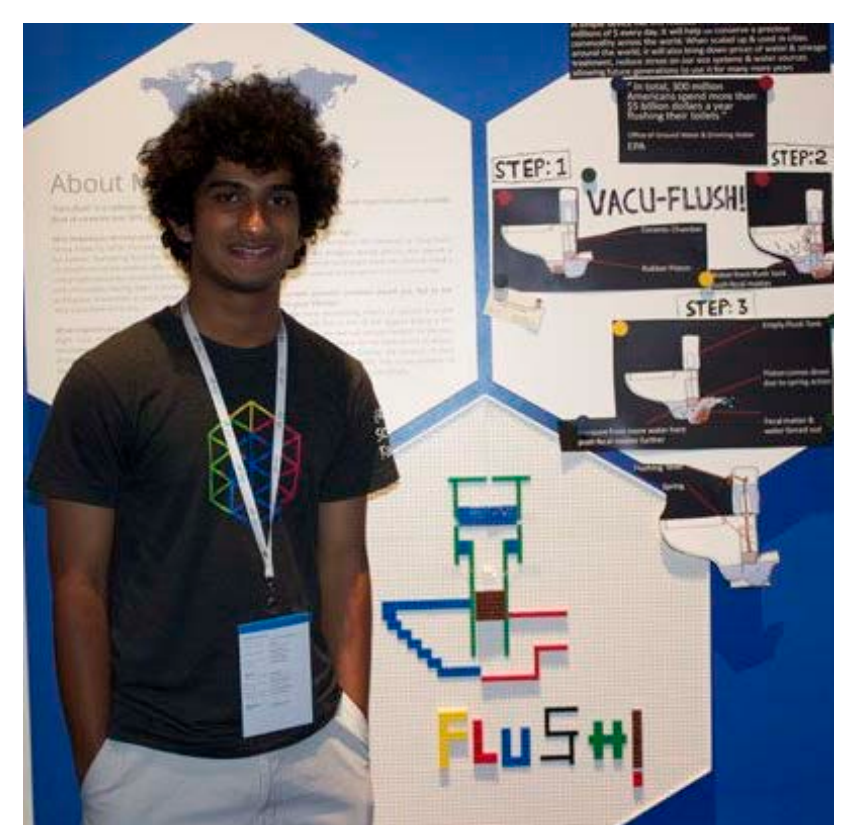
What did he do about it?

When Rohit was 16 he became aware of the problems India was facing in regard to the lack of clean water. He says, "This sparked in me the desire to come up with a hygienic, reliable, cheap and water efficient solution to the problem."

Rohit designed and tested a toilet that used a pedal mechanism to save 50% of the water conventional toilets use, reducing the amount of water used from 6 litres per flush to around 3 litres, and called it the Vacu-flush – winning the Google science prize in 2011.

What's next for Rohit?

"In the future, I would like to do more projects concerning the environment. For example, my biggest dream is to build a greenhouse made of waste materials."



Rohit in action

<https://www.youtube.com/watch?v=GjMPLL8n4Kc>



Now it's your turn!

What will you do to make a difference for the Global Goals?



Discardious is an android mobile app developed by Team Charis for the 2015 Technovation Challenge. They are a formidable team of young minds who are passionately committed to making a difference in their communities. They first met in high school as classmates and met again at the iKapture Afterschool Academy where they decided to take up the challenge of programming for the first time. Despite diverse backgrounds, they have dedicated themselves to doing this project because of their collective interest in creating positive change.

“Young girls, everyone has the potential of attaining great heights. It depends on your mindset and how you see yourself. Instead of using the Internet negatively, use it to search for life changing opportunities.” - Grace Akpoiroro, Team Leader

### What global issue were they concerned about?

Discardious aimed to tackle the health issues many Nigerians face as a result of improper waste disposal.

### Why did it matter to them?

Where they live, the public services did not effectively deal with waste management, especially on the streets.

### What did they do about it?

Praise David-Oku, Sonam Kumar, Nmesoma Ogbonna, and Grace Akpoiroro as they developed a mobile app to tackle waste disposal challenge in Nigeria.

*Discardious* was developed using the MIT App Inventor 2 and an android phone for testing the app. They pitched their app, which enables individuals and businesses to call in hazards and request for them to be removed quickly and cleanly by eco friendly tricycle carts for a small fee. It has created employment opportunities as well as a better and more sustainable city by reducing the impact of waste.

### What's next for Discarious?

The girls hope to start up the business and organize training sessions for young people who will in turn help the business to grow smoothly and help their goals to be achieved in a shorter time. They also want to encourage young girls to participate in the next Technovation Challenge.



**8** DECENT WORK AND  
ECONOMIC GROWTH



**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



Follow them online

[https://twitter.com/TeamCharis?ref\\_src=twsrc%5Etfw](https://twitter.com/TeamCharis?ref_src=twsrc%5Etfw)



Now it's your turn!

What will you do to make a difference for the Global Goals?





Meet Muzoon Almellehan, a 16-year old Syrian girl who worked for years in Jordanian refugee camps to ensure that the girls of the camps were getting the education they deserve. She and her family fled their home country of Syria in 2013 as a result of Syria's ongoing civil war. Life in the camps was understandably difficult, and as a result, many young Syrian women marry before they turn 18 as a means of ensuring security. Nearly a third of Syrian girls in the Jordanian refugee camps become brides before they turn 18. Muzoon is passionate about getting these girls to stay in school and to see education as an alternative to early marriage.

What global issue was Muzoon concerned about?

Early marriage has soared amongst Syrian refugees in Jordan in the past three years – in 2014 25% of their marriages involved children ages 15-17, according to UNICEF. As Syria's long, brutal civil war grinds on with no end in sight, desperate displaced Syrians are increasingly seeing early marriage as a way to secure the social and financial future of their daughters.

Why did it matter to her?

"Many families think that if they get their daughters married at an early age, they'll be protected. They don't know that something might go wrong...and if the marriage fails, the daughter will be vulnerable."

"Education is very important because it's the shield we can use to protect ourselves in life. It's our method to solve our problems," she says. "If we don't have education, we can't defend ourselves."

What did she do about it?

For two years, Muzoon went door-to-door in Azraq camps where she lived, waging a one-girl campaign to convince parents to keep their daughters in school instead of pressuring them into wedlock.

Muzoon has been called the "Malala of Syria" for her crusade to keep girls in school, a reference to the teenage Pakistani education activist who survived a Taliban attack on her school bus in 2012.

What's next for **Muzoon**?

"I want to be a journalist," says Muzoon. "It's a very beautiful job, in my opinion."



Muzoon Speaks about Education

<https://www.youtube.com/watch?v=zBzYG3Jr80k>



Now it's your turn!

What will you do to make a difference for the Global Goals?

