

The **CONNECTIVE** *Detective*

Report 2024-2026





The Connective Detective Report

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Welcome!

We are very excited to share the results and learnings of three years running *The Connective Detective*. With this report, we would like to inspire you about how to integrate young voices into our (smart) cities and share knowledge around connectivity. Have fun exploring!

Clara Butz

Project Lead 'The Connective Detective',
Trinity College Dublin



Forward

Today technology is woven into almost every aspect of our daily lives, shaping how we learn, communicate, travel, access services and participate in society. Yet while technology surrounds us, the systems, networks and algorithms that influence our choices and experiences are often invisible or poorly understood, even by those who use them every day. In this context, developing technological understanding is no longer simply an educational aspiration. It is an essential component of citizenship.

This is why programmes such as *The Connective Detective* are so important. Rather than focusing solely on using technology, the programme encourages children to ask deeper questions: How does technology work? Who designs it? How does it influence our communities and daily lives? Most importantly, how can young people shape technology to address challenges that matter to them?

The programme recognises something that educators have long understood: children learn best through active participation. Hands-on, playful and experiential learning enables young people to explore complex ideas in ways that are engaging, meaningful and memorable. Through investigation, experimentation and creative problem-solving, children develop not only technical understanding but also confidence, curiosity and a sense of agency. Importantly, the programme is inclusive in its approach, creating opportunities for all children to engage with technology as creators, designers and critical thinkers.

A particular strength of *Connective Detective* is its commitment to listening to young people and recognising them as active citizens in their own communities.



The programme creates meaningful opportunities for children to identify challenges, develop solutions and communicate their ideas to researchers, community groups and decision-makers. In doing so, it demonstrates the importance of taking young people's voices seriously and creating pathways through which those voices can influence change. As an educator and researcher working at the intersection of technology and education, I am particularly encouraged by the programme's emphasis on learning through participation. Students develop their understanding of communications networks and smart-city technologies and apply that knowledge to challenges they have identified in their own communities and to share those to a wider audience. This progression from understanding, to creation, to engagement is powerful. The next and most important step is influence: ensuring that young people's ideas are not only heard but are genuinely considered in the decisions and developments that shape their communities.

Since its launch in 2024, *The Connective Detective* has grown significantly and has already demonstrated a remarkable impact.

These achievements speak not only to the scale of participation but also to the appetite among young people and communities for meaningful engagement with technology and innovation. Partnerships between schools, researchers, local authorities and industry partners played an important role in this success.

Looking ahead, I am excited by the programme's potential. The achievements documented in this report represent an important foundation, but they are only the beginning. There is an opportunity to extend the programme's reach, engage more schools and communities, and amplify the voices of even more young people. At a time when technology is reshaping our world at an unprecedented pace, initiatives that help children understand technology, question it, influence it and use it for the common good have never been more important.



Dr. Ann Devitt

Associate Professor & Head of School of Education, Trinity College Dublin



Testimonials



Nicola Graham
Innovation, Technology & Design Manager
Dublin City Council

"People can sometimes feel uncertain about the technology. Through programmes like The Connective Detective, we can help people better understand how smart technologies work, by building awareness and aiming to reduce the uncertainty."



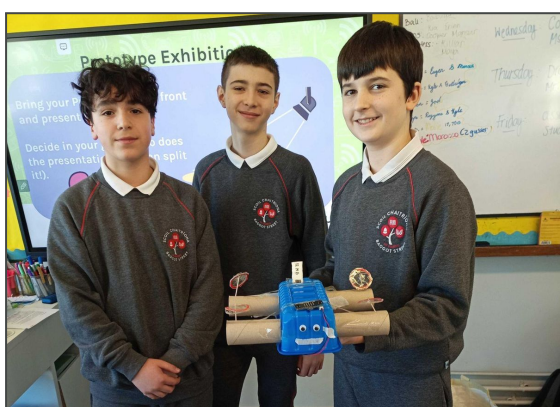
Prof. Daniel Kilper
Director of CONNECT
Trinity College Dublin

"Inspiring the next generation means more than teaching STEM – it means empowering young people to ask real questions, tackle real-world problems, and see themselves as active contributors to their communities. The Connective Detective does exactly that."



The Connective Detective

Who says smart cities can't be fun?! The Connective Detective is a free smart city education workshop series designed and developed by Academy of the Near Future (ANF) to explore telecommunications, smart cities and connectivity.

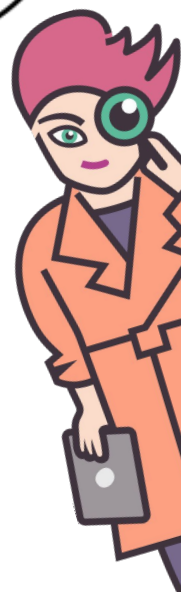


The target audience for the Connective Detective programme are primary school students (5th/ 6th class). The goal of the workshop series is to educate the students on the topics telecommunications/ connectivity/ smart cities with age-appropriate and hands-on methods while inspiring an interest in STEM, create a sense of ownership and get students involved in the decisions of the local community.

The Connective Detective consists of four interconnected workshops and an exhibition displaying smart city prototypes created by the students as an end-of-year showcase.

The workshop series was developed in 2023, piloted in 2024 and is ongoing.

Scan to see the programme in action!



ANF is a smart city education programme consisting of three team members and is part of Smart Docklands. Smart Docklands is a smart city testbed in the heart of Dublin's Docklands. Established in 2018, the programme is funded and developed by Dublin City Council (DCC) and CONNECT Research Ireland Centre for Future Networks (CONNECT), headquartered at Trinity College Dublin.

The Team

The Connective Detective is led and delivered by Clara Butz, strongly supported by Grace D'Arcy and Mariana Chihenseck Blanco!



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Partner

We are very thankful for the support from:



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council



SMART
DOCKLANDS
A Smart Dublin District



Research Ireland Centre
for Future Networks



Our Journey



The Connective Detective was developed in 2023 and first piloted in 2024. The first pilot consisted of three 90 min workshops and focused on telecommunication and connectivity. After the first pilot, in 2024 a smart city element was added to include young voices in the smart city discourse.

Since then, the programme consists of four 90 min workshops and an exhibition showcase event. Here selected students present their own smart city prototypes to smart city professionals, including researchers/ professors. Afterwards the exhibition is open to the public. Besides the exhibition, we organise community workshops that are free and open to the public.



Evaluation as part of the Journey

It is important to us that the content of the workshop series is valuable to our participants and also contribute to the aims we have set for ourselves (see next page). Therefore, when creating the workshop series we sought advice from experts. We asked for input from researchers from CONNECT, the telecommunications industry, a primary teacher and youth representatives.

During the pilot, we gathered deeper insights and got great feedback from the participants about what they learned, what they enjoyed the most and what the least. This was very helpful to adjust some of our activities and to make the workshop series even more interactive. We also asked for verbal feedback from the class teachers to get insight on what structure and timeline is working best for the schools. Finally, we were in close contact with researchers and professionals to make sure the information we share is up to date.



As our aim was to include students in the discourse around smart cities, we wanted to strengthen the connectivity content even more. Therefore we changed the focus from telecommunication alone to connectivity and added the smart city element after the first pilot. Further, we added another 90min workshop (from three to four workshops), to have more time with the students.

To this day, we still ask for feedback after each workshop and gather insights in the impact of the workshop through a pre- and post-questionnaire.





Aims

By delivering the Connective Detective we want to make a difference on two different levels - education and participation.

There is a lot of fear and miscommunication around technology used in smart cities. A large-scale international study by Cambridge University in 2018 uncovered widespread public distrust of authority across Europe and the United States, with distrust of technology being particularly pervasive. 1 in 5 adults in England agreed to some extent that “coronavirus is caused by 5G and is a form of radiation poisoning transmitted through radio waves.”^[1]



Further, research shows that children are not included in the smart city discourse as they are not seen as active citizens^[2-4]. They are seen as being immature, innocent and inexperienced because of their age^[2-5]. Therefore children are rarely educated on smart city matters and are rarely considered in smart city projects^[2,6].



Children living in disadvantaged areas are particularly at risk of exclusion from smart city engagements and not be seen as smart city stakeholders^[7,8].

To tackle the gaps shown in the research, the mission of the Connective Detective is to empower children by sharing information about smart city technologies and telecommunication infrastructure in a way that is accessible to them. We want to engage children as equal citizens and build their knowledge and understanding. When information is shared with young people and their communities from all parts of the city, opportunities for conversations and participation will open up. In the long term it helps reduce fears and uncertainties about smart city technologies and telecommunications infrastructure, which results in empowered, more open and adaptive communities who are interested in future developments. As research has shown that participation in the community at a young age is essential to become an engaged citizen as an adult, this is laying the foundation for having engaged citizens in the future^[3,6,9-12].



Participation Model by Lundy

To ensure that the young participants in our programme feel seen and part of their city, we aligned our programme as closely as possible to the model of participation by Lundy (2007)^[13]. Lundy describes four elements that have to be installed in a chronological order to conceptualise a child's right to participation, as laid down in Article 12 of the UN Convention on the Rights of the Child^[13]:

Space - Children must be given safe, inclusive opportunities to form and express their view

Voice - Children must be facilitated to express their view

Audience - The view must be listened to

Influence - The view must be acted upon, as appropriate



Lundy Model Implementation

Therefore, during Workshop 1 & 2 (**space**) the focus is on conveying knowledge and answering questions so that the students form a comprehensive understanding of telecommunications, networks, connectivity and smart cities.

After those two workshops the students reflect on what they learned and the workshops.

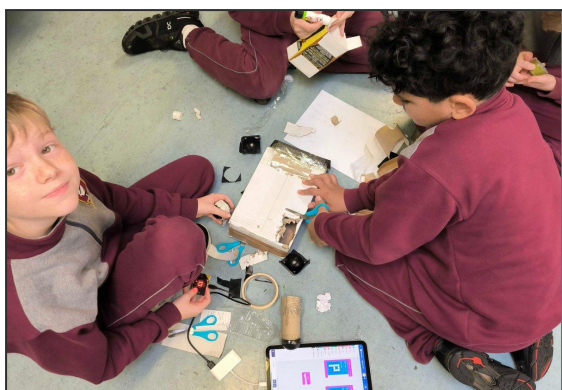
"I think it was really good, because people actually get exposure to what happens behind the screen when you're texting and calling and stuff."

(Female participant, 5th class)

The learning posters created by the students showed that the students are very capable of reconstructing how data travels and what infrastructure is used to create connectivity and telecommunication networks.

Include Young Voices

After the students gained knowledge, the focus shifts. In Workshop 3 (**voice**) the focus changes from knowledge transfer to knowledge application. The students explore smart cities further and learn about problems cities have to face in the future with one final aim: The students brainstormed what problems they noticed in their local area and how to go into action.



This is a planned build up to encourage young people to raise their voices and share their views and ideas on how they see our cities. We want to know: *What problems do they identify? What would they do to improve our cities? How would they use smart city technologies to do so?*

Finally in Workshop 4 (**audience**) the students go into action. They build their own smart city prototypes, tackling one of the challenges they identified in Workshop 3. They present their idea back

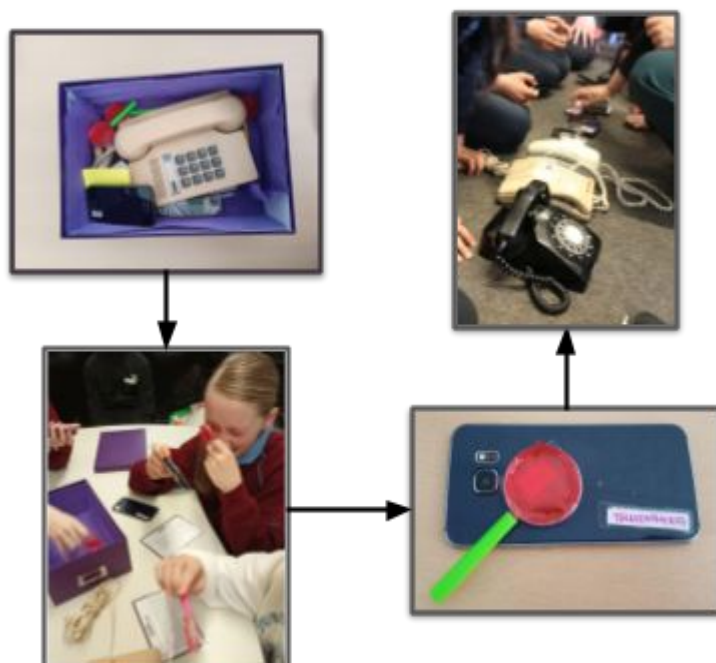
to their class, receiving feedback and explaining how they would use technology in their solution. The most thought-through idea will then be part of the Connective Detective Exhibition (**audience, influence**).

Insights: Museum in a Box

One of our main activities in Workshop 1 is a Museum in a Box to make the change in communication visible.

Students are given a box with multiple phones from different years. On them are stickers with coded years and the names of those phones. With the help of the magnifying glasses the students have to go through all phones to find out what years they are from. This makes the changes in technology and telecommunication very tangible.

MUSEUM IN A BOX





Numbers

Since the first workshop was delivered in 2024, the programme gained momentum. From **124 students in 2024**, to **288 in 2025** to finally **308 in 2026**.

Have a look at some numbers to see what else we have been up to between 2024 and 2026!





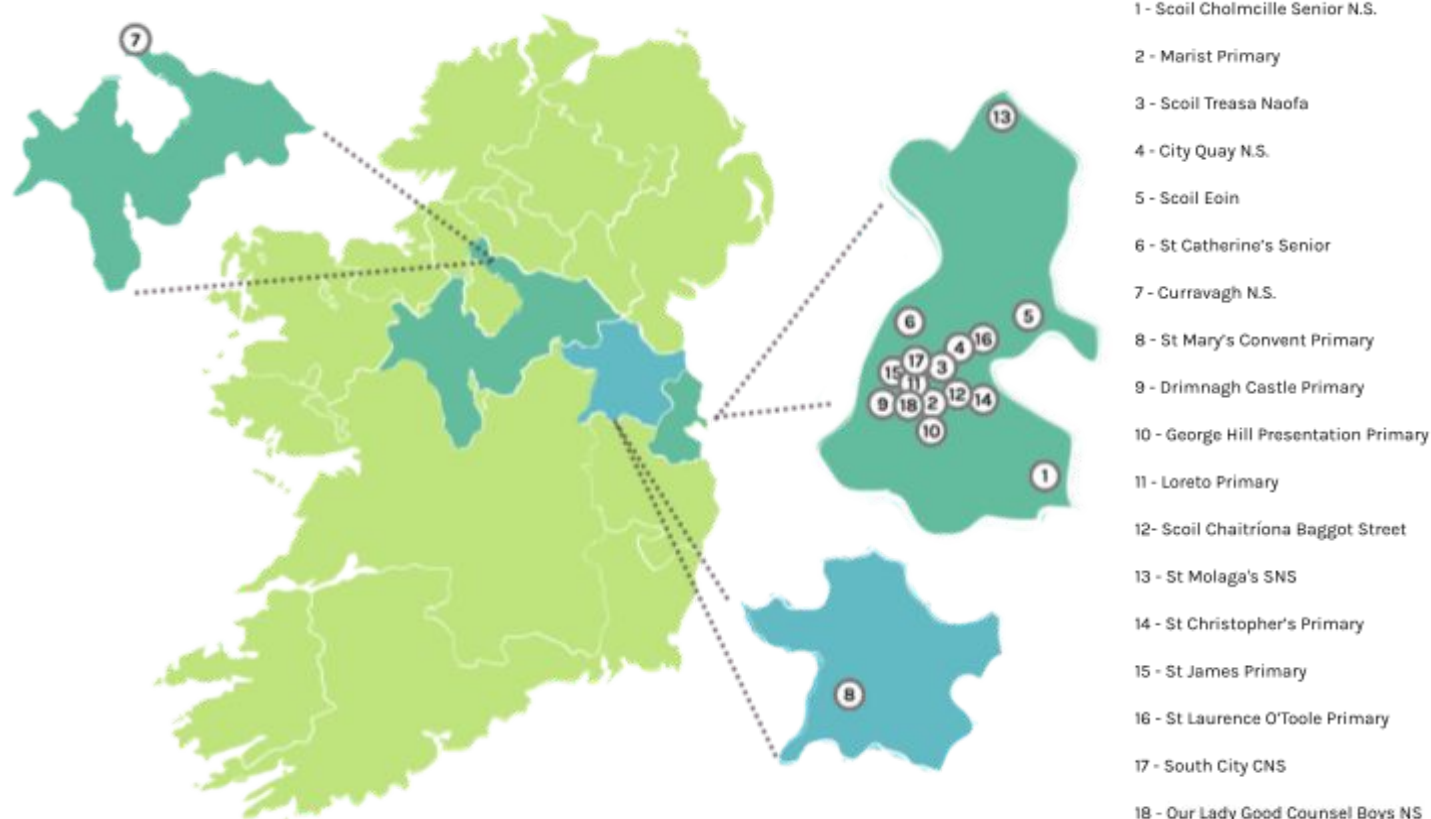
Participating Schools

All primary school students who participated in the Connective Detective are in 5th or 6th class. As STEM participation is often lower in DEIS-schools and we want to support disadvantaged neighbourhoods, we prioritised DEIS-schools^[14-16]. The programme is free of charge, schools only have to apply to participate.



Since 2024, 18 schools have participated in the full 'The Connective Detective' programme. Most of them are located in the wider Dublin area, but we also started exploring to bring the workshop series to other locations outside of Dublin.

We also went to a two-teacher school in County Cavan and a primary school in County Meath. Have a look at the map below to see all our locations.





The Workshop Series

The Connective Detective programme is a workshops series consisting of four interconnected 90 minute long workshops to build real connections with the students.

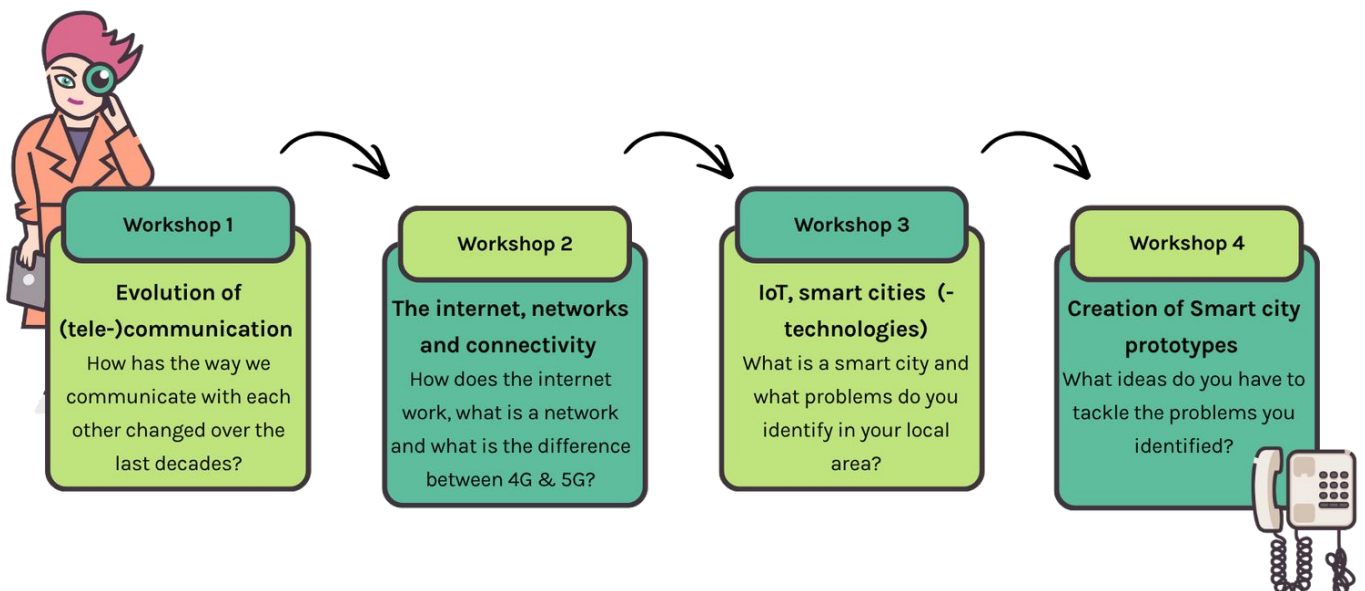
By participating in these workshops primary school students learn about smart cities, connectivity and telecommunications in a hands-on approach.



The four workshops are divided into different areas, see graphic below. In the fourth and final workshop we emphasise students' voices and ideas.



In small groups, the students build their own prototypes out of recycling material and micro:bits to tackle real city challenges they identified themselves in their local communities like littering, homeless people or wrong parking. At the end of the workshop they present them back to their classmates and share their thoughts around it.





The Connective Detective Exhibition

After the workshop series has finished, selected students are invited to be part of the two-day exhibition, where they present their smart city prototypes.

The exhibition is divided into two parts.

Part 1 - Student Showcase

On the first day in the morning is the students showcase. The students present their own smart city prototypes to smart city decision makers/ researchers from Dublin City Council and Trinity College Dublin including researchers and professors in telecommunications, City Council Representatives. They also receive feedback about their prototypes and discuss their solutions with the professionals. This way the students experience being part of the smart city discourse and taken seriously by adults. The professionals benefit by hearing from a segment of the population they might not often interact with in their professional lives.

“Yeah. It felt like that they were talking to us like we were normal people, not children.”

(Exhibition Participant)

Part 2 - Public Exhibition



After the student showcase is finished and the students get their certificates, the exhibition is open to the public - free of charge.

Visitors can explore the students' smart city prototypes and gain information about smart city projects in Dublin and general information about telecommunications infrastructure and connectivity.

All the information is displayed in a fun and accessible way. We also provided crafting stations, where everyone could design their own smart city prototype.

While the exhibition is open to all ages, it is especially designed for families.

“I was blown away by the ideas the students came up with and the way they built their prototypes. I thought that was phenomenal.”

(Teacher Scoil Chaitriona Baggot Street)

Community Engagement

It is important for local governments and researchers to engage with and include citizens in the changes and developments of their city. This way they are part of the change from the beginning. Therefore it is important to create opportunities for the local communities to develop knowledge and understanding about changes and development that are happening in Dublin.

To share the knowledge about smart cities with our local community and a more diverse audience, we have organised six community workshops and events since 2024, and we hope even more will follow!

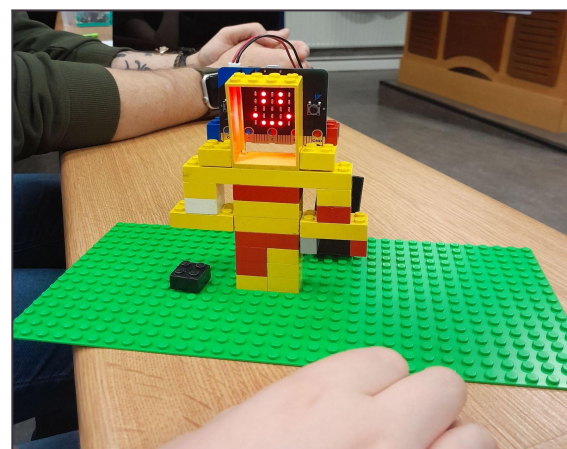


We collaborated with other organisations and events like the Dublin Maker, OurKidsCode, Dublin Tech Week, UTS Technology, Trinity Access Programme and Pearse Street Library. One of our biggest events is the end-of-year



'The Connective Detective' exhibition with over 500 visitors between the last two years. By engaging with the community and sharing knowledge about connectivity and smart cities, we build a bridge between the council, academia and the people living in the city. We also develop the capacity of local citizens to engage with smart city developments and research that is happening in their local area.

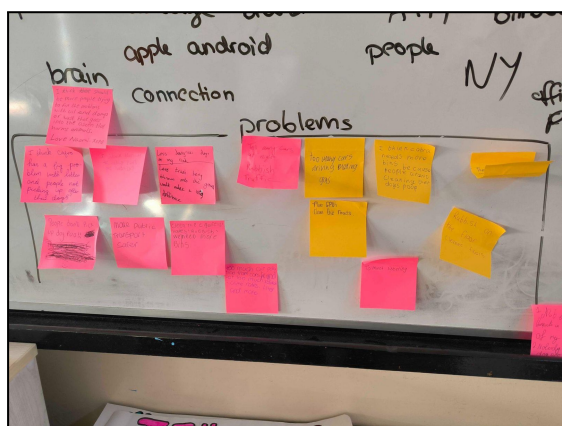
This encourages citizens to share their ideas and stay curious about Dublin's development.





Young Voices

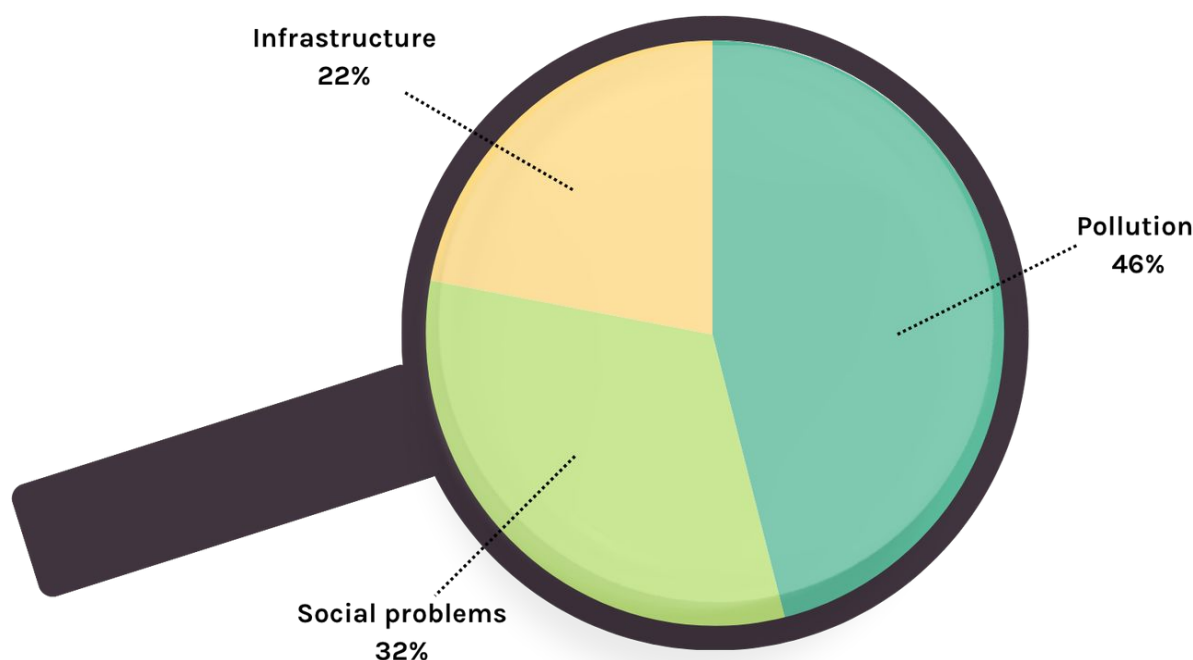
In the two runs of the programme after the pilot (24/25 and 25/26) where the smart city element was added, we also added a young voice highlight. Students learned about smart cities and the technologies used, before they brainstormed and identified multiple challenges in smart cities. Those can be categorized into three categories.



Pollution - including littering and pollution from cars, pollution exacerbating climate change, dog poo or cigarettes/ vapes on the path, wrong recycling, lack of bins

Social challenges - including homelessness, stray dogs, drugs use (including smoking/vaping), alcohol abuse, anti social behaviour, social media, lack of police, robbery, racism, war

Infrastructure - including speeding cars, wrong parking, lack of green spaces/ ADHD friendly playgrounds/ dog parks/ biodiversity, flooding





Let's tackle those challenges!

After the challenges were identified and discussed by the students, the students picked one challenge. In groups, they were encouraged to work on those challenges and to develop smart city solutions to tackle them.

Pollution

Pollution and littering in their local areas is a very big problem for our students. It



was part of the discussion in all classes the Connective Detective was delivered to. Nearly 50% of all prototypes created by the students were addressing problems that fall under the category of pollution. The solution the students designed to tackle those problems can again be categorised in the following categories:

Cleaning robots - Various types of cleaning robots were designed by the students including features like picking up trash or dog poo, reminding citizens to collect dog poo/ to not litter, cleaning with water, waterproof robots to clean the River Liffey and the canals, robots connect to a drone to spot littering or robots with wings to fly to where they are needed.



Smart bins - Bins that are able to detect different types of trash and sorting the trash for better recycling

Motivation to recycle - A return scheme for wrappers not just bottles, bins transforming plastic bottles into toys, bins complimenting you for not littering, bins showing the impact of how much was recycled

Reduce pollution - a filter to filter micro-plastic out of the water, a dome to put over Dublin to protect from pollution, a big drone to absorb all pollution, electric train with more space for more people, park just for dogs



Student Spotlight - Pollution (1)



**Shiann, Elzy-Mae,
Isabel and Carly**

The Wrapper Return

School: Scoil Eoin in Kilbarrack

"Our idea is that if there is a wrapper return everywhere, that it will stop people from littering and giving them a great reward. There is a card where the money will load on and you can use the card on all your local shops to support local business."



There is also a card where you can collect the money instead of a paper receipt!

Problem

"If you go to the beach you see wrappers everywhere and it is not clean. They can hurt animals."



Student Spotlight - Pollution (2)



Ester, Diya & Gargi

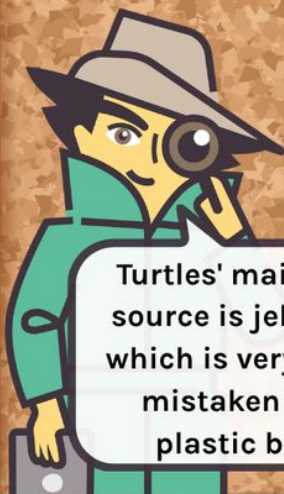
Green Machine

School: St Christopher Primary School in Ballsbridge

"Our idea is to detect where is rubbish in the sea and send out the required amount of drones needed to pick up the rubbish and locate the nearest waste management to reuse the rubbish"

Problem

"Our problem is that there is too much trash in the ocean and in rivers, which is doing serious damage to marine animals like seals, fishes or turtles."



Turtles' main food source is jelly fish, which is very easily mistaken for a plastic bag.



Social challenges

Problems clustered under the category social challenges have a wider range than the ones under pollution and are very diverse. Social media is added to this category as it influences young people and their perception of the world.

Most other problems are linked in one way or another with how safe (younger) citizens feel in the city. This reflects in the created solutions.



Smart Cameras - smart cameras linked to the Garda Síochána to detect drug use, racism and anti-social behaviour, robots supporting the police

Face ID Scanner - for playgrounds and shops to only allow access to placegrounds to young children and not teenager, and to make sure only over 18s can buy alcohol and cigarettes

Campaigns - to educate people on the effects of smoking (vapes/ cigarettes) and show them alternatives to drugs

Social robots - robot to provide homeless people with blankets and food, smart water spender who can also call for help, robots to collect animal food donations and can find stray animals, robots distributing toys for children living in poverty

Apps - to report animal abuse, to collect problems in the cities/ opinions from citizens

Drone - to detect where homeless people camp to help the government get in contact with them and distribute donations

Shelter - for homeless people where they are provided with clothes, foods and a smart card to give them access to a limited amount of money

Electric Tank - tank that runs with solar energy to run long without gas to help during war or riots

“No” Smart Phone - Switches off all apps after 2-5h depending on the age of the child using it.



Student Spotlight - Social Challenges (1)



Eli, Sam & Derek

RD Camera

School: St James Primary School in The Liberties

"With our RD Cam we are able to catch racist people and bring them to court. This might stop people from being racist and raise awareness of racism. It's based on smart cameras, using AI that was trained with real accidents and is able to detect things like weapons and violent/ racist words. The camera is also using facial recognition and links to Garda stations."

Problem

"We experienced people threatening, chasing & swearing at us on the street because of our skin colour. Racism attacks are scary and upsetting, therefore we wanted to come up with a solution to that makes us feel safer in the city."





Student Spotlight - Social Challenges (2)



**Heya, Indie-Rose
& M-Jay**

ID Checker

School: St Catherines in Cabra

"We came up with the solution of having a sensor in the playground. We have a face sensor and weight checker to distinguish kids from teenager, and allow them to use the space.

In this way, teenagers cannot break the playground, letting the little ones use it."

Problem

"In our local playground most of the things are broken because teenagers are not respecting it. Young people are stealing them and vaping illegally. They dump the vapes and it causes problems to the environment."





Infrastructure

The students further noticed challenges in the city that all fall under the wider category of infrastructure. During the prototyping session they came up with great ideas to use smart city technologies to tackle those.

Smart cameras/ robots - to detect speeding cars and fine people/ call them out

Drones - to use them for constructions instead of big machines

Sensors - to avoid big cars blocking pathways connected to report wrong parking to the gardai, counting bees and insects to collect data about biodiversity in the city



More dedicated spaces - Hoover football pit to have one near wherever you go, more good-equipped playgrounds & youth centres to give teenagers/ young people with special needs (ADHD, wheelchair) a space to meet, parks just for dogs (less dog-poo on the path)



Green roofs - support biodiversity by having more green roofs and information about insects

Adjustments to climate change - a wall/pipe system to prevent flooding connected to a drain basin

Smart Medical Device - to bridge the lack of doctors in rural areas





Student Spotlight - Infrastructure (1)

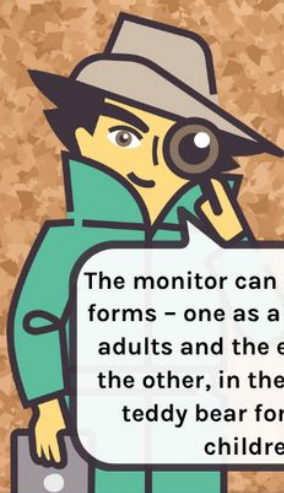


Eva, Ciara & Hoa

Medical Device

School: Cavanagh N.S. in County Cavan

We want to create a smart health monitoring device which will check a patient's temperature, heart rate and breathing rate. If the breathing rate exceeds a specific number, then the alert 'Go to Doctor' is shown. The Smart Health Monitor will send an alert if the temperature, heart rate and/or breathing rate are high and the patient is in need of medical care. The alert will then recommend that the patient 'Go to Doctor'.



The monitor can come in two forms – one as a bracelet for adults and the elderly, and the other, in the shape of a teddy bear for younger children.

Problem

"We live in a rural, isolated, mountainous part of Cavan. It is an hour's drive to our nearest hospital. If it is snowy or foggy, it can take even longer. We want to be able to set up a system where illnesses can be monitored at home with fewer visits to the hospital.



Student Spotlight - Infrastructure (2)



Billy, Skyler & Nikki

The Bee Green Roof

School: Scoil Chaitríona Baggot Street

"Our idea is a roof with lots of plants and flowers. This would greatly help the environment. Our prototype also has solar panels that provide sustainable energy (relying on natural resources) and sensors to count the pollinators. Our idea would have a positive impact marketing it a safer greener environment."



Problem

"The problem we wanted to tackle was bees are dying and they're very important for our environment. People are also cutting down trees/picking plants. This could cause increased pollution."



Student Spotlight - Infrastructure (3)



Parking Sensor

School: Scoil Chaitríona Baggot Street

"Our idea is that we place pressure sensors under the roads and footpaths in areas that need to be accessible, and when a car parks in these areas, the sensor will detect the pressure. This detection of pressure will send a signal to notify the city council or the gardaí of this, and allow them to come and clamp the car or issue them a ticket. There will be signs in these areas, so that drivers are made aware of what will happen if they park there."



Problem

"Big Cars are often parked on the foot path or emergency exits. Many people are affected by this problem, but in particular those affected are the elderly, people with mobility issues and buggies."



Participate

With this report, we want to encourage industry partners and city-/county-councils to include the views of young people in their decision making. We further would like to inspire researchers to develop research questions in collaboration with communities. Through 'The Connective Detective' we are able to fulfil the first three elements of youth participation as stated by Lundy (2007): *space, voice, audience*. But we would like to also include the element of *influence*: *"the view [of young people] must be acted upon, as appropriate"*^[17]. Therefore, we are looking for collaborations with everyone who is interested in listening to young voices and especially including their opinions in decisions and actions that shape our cities. Maybe you can give insights into smart city processes you are involved in or we can organise a design thinking workshop with your organisation and students? We are open to your ideas as well!

If you or your organisation is interested in a collaboration with us and 'The Connective Detective' please contact Clara Butz, clara@smartdocklands.ie.

***"Connective Detective has just been fantastic, from day one, the organisation, the personnel that came out there."
(Teacher Drimnagh Castle)***

Bring the programme to your area!

If you want to start including young voices into city decisions by sharing knowledge and information about telecommunications and smart cities in your area - good news!

We are now able to give out licenses and train facilitators on the content.

The Connective Detective Workshop Bundle

The workshop bundle makes it easy to start educating your community on connectivity topics. After some training from us, your employees are ready to get started and inspire young people with smart city topics.





The Connective Detective Workshop Bundle

ACADEMY OF THE NEAR FUTURE

The
CONNECTIVE
Detective
Workshop Bundle

SMART DOCKLANDS
A Smart Dublin District

With over 1000 participants since March 2024 Academy of the Near Future built a successful four-part programme called 'The Connective Detective'. The programme educates young people in schools and local libraries on smart cities, connectivity and telecommunications.

'The Connective Detective' covers topics like:

- (Mis-)Communication
- Evolution of Telecommunications
- Telecommunications Infrastructure
- Networks
- 4G/ 5G
- Smart Cities
- Smart City Technologies

Bring the successful programme to your council!

The workshop bundle makes it easy to start educating your community on connectivity topics.

It contains:

- Ready to use Slide Deck
- Facilitation Guide
- Worksheets
- Material lists
- Videos

Scan the QR-code to see the programme in action!









Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



CONNECT
Research Ireland Centre
for Future Networks



Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council





ACADEMY
OF THE
NEAR FUTURE



The CONNECTIVE Detective

Workshop Bundle



A train-the-trainer-session will support your staff and make sure that they are perfectly prepared to deliver the programme!

During this half-day session, participants get insights from facilitators who delivered the workshops to over 20 classes.

Costs:

2000€ for a 12 month-license, including

- access to all materials as described*
- training and license for two facilitators

Every additional facilitator will cost 500€. Agreement will be provided.

*material that is used during the workshops besides the worksheets i.e for crafting must be provided by each council and is not part of the workshop bundle

Academy of the Near Future is a smart city education programme and collaboration between the CONNECT Research Ireland Centre of Future Networks @ Trinity College and Dublin City Council.

Get in contact:
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Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin



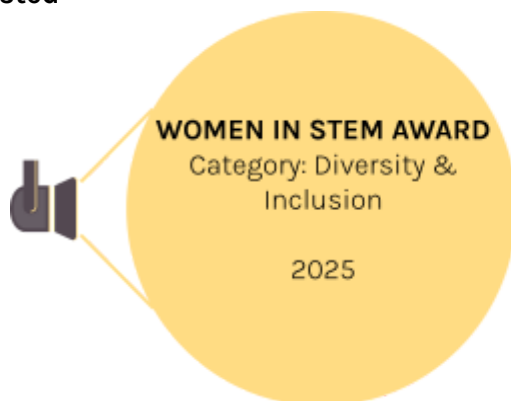


Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council

Recognition

We are grateful for the recognition the programme gained since its establishment!

Shortlisted



Featured on RTE/ news2day (scan the QR code to watch!):



Presented at:

Interaction Design and Children (IDC) - 2025

International Game-Based Learning Conference - 2024



Exhibition Quiz Sheet

This sheet was given out to everyone that was visiting the exhibition.

Give it a go and have fun solving the riddles! :)

The Connective Detective Quiz

What is a more common term for data centres?

A) The Cube (con)
B) The Cloud (tel)
C) A Computer (det)

How many kilometers of optical fibre cables span the world?

A) 15 000 km (ive)
B) 180 000 km (ect)
C) 28 000 km (eco)

For what stands the "G" in 4G/ 5G?

A) Generation (mu)
B) Gigabit (com)
C) General (con)

What is a digital twin?

A) A robot that looks like you (rob)
B) A 3D model of the city (nica)
C) A video game character looking like you (wif)

What was added to the Ring Buoys to be aware of missing Ring Buoys?

A) An alarm (ing)
B) A camera (tive)
C) A IoT sensor (tions)

Solution: _____
→ connect the letters of the right answer in the () behind for the solution
& show us to win a 'The Connective Detective' Sticker!

Word Search

T	B	X	Q	Y	D	J	A	R	D	E	C	B	J	N
U	E	N	C	R	J	G	O	R	X	V	I	I	V	W
Q	E	N	O	H	P	S	I	J	Z	I	E	L	T	R
V	U	N	R	I	N	J	J	J	R	T	F	D	Z	Y
T	E	C	M	E	T	Z	C	C	Z	C	Z	I	O	R
S	Q	M	S	I	T	A	A	Y	G	E	E	R	E	W
Y	O	U	B	G	N	N	C	Q	F	T	L	D	X	M
F	M	N	A	G	J	A	I	I	E	J	U	N	B	
A	R	V	T	P	C	G	E	M	N	D	O	Y	R	W
A	I	A	A	F	O	Q	C	P	P	U	R	N	X	N
G	K	Z	D	S	C	U	A	X	Y	M	M	C	Y	I
P	H	Z	A	C	U	H	B	J	U	B	T	M	R	J
S	M	A	R	T	F	Y	L	O	M	S	L	L	O	S
S	K	Z	M	L	W	I	E	I	O	M	T	P	Z	C
Y	M	X	I	X	O	P	W	G	U	Q	Q	P	N	A

Find the following words:
Phone, Communication, Detective, Sensor, Smart, City, Cable, Drones, Buoy, Internet, Data

Add some colour!

ACADEMY
OF THE NEAR FUTURE



Thank you!

We want to say a big **THANK YOU** to all the people who were part of our journey:

The Smart Docklands Team,

The Smart Dublin Team,

The CONNECT Research Centre Ireland Team,

The DCC Telecoms Unit Team,

The Trinity Access Programme Team,

And of course to all the students and teachers who participated in the Programme!





References

1. Freeman, D., Loe, B. S., Chadwick, A., Vaccari, C., Waite, F., Rosebrock, L., Jenner, L., Petit, A., Lewandowsky, S., Vanderslott, S., Innocenti, S., Larkin, M., Giubilini, A., Yu, L-M., McShane, H., Pollard, A. J., & Lambe, S. (2022). COVID-19 vaccine hesitancy in the UK: The Oxford coronavirus explanations, attitudes, and narratives survey (Oceans) II. *Psychological Medicine*, 52(14), 3127–3141. <https://doi.org/10.1017/S0033291720005188>
2. Cámara, A. M. N., Torres, F. I., & Porto, H. P. (2022). Meetings Between Professionals for the Inclusion of Children in Citizen Participation: A Formative Experience. *Social Inclusion*, 10(2). <https://doi.org/10.17645/si.v10i2.5018>
3. Clarinval, A., Simonofski, A., Henry, J., Vanderose, B., & Dumas, B. (2023). Introducing the Smart City to Children: Lessons Learned from Hands-On Workshops in Classes. *Sustainability*, 15(3), 1774. <https://doi.org/10.3390/su15031774>
4. Peacock, S., Puussaar, A., & Crivellaro, C. (2020). Sensing our streets: Involving children in making people-centred smart cities. In *The Routledge handbook of placemaking*. (pp. 130-140.).
5. Wyness, M. (2013). Global standards and deficit childhoods: The contested meaning of children's participation. *Children's Geographies*, 11(3), 340–353. <https://doi.org/10.1080/14733285.2013.812280>
6. Montalvan Castilla, J. E., & Riel Müller, A. (2024). A smart city for all citizens: An exploration of children's participation in Norway's smartest city. *International Planning Studies*, 29(1), 19–33. <https://doi.org/10.1080/13563475.2023.2259110>
7. Kaharevic, A., & Wihlborg, E. (2024). Whose Future is Smart?: A Systematic Literature Review of Smart Cities and Disadvantaged Neighborhoods. *Proceedings of the 17th International Conference on Theory and Practice of Electronic Governance*, 318–326. <https://doi.org/10.1145/3680127.3680220>
8. Park, S., & Vitak, J. (2024). Who Gets Left Behind in the Push for Smart Cities? Insights from Marginalized Communities. In I. Sserwanga, H. Joho, J. Ma, P. Hansen, D. Wu, M. Koizumi, & A. J.



- Gilliland (Eds.), *Wisdom, Well-Being, Win-Win* (Vol. 14598, pp. 90–104). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-57867-0_7
9. Checkoway, B. (2011). What is youth participation? *Children and Youth Services Review*, 33(2), 340–345. <https://doi.org/10.1016/j.childyouth.2010.09.017>
10. Häkli, J., & Kallio, K. P. (2018). On becoming political: The political in subjectivity. *Subjectivity*, 11(1), 57–73. <https://doi.org/10.1057/s41286-017-0040-z>
11. Häkli, J., & Kallio, K. P. (2019). Theorizing Children’s Political Agency. In *Establishing Geographies of Children and Young People* (pp. 271–293). Springer, Singapore. https://doi.org/10.1007/978-981-287-041-4_1
12. Riggio, E. (2002). Child friendly cities: Good governance in the best interests of the child. *Environment&Urbanization*, 14(2), 45–58.
13. Lundy, L. (2007). ‘Voice’ is not enough: Conceptualising Article 12 of the United Nations Convention on the Rights of the Child. *British Educational Research Journal*, 33(6), 927–942. <https://doi.org/10.1080/01411920701657033>
14. O’Shea, S. (2023). “It was like navigating uncharted waters”: Exposing the hidden capitals and capabilities of the graduate marketplace. *Journal of Higher Education Policy and Management*, 45(2), 126–139. <https://doi.org/10.1080/1360080X.2023.2180161>
15. Shaw, E. J., & Barbuti, S. (2010). Patterns of Persistence in Intended College Major with a Focus on STEM Majors. *NACADA Journal*, 30(2), 19–34. <https://doi.org/10.12930/0271-9517-30.2.19>
16. Lau, J. (2024). *Exploring student progression in higher education*. Retrieved from *Progression Rates: Overview and Key Findings*. Higher Education Authority Ireland. <https://hea.ie/2024/02/29/exploring-student-progression-in-higher-education/>
17. Lundy, L. (2007). ‘Voice’ is not enough: Conceptualising Article 12 of the United Nations Convention on the Rights of the Child. *British Educational Research Journal*, 33(6), 927–942. <https://doi.org/10.1080/01411920701657033>