

Lesson 5

Deploy Weather Stations

Townsville City Council Staff participation

Content descriptors:
Knowledge and understanding:
Examine the main component of common digital systems and how they may connect together for networks to transmit data. (ACTDIK014)
Relevant elaborations:
<ul style="list-style-type: none"> Investigating how emergent digital systems work Explaining how data may be transmitted between digital systems in different ways Describing digital systems as having internal and external components that perform different functions

Learning intention:

By the end of the lesson, students will be able to:

- Learn to deploy their digital system into a natural environment
- Understand how environmental monitoring systems transmit data.

Equipment list:

- Transportation
- Students to have hats, water bottles, sunscreen
- School to bring the weather stations
- TCC to bring deployment materials
- Checklist of student groups/weather stations and deployment GPS co-ordinates.

Lesson outline: Excursion activity to deployment site

Introduction (10min)	<ul style="list-style-type: none"> TCC staff led class discussion (sustainability perspective of the importance of their weather stations, how they are helping scientists, wildlife groups etc across Townsville) Discuss the design features (why is it built a certain way, what benefits of colour, design, structural integrity, battery life, how their weather stations will connect together to build the network, how they will be able to see real time data) Safety briefing
Body (40min)	<ul style="list-style-type: none"> Deployment of weather stations
Conclusion (10min)	<ul style="list-style-type: none"> Question time – students can ask TCC staff any questions Getting students back onto the bus