



WIRELESS COMMUNICATIONS WITH DR DE MI

TALKING POINTS

1. In ancient China, the Chinese military used fire and smoke to send messages over long distances. What kinds of messages do you imagine they were sending? (See the timeline)
2. When were the first digital radio signals used on 2G cellular networks? (See *Introduction to the article*). How do you think this changed the way people used mobile phones?
3. Who invented the first wireless radio? (See *Introduction to the article*). Why is it sometimes difficult to know who was the inventor?
4. How is multicast and broadcast different to unicast? (See *What is the difference between broadcast, multicast and unicast media?*)
5. What about object-based media? What is that and what might be its benefits? (See *About object-based media*).
6. How many partners and countries are involved in the 5G-Xcast project? (See *What is the 5G-Xcast project and why has it been established?*). Why are so many partners and countries involved?
7. What are vertical industries? (See *Introduction to the article*).
8. In what ways will new broadcasting technologies change society as we know it? Do you think these changes will be a good thing?

ACTIVITIES YOU CAN DO AT HOME OR IN THE CLASSROOM

WHERE CAN ENGINEERING TAKE YOU?

Take a look at the Engineering Council's website. It is a treasure trove for those interested in embarking on an engineering profession. As well as being a brilliant source of information for engineering-related topics, the site contains advice on professional development.

WHERE WILL 5G TAKE US?

TechRadar has a page dedicated to 5G. Have a read through the article, including what is expected to happen with regards to 5G in different countries around the world.

TAKE A TOUR OF 5G-XCAST

5G-Xcast has an introduction video on YouTube. Watch it to find out more about the project and how it will help solve the challenges of establishing 5G Broadcast:

<https://www.youtube.com/channel/UCCI2iSgTDx42UiLoRcDyDBg>

