

Assignment 5

COLLECT TELECOMMUNICATIONS

Telecommunication is communication between different places, although these places can be very near. In telecommunication: a transmitter (T) sends information (I) coded as energy (E), often via a transmission medium (M), to a receiver (R). For instance:

- Church bells (Transmitter) send the time (Information) coded as sound (Energy) via air (Medium) to your ear (Receiver)
- Room thermostat (T) sends the temperature (I) coded as electrical impulses (E) via wire (M) to your boiler (R)
- Remote controller (T) sends commands (I) coded as infrared light (E) to your TV (R).

Note: Not long ago, electromagnetic radiation (which includes light and radio waves) was assumed to travel in a medium, 'the ether'. Nowadays electromagnetic waves, radiating in space, are not considered to need a medium.

- 1 Obtain either:
 - 75 x 75mm Post-Its (orange, green, blue, red and yellow) and 1 medium marker (black) or, if you can't find them:
 - 75 x 75mm Post-Its (white or gray) and 5 medium markers (orange, green, blue, red, and yellow)

This colour-coding makes your display easier to understand
- 2 This week, take a note of every telecommunication type you observe and can think of (e.g. church bells ringing) but not static information like posters or writing, or direct interpersonal communication like speaking or gesturing
- 3 For each telecommunication type, decide what are the transmitter (T), information, (I) energy (E), transmission medium if it exists (M), and receiver (R)
- 4 For each type, choose a colour depending on the energy:
 - Visible light Orange Post-It + black marker (or white/gray Post-It + orange marker)
 - Sound Green Post-It + black marker (or white/gray Post-It + green marker)
 - Electrical impulses Blue Post-It + black marker (or white/gray Post-It + blue marker)
 - Radio waves Red Post-It + black marker (or white/gray Post-It + red marker)
 - Other Yellow Post-It + black marker (or white/gray Post-It + yellow marker)
- 5 For each type, write down the left-hand side of the Post-It, the letters T, I, E, M, and R; then, to their right, the transmitter, information, energy etc. E.g:
T Church bells
I The time
E Sound
M Air
R Ear
- 6 Arrange your Post-Its on A3 sheet(s) according to colour
- 7 Write your full name (*nome e cognome*) on your display, and your total number of Post-Its
- 8 When you arrive at the next lesson, immediately fix the display to the wall and be prepared to explain it to everyone.