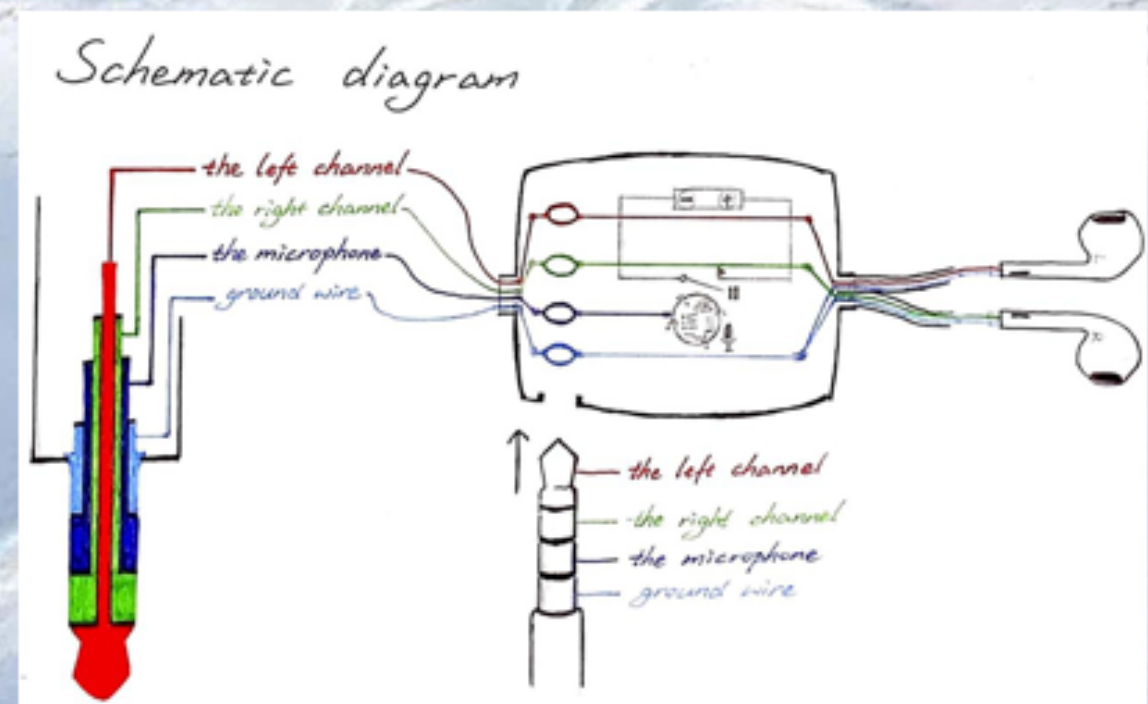
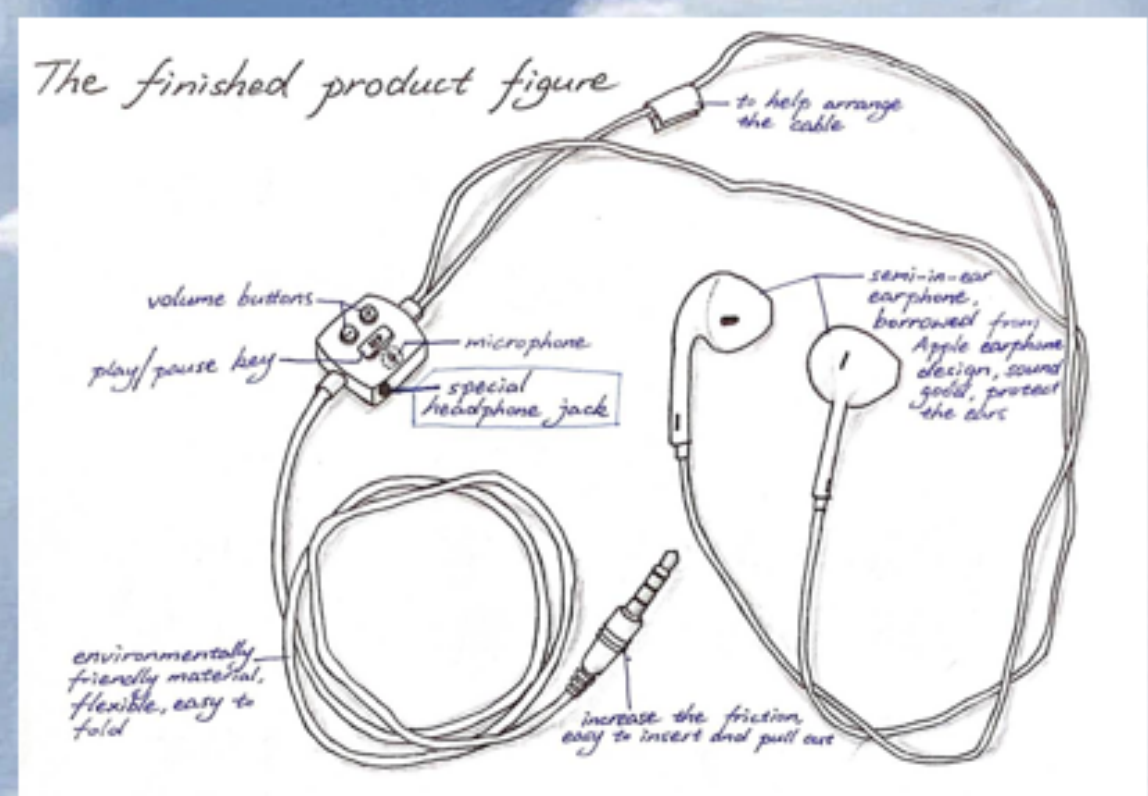


# Special Multi-person Earphone

In our daily life, we often need earphones. As students, we have found the disadvantages of wired earphones in our classroom life. When one person uses earphones, both ears can enjoy the sound, and when we want to share the sound we hear with the people around us, but cannot amplify the sound to the people around us, we will take off the earpiece on one side of our own ear and give it to the other person. But if we want to share it with two people, three people? Wireless Bluetooth earphones are easy to use, but they don't work with MP3 players or non-smart phones. So we had a whole new idea -- a type of wired earphones with unlimited connections.

This special earphone is added a headphone jack to a normal earphone to insert another earphone, so that sounds that could only be heard from one earphone can be heard from two connected earphones. And if multiple such earphones are connected, sounds that could only be played through one earphone can be quietly shared by 10, 20, or even more people through connected earphones.



A common earphone has four lines: left channel, right channel, microphone and ground. Our idea is to place four special metal rings on each of the four lines corresponding to the earphone jack. In this way, when the other earphone is inserted, it can be combined with each metal ring to share information with the inserted earphone. That's how we made it possible for music to be shared by multiple people using multiple earphones by adding a headphone jack to a normal earphone.