## Project 2- Computer Dynamics

For this case study of computer dynamics, The Local Area Network (LAN) is designed as a physical star topology connecting computers on each floor with UTP cabling to a switch. On each floor of each building, you would need a LAN. I would also use a multi-mode of fiber optic cables that would connect all three buildings with one of the buildings being the main point. Adding fiber optic cables over normal cabling would make for way higher data speeds. A data switch should be added in one of the main buildings and the buildings connecting to it would be connecting by using fiber. I believe that adding a wireless network can help adding wireless devices to the network. To add a wireless network, you would need to install access points on every floor of every building. The switch on each of the floors can connect to the main switch on each of the buildings. That will indeed connect them to the main router in that specific router. The connections between all the switches in the buildings would be fiber.

I believe that the recommended idea for this specific company's network would be to install switched Ethernet switches and a cabling plant that can run Ethernet effectively. Each of the computers that are in the buildings would need to have installed some sort of Ethernet. The main switches in each of the buildings would be connected together. It should also be assumed that all the security, cost of the software, and the management of the network will be purchased as the budget allows. The equipment of the network for internet access will be based on the preference of the network manager. I do not believe that a WAN would be needed because as this case specifies that there is only one main campus.



