Smart Learning with Secure, Scalable Wi-Fi

You'll find technology change the way we learn. What has become ubiquitous is the adoption of mobile devices in higher education. Smart Wi-Fi network is used by students, teachers and guests for everything, everywhere in Campus. Professors encourage the usage of laptops and tablets to facilitate students' learning. The advancement of technology has hit the higher education world making reliable Wi-Fi an essential utility tool for colleges and universities around the world.

More reliable and robust Wi-Fi has become the focal point for change among many campus/universities. From classrooms and dorm rooms, to the sports facilities, students and teachers want more wireless capacity, better performance and reliable connections everywhere with any devices. Consequently, Wi-Fi is no longer a luxury, but essential to the education sector, looking to attract the best and brightest.

Therefore, it is essential for school administrations to deploy high speed wireless networks by 802.11n or 802.11ac to support BYOD on campus. However, they not only need to provide Wi-Fi access with management, but also monitor user behavior and network operation while maintaining security and reliability by WLAN Controller/Gateway. The performance and manageability are the key factors in selecting WLAN infrastructure.
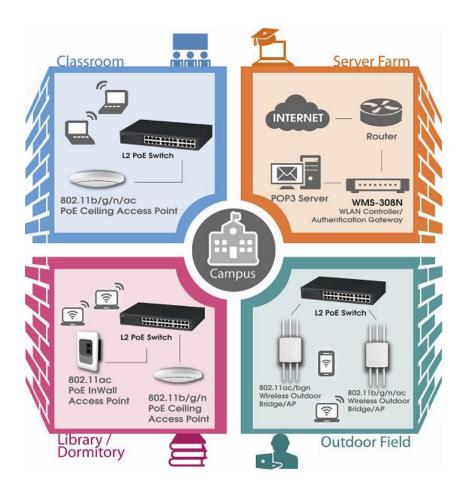
➢ What Campus administrator need?

1) Campus admin need to keep track of each user's Internet usage in the case of illegal activities
2) With managed Wi-Fi, the quality of the campus' wireless Internet service can be guaranteed
3) High user density in lecture halls increases network congestion and collisions
4) Users get disconnected when moving between classrooms or academic buildings
5) Some students get distracted easily and do not stay focused during class time, using Wi-Fi to browse the Internet or chat with friends

- Policy assignment from PheeNet WLAN Controller to Access Points to treat the access points as an edge switch
- VLANs were applied to users within each particular building to help manage contention to the network and keep data rates high
- Broadcast traffic was filtered through an access point not allowing it to move away from the switch to which it was connected
- Role-based policy assignment to provides students and faculty members with differentiated services and security profiles
- Keep track of each user's Internet usage in the case of illegal activities, and enable Session log and store syslog in server. users can also be blacklisted when necessary
- Seamless roaming across campus improves learning experience with optimized mobility
- Time Policy limit the network access of students during specific times by blocking certain applications or websites, encouraging students to pay attention in class

➢ **Scenario**