



Help students progress their education, not bring it to a halt with network downtime.

# Maintaining a high performing network for students in a fast-paced, virtual age: A Higher Education Case Study

## On-Campus Experience in Higher Ed

A study by the University of Oxford has revealed that, over the last decade, the number of both universities and degree programs offered has surged. This trend has brought more competition among universities and a global movement to bolster the quality of higher education.

The goal of providing high quality instruction and a stellar on-campus experience is shared by all universities of which are competing to attract the most talented and intelligent students..

## Campus WiFi

When delivering an excellent student experience, ensuring optimum WiFi performance is one of the main challenges.

## Challenge

Ensuring excellent WiFi experience for in-campus students

## Results

Universities that implemented NetBeez were able to reduce network downtime, IT staff's time as well as resources used thanks to:

- A reduced number of student generated tickets
- Decreased number of surveyed sites required to troubleshoot WiFi performance issues
- Quick identification of network versus application issues

## Industry

Higher Education

## Use Cases

Universities that implemented end-user WiFi monitoring were able to efficiently detect and troubleshoot:

- WiFi authentication issues
- Slowness of bandwidth-intensive applications
- WiFi signal coverage

## Products

BeezKeeper - Dashboard  
WiFi Beez - Monitoring Sensors



However, deploying and managing wireless networks has become increasingly more complex over the last five years. Today, the average student typically owns three to four mobile devices and relies on them not only in managing their everyday personal lives but also to communicate regularly with classmates and professors.

## How NetBeez is Improving the Student Experience

NetBeez has released a SaaS solution that continuously simulates user activity on any LAN and WiFi network to proactively identify the most complex network problems by allowing complete visibility of the issue before it severely impacts users. This newfound visibility significantly reduces time to detection and resolution in respect to network downtime. The 802.11ac monitoring sensors (WiFi Beez) run user-defined tests at the network layer (PING, Traceroute, Iperf, ...) and at the application layer against online resources (YouTube, Dropbox, ...) while reporting wireless metrics, such as:

- Number of sent and received bits per second
- WiFi signal strength and link quality
- Associated 2.4/5GHz channel and BSSID
- Bit rate established with the access point

WiFi monitoring from the student, professor or end-user's perspective enables network administrators to proactively detect and address any problem that may cause a bad student experience.

## Deployment of WiFi Sensors

The WiFi Beez are deployed at strategic points across the campus, from high-density areas such as libraries, classrooms and test centers to other equally as important locations such as dorms and administrative offices.

Typical configurations require between one to three sensors for high-density areas and four to eight sensors per floor in dorms and administrative areas.

The WiFi sensors are centrally managed by the 'BeezKeeper' dashboard, which displays key performance indicators of the WiFi experience as reported by the Beez. It also shows how the network administrator can quickly detect and troubleshoot any network and application problem detected by the sensors.

## About NetBeez

NetBeez is a network performance monitoring company that provides network performance monitoring from the end-user's perspective on any LAN or WiFi network. Our solution is used by many national and international Universities. NetBeez is a Cisco Solutions Preferred Partner.

## Results

Universities that have deployed WiFi monitoring from the students' perspective are able to efficiently identify WiFi authentication issues, troubleshoot slowness of bandwidth-intensive applications (e.g. YouTube), while reducing students' tickets and time-consuming site surveys. If you want to learn more about this solution, please visit the page <https://netbeez.net/wireless-monitoring/> or send your inquiry to [sales@netbeez.net](mailto:sales@netbeez.net).



Pictured: The NetBeez WiFi agent