



### Challenge

Increase the productivity and quality of faculty, staff and student interactions, including flexible methods of remote instruction and remote “virtual” office hours across seven campuses. Also increase the usefulness of mobile communications by linking cellular calling with the enterprise network to enhance productivity and security through the creative deployment of notification applications.

### Solution

To bring students and faculty together for classes and meetings across seven campuses, Western Kentucky University engineered individualized video communications consisting of Avaya Softphone with Video Integrator and Avaya Communication Manager, extending a campus-wide video application that also employs Polycom gatekeepers and endpoints, including rooms with high-definition video. Avaya also implemented an IP Telephony Solution with Extension to Cellular (EC 500) to offer one-number access to desk and mobile phones. Coupling these with Avaya one-X Mobile Edition also enabled users to access advanced enterprise-based (PBX) calling features from their mobile phones.

### Value Created

- **Growth based on communications.** Increased student enrollment, up 20 percent in four years, was facilitated at satellite campuses by video applications that address the need for a range of diverse teaching and learning methods.
- **Improved instruction and curriculum.** Video courses in 2008 increased by 13 percent over 2007, with 3% more students enrolled in video courses, reflecting a trend to enable students at satellite campuses to routinely experience classes staged at the main campus.
- **Better mentoring to get careers off to a strong start.** With “virtual office hours,” satellite campus students can meet with remote faculty for detailed and personal discussions.
- **Mobility coupled with single-number enhanced privacy.** Students and users keep their cell numbers private while being known publicly by a number in the campus dial plan, which is the only number displayed to callers.
- **Work-life balance.** Users report freedom to leave their desk while transparently remaining connected on important calls and setting off to meet other business, family or personal needs.
- **Defensible, redundant campus-wide security.** Emergency notifications that might have reached one-fourth of campus users through the wired network are expected to reach as many as 90 percent by extending notifications to users’ mobile phones.

# Attracting Students and Faculty to Western Kentucky with Intelligent Multi-Campus Voice, IM, Video and Mobility Applications

Bowling Green, Kentucky – As a workday drew to its close, IT director Edwin Craft of Western Kentucky University could see a potential problem at home. Craft was busy on an important call, but he and his family had important plans for the evening. A delay of even 30 minutes would create inconvenience and disappointment. Craft knew what to do.

*“I used the extend button on the IP phone in my office, and without interruption I bridged my desk phone call to my mobile phone,”* said Craft. *“I was able to make my way home while staying on the call.”*

Craft averted conflict and met both professional and personal commitments because his office phone system was enabled with Extension to Cellular and Avaya one-X Mobile Edition. As one-X Mobile Edition is deployed to the teaching staff and administration at Western Kentucky University (WKU), end-user feedback has been positive. *“Our users love the freedom of mobility,”* said Craft.

## Institutional Challenges

Like other universities, Western Kentucky University is challenged to attract students and faculty, and its support for academics and campus life is a key to success. One competitive tool is leading-edge communications. Craft, whose professional responsibilities include both voice and video communications, is proud of helping the school use advanced technology to enhance its attractiveness. *“Mobile and video communications represent major opportunities for higher education institutions to offer more services, more communications options and access to more learning tools for students and staff,”* Craft said.

WKU's technology vision includes the development of a flexible Web-based portal to give faculty and students freedom of movement and enable them to access a full range of communication capabilities, including instant messaging, email, mobile calls with access to enterprise calling features, and video conferencing. Craft shares the Avaya vision of Intelligent Communications. *"This university doesn't want isolated 'island solutions',"* he noted. *"We want a consistent and synergistic set of communications capabilities accessible from a variety of devices."* Craft views uniformity of communications across all campus locations – making them arms, not satellites of the main campus – as a differentiator for WKU.

Along with mobile and video communications, security is the third major component of WKU's telecommunications vision. *"To ensure that we can urgently contact everyone with emergency*

**“ In four years at WKU enrollment is up nearly 20 percent, outpacing many peer institutions. Because the increases reflect demand at remote campuses, advanced communications is a key to satisfying students and remaining in close contact with those same students.”**

*Richard Kirchmeyer, CIO, Western Kentucky University*

*instructions, we need multiple ways of notification,"* Craft said. *"The Avaya one-X Mobile Edition application gives us a critical redundant channel that complements our wired network access to the campus offices and residence hall rooms."*

## The WKU Video Solution

The video solution at Western Kentucky University was engineered with the help of Avaya's Unified Conferencing Group. WKU already had a number of classrooms and other facilities with video technology, including document cameras, tools for integrating multiple data feeds, and state-of-the-art products from Polycom, a member of Avaya's AlliancePartner program. These Polycom products include Path Navigator gatekeeper, MGC bridge and clients such as Polycom VSX and HDX (high-definition video endpoints). The new video solution integrated existing components with Avaya Communication Manager call processing software to deliver a robust education-oriented video platform. The solution is being used in 26 classrooms on multiple campuses, supporting more than 70 courses.

Enhancing still further the access to video courses, individualized video is now showing up on the personal computers of end-users across WKU. This solution, which some users strongly welcome, implements Avaya IP Softphone with Video Integrator on individual computers, along with peripherals like desktop cameras.

## Virtual Office Hours

In addition to supporting teaching and learning, WKU's new video solution

enhances the student-faculty relationship. Faculty mentoring helps young careers get off to a strong start, and technology-savvy students may find real-time two-way video a personal and confidential way to interact with a faculty mentor on a remote campus. *"Currently we are investigating how the Avaya solution can aid faculty members with what we call 'virtual office hours',"* Craft said. *"There's no question that video telephony is becoming more popular in academic environments with many young people. For interactive classes and remote interviews of our students by potential employers, Avaya has helped us tap the full potential of our IP network."*

## WKU's Mobility Solution

The mobility solution at WKU reduces calling costs, enables users to be more responsive, and enhances security both for users and the overall institution. At the heart of the solution is Extension to Cellular and Avaya one-X Mobile Edition, which enable one-number access and the ability for users to switch seamlessly in mid-call between the desk and mobile phones. They do this with an "extend call" button on the desk set to push a call over to the user's cellular service.

The solution enables anyone at WKU, if they choose, to be known only by the single number in the campus dial plan. Users can receive all of their incoming calls on that number, which can be set to ring simultaneously at their mobile device and their desk or residence hall room. Outgoing calls dialed on a cell phone may be routed through the campus Avaya Communication Manager, which means that Avaya one-X Mobile Edition users enjoy advanced

features, such as conference, transfer, and call park through a convenient graphical interface on their mobile devices. *“Many students and staff like to keep their mobile number private,”* said Craft. *“With the Avaya mobility solution, only the user’s campus number appears at the call termination.”*

## Security with Intelligent Communications

Maintaining campus security and safety in times of emergency is a top priority for Western Kentucky University. *“Our new solutions will enhance our emergency preparedness,”* said WKU’s CIO, Richard Kirchmeyer. *“Because almost all students and staff have cell phones, it makes sense to incorporate mobile devices into our emergency communications plan.”* The Avaya solution will help ensure that urgent calls get to the intended party, wherever they may be. *“Security by dual networks, wired and wireless, provide the university with a strong and defensible solution,”* added Kirchmeyer.

## A Side Benefit of Intelligent Communications

*“My wife would have been very upset that evening if my communication needs at work had spoiled our family’s plans,”* admitted Craft. But his Avaya communications resources saved the day when he extended the call wirelessly and concluded it while going home on time. *“Avaya has been a partner,”* Craft added. *“I have a robust communications environment, innovative features, confidence in my implementations – and more peace in my life.”*

## Learn More

For more information on how Avaya Intelligent Communications can take your enterprise from where it is to where it needs to be, contact your Avaya Client Executive or a member of the Avaya Authorized BusinessPartner program, or visit **“Do Your Research”** at [www.avaya.com](http://www.avaya.com).

All statements in this Case Study were made by Edwin Craft, director of Telecommunications, Western Kentucky University, and Richard Kirchmeyer, CIO, Western Kentucky University.

**“ The Avaya mobility solution creates flexibility for users to move freely from a desk conversation to a cellular connection without interruption, and it fosters security by enabling users to keep their cell number private, and receive calls via their single number entry in the campus directory. ”**

*Edwin Craft, Director of Telecommunications, Western Kentucky University*

## APPLICATIONS

- Avaya one-X Mobile Edition
- Avaya IP SoftPhone with Video Integrator
- Extension to Cellular

## SYSTEMS

- Avaya Communication Manager
- Polycom MGC
- Polycom HDX
- Polycom VSX
- Polycom Path Navigator

## SERVICES

- Engineering by Avaya  
Unified Conferencing group

## ABOUT POLYCOM

Polycom is the only company today delivering end-to-end, rich media collaborative applications for voice, video, data and the Web from desktop and mobile personal systems to room systems to the network core. They are the industry leader in unified collaboration solutions. Their vision is to enable people to connect anytime, anyplace and with any device in a virtual experience as natural as being there. Polycom delivers business value by cutting costs, simplifying system management, and fostering real time collaboration. As a result of this easier, more lifelike collaboration, people are more innovative, efficient and productive, make better decisions, enjoy enhanced relationships and greater satisfaction with their jobs — enabling organizations to be more agile, innovative and therefore globally competitive. For more information please go to [www.polycom.com](http://www.polycom.com).

## ABOUT WESTERN KENTUCKY UNIVERSITY

Western Kentucky University, with more than 18,000 students on seven campuses, is centered in Bowling Green, Kentucky. Employing nearly 2,000 staff, including 700 faculty members, the university prepares students from 70 countries to be productive, engaged leaders in a global society. Among the fastest growing of its peer institutions, Western Kentucky University offers academic programs encompassing education, the liberal arts and sciences, business, and traditional and emerging professional programs at the associate, baccalaureate, and graduate levels. For more information, visit <http://www.wku.edu/>.

## ABOUT AVAYA

Avaya is a global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world. Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness.

For more information please visit [www.avaya.com](http://www.avaya.com).