

## Metro puts IBM Academic Initiative at the top of the class




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### Overview

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#### ■ Challenge

Metropolitan Community College (Metro) needed an IT environment that enabled the teaching of a wide range of computer courses without purchasing additional equipment for every new class.

#### ■ Solution

Metro elected to participate in the IBM Academic Initiative for IBM® System i™ program, forging relationships with local IBM Business Partners, customers and user groups and helping the college develop critical new curricula and, with support from IBM in the form of discounted leases on System i equipment, no-charge software and cost-effective System i education for faculty.

#### ■ Key Benefits

- The partitioning capabilities of System i help Metro Community College support multiple curricula and operating systems on one cost-effective system, minimizing capital equipment costs and simplifying the IT environment.
- The simplified environment of System i, combined with its effective management tools, helps reduce the time Metro instructors spend managing systems so they have more time to spend with students.

- The local relationships enabled by the IBM Academic Initiative for System i provide Metro with valuable insights into regional business needs and offer additional resources for students, potentially resulting in higher placement levels and an increased pool of skilled employees in the community.
- Attractive financial terms on IBM systems, software and training provided by the IBM Academic Initiative for System i helped Metro offer critical new curricula affordably.

For the past 10 years, Metropolitan Community College (Metro) in Omaha, Nebraska, has ranked in the top 10 community colleges nationwide for number of IT graduates, and the college's computer classes are the mainstay of its offerings. One reason for Metro's success is that Omaha is one of only a few U.S. cities that sits at the intersection of both east-west and north-south fiber optic networks— attracting a large number of communications and information services companies and putting IT-savvy employees in high demand.

Many Omaha companies use IBM System i solutions, and these local business leaders have encouraged Metro to expand its catalog of IT classes over the years. When a representative from an IBM Business Partner first told computer programming technology instructor Ted Tucker about the IBM Scholarship Program in 1992, Tucker saw the opportunity to gain affordable access to leading-edge technology. Metro became one of the initial 35 community colleges to provide classes on an IBM AS/400® system put in place as part of the program. As the information superhighway took off, Metro's computer classes were able to keep pace, thanks to the IBM Scholarship Program.

**Changing educational needs are addressed by the versatile capabilities of the System i platform**

Even in those difficult times, however, local businesses were still pushing to increase efficiency and gain competitive advantages through IT. But the scope of knowledge required by IT staff had changed. Employers needed people with a combination of skills: networking engineers who knew databases, Web designers who understood networking and—more importantly—employees with business skills who could see the big picture, work as a team and deal directly with customers.

*“IBM showed us how we could use the System i5 520 system to address precisely those educational needs being expressed by our business community.”*

*Ted Tucker, Computer Programming Technology Instructor, Metropolitan Community College*

As a result, Metro became involved in a program funded through the National Science Foundation to examine how to increase the number of students obtaining degrees in science, technology, engineering and mathematics, while developing curricula that reflected changing business needs. Around the same time, Tucker and several members of his team participated in a roundtable discussion offered as part of the IBM Scholarship Program—now called the IBM Academic Initiative for System i. “IBM showed us how we could use the System i5™ 520 system to address precisely those educational needs being expressed by our business community,” Tucker explains. “We could run courses on IBM WebSphere®, IBM DB2®, Java™ technology and others alongside UNIX® and Microsoft® Windows® classes. The ability to support all of this on one

system would enable us to teach students to work on many different platforms without having to buy equipment for each one.” In addition to the required technical skills, Metro is also able to provide students with necessary business skills. A key component of the IBM Academic Initiative for System i program fosters the partnering of colleges with the System i business community to provide internships and other opportunities for students.

**i520 helps increase class offerings**

Seeing that the System i curriculum could further the college's objective of serving the local business community, Tucker and his team decided to upgrade existing systems to the i520. As a participant in the IBM Academic Initiative, Metro received a favorable lease rate for the new i520 and IBM software at no additional charge, as well as help with advertising and participation at COMMON user group conferences. Also, faculty could attend IBM's annual educational roundtable and summer school events.

Bob Luebbe, president of Linoma Software, is a member of Metro's computer technology advisory board, which brings together IT leaders from the community to identify critical job skills over the next five years. He says, “We

help the teaching staff define programs that are responsive to business needs. The IBM Academic Initiative for System i enables the college to offer these important classes at affordable rates to students and employees of local businesses who want to update their skills. Because many businesses in our community have IBM System i solutions, students find grateful employers when they graduate.”

### **System i partitioning can increase management efficiency**

Using the innovative partitioning capabilities of the i520, Tucker and his team created independent partitions to run five separate operating systems: IBM i5/OS®, two instances of Red Hat Linux®, IBM AIX 5L™ and Microsoft Windows. This enabled him to move Metro’s UNIX classes onto the i520 and add a Microsoft Windows curriculum without adding hardware. By running all these classes on the i520, Tucker dramatically reduced Metro’s equipment and maintenance costs while avoiding additional software licensing fees for multiple systems.

In addition, the partitioning capabilities of the i520 enable the teaching staff to efficiently manage the system. “For example, if our UNIX students get busy

and the system begins to slow, I can quickly reallocate memory from another partition to improve performance,” Tucker explains. This ease of management has already saved hours of time that teachers used to spend maintaining multiple servers—freeing them to spend more of their valuable time teaching and helping students succeed.

### **IBM Academic Initiative for System i enhances multidiscipline collaboration**

The success of the System i5 solution has generated interest from other community colleges. When a friend of Tucker’s working at a college in Canada heard about the program at Metro, he asked if he could tap into Metro’s i520 to support a UNIX class at his own school. Tucker created an area for the Canadian students, which they accessed over the Internet. Impressed by the performance and flexibility of the system, the faculty at the Canadian college is now considering acquiring their own System i5 to host class offerings similar to Metro.

The flexibility of System i enhances the ability to add new classes, helping Metro maintain its reputation for leadership in IT education. After introducing courses in WebSphere, DB2 and Java on the i520, Tucker, working with Tom Pensabene, dean of information

technology and e-learning, is developing a new associate degree program that combines programming, Web design, Help Desk, Networking and Database Management. Students can design their own curriculum and take classes based on their individual needs. He says, “Empowering students to develop their own degree programs enables them to be more responsive to changing employer requirements. There’s a much greater demand now for workers with an innovative and integrated approach to IT. The i520 enables us to create a situation where students can compare, contrast and experiment with new ideas.”

### **Online classes respond to student and business needs**

Metro now offers new online and partially online classes as a convenience to students who are unable to attend class during regular business hours, such as service members at the local military base and students who are employed full time. A virtual online classroom hosted on the new i520 allows students to take classes any time and anywhere on the Internet. This enables the college to enroll more students without having to add physical classrooms.

*“Participating in the IBM Academic Initiative for System i enables us to provide our students with access to the latest technology.”*

*Randy VanWagoner, Ph.D., VP for Learning and Academic Affairs, Metropolitan Community College*

The faculty at Metro is confident in the future success of the program.

“Participating in the IBM Academic Initiative for System i enables us to provide our students with access to the latest technology,” says Randy VanWagoner, Ph.D., vice president for learning and academic affairs at Metro. “The streamlined environment helps our teachers spend more time developing curriculum and teaching students. The relationships and expert advice we receive through the IBM Academic Initiative for System i help us stay well positioned to serve our students and the local business community.”

#### **For more information**

To learn more about the IBM Academic Initiative for System i, visit [ibm.com/systems/i/AcademicInitiative](http://ibm.com/systems/i/AcademicInitiative) or send an e-mail to [AcademicInitiative@us.ibm.com](mailto:AcademicInitiative@us.ibm.com). More information about System i is available at [ibm.com/systems/i/](http://ibm.com/systems/i/)



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