# Rich Wagner, president of Dunwoody College of Technology, Minneapolis

## Minnesota must keep up with other states in preparing its workforce to meet the needs of employers

A Civic Caucus Focus on Human Capital Interview

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## Present

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## Summary

Minnesota's currently vibrant economy is in a lot of trouble if other states are doing a better job of preparing their workforces to meet the needs of employers, cautions Rich Wagner, president of Dunwoody College of Technology in Minneapolis. Minnesota has always prided itself in having a well-educated and well-trained workforce. But he asks when the last time was that a manufacturing company came to Minnesota and discusses the type of workforce training that drew Volkswagen to locate a new factory in Chattanooga.

Wagner asserts that the skills gap in Minnesota-between jobs available for skilled people and the number of people qualified for those jobs-is a major problem at all skill levels for every industry across the board. He believes training institutions are not producing enough skilled workers to meet employers' needs. He says a critical first step to increase the workforce talent pool is to graduate all of our kids from high school.

Dunwoody takes a different approach from most schools, Wagner says, in hiring its faculty and in helping students who need remedial help. The school hires faculty who have worked in the field in which they'll be teaching. And, unlike most schools, Dunwoody allows students who need remedial help to continue in their regular courses, while they get extra tutoring in small classes. That way, Wagner points out, students can see the relevance of the remedial help to their technical classes.

While Wagner admits that the Twin Cities area is a competitive environment for higher education, he says Dunwoody does not view the two-year colleges in the Minnesota State Colleges and Universities (MnSCU) system as direct competition. He says the challenge those schools face is their sheer size and bureaucracy. Dunwoody has 1,200 students, while there are 183,000 students enrolled in MnSCU's two-year schools. Dunwoody's tuition is $18,000 a year, more than three times higher than tuition at the MnSCU two-year colleges. But Dunwoody graduates earn an average starting salary of $42,000 a year and the school places 99.3 percent of its graduates in the fields for which they were trained.

## Biography

Richard J. Wagner is the ninth president of Dunwoody College of Technology in Minneapolis. He has served in that role since July 1, 2009.

Wagner joined Dunwoody in 1996 as an electrical instructor. In 1999, he assumed the role of department director and was promoted to dean of learning in 2001. In 2004, Wagner left Dunwoody to serve as vice president for learning and academic innovation at Hennepin Technical College. He returned to Dunwoody a year later and served as vice president of academic affairs from 2005 to July 2009.

Wagner earned a doctorate in educational policy and administration from the University of Minnesota. He holds a master's degree in business administration from the Crummer Graduate School of Business at Rollins College in Winter Park, Fla., and a B.S. degree from the State University of New York in Albany. Prior to entering higher education, Wagner served 10 years in the U.S. Navy, including five years as an electrician/technical supervisor on a nuclear submarine.

He is past president of the board of trustees of the American Technical Education Association and a member of the Minnesota Governor's Workforce Development Council.

## Background

The Civic Caucus has released two recent statements on human capital: one in September 2014 laying out the human-capital challenges facing the state today and in coming years and a follow-up paper in January 2015 offering recommendations for maintaining a high-quality workforce in Minnesota. The Civic Caucus interviewed Rich Wagner to learn more about Dunwoody College and its approach to preparing students for the workforce through certificate programs and two-year and four-year degree programs.

**Information about Dunwoody.** Dunwoody College of Technology in Minneapolis is a private, not-for-profit institution of higher education. It offers bachelor and associate degrees in a variety of technical fields. The college maintains strong ties to business and industry, which help inform its program offerings and curriculum.

The school was founded in 1914 with $3 million dollars from the estate of William Hood Dunwoody and additional funds from the estate of his wife, Kate L. Dunwoody, who died a year later. William Dunwoody wanted to "provide for all time a place where youth, without distinction on account of race,

color or religious prejudice, may learn the useful trades and crafts, and thereby fit themselves for the better performance of life's duties."

In 1915, Dunwoody's board brought in Charles Prosser to head what was then known as the Dunwoody Industrial Institute. He stayed in that role until 1945. He was known as "the Father of Vocational Education in the United States."

## Discussion

**There's a lot of competition in the higher education landscape in the Twin Cities.** Wagner noted that there are 10 two-year Minnesota State Colleges and Universities (MnSCU) schools in the metro area. There have been over 40 private, for-profit institutions in the area, such as Rasmussen College, Globe University, Brown Institute, University of Phoenix, etc.

Adding to the challenge of the competitive landscape is the fact that the number of high school students will continue declining until it begins creeping up in 2017 or 2018.

**Dunwoody, like most organizations, faced challenges during the 2007-2008 financial crisis.** Rich Wagner said during the following few years, the school focused on its mission of helping students and started exploring what it needs to do today to lock in another 100 years. (The school celebrated its 100th year in 2014.)

**The college decided to implement a combination of strategies going forward to meet the needs of the Minnesota workforce, expand the offering of STEM programs by focusing on a new School of Engineering and help raise the profile of technical education to promote more interest in technical careers.**

**One part of the strategy is to take its existing programs to underserved and underrepresented students.** Wagner said that this initiative is focused on attracting more women, people of color and students from outside the Twin Cities and even outside Minnesota. He said the college thinks recruiting students from these three markets is a good strategy to bolster its existing programs.

One of the implications of reaching out to a larger geographic area, Wagner said, is the issue of where students from outside the Twin Cities area are going to live. He said Dunwoody is currently working on establishing a residency program. It wouldn't involve residence halls, but might include partnering with apartment buildings or developers or sharing living facilities with other colleges.

**Another element of Dunwoody's strategy is to meet student's educational needs along the continuum of their career.** The college started offering 2 + 2 programs in 2007, Wagner explained. The programs allow associate-degree graduates of Dunwoody to come back for bachelor's degrees, with all of the first two years of credits counting toward the new degree. He listed four bachelor-completion programs at the college: industrial engineering, construction management, computer systems analysis and applied management. In 2014, Dunwoody started offering a Bachelor of Architecture program to provide a bachelor-degree completion program for graduates of traditional Associate in Applied Science in Architectural Design programs. One out of four Dunwoody students is now enrolled in one of these degree-completion programs.

Wagner said the school feels its growth will come from new programs that will bring new students to help close the skills gap. And it must serve the Twin Cities market. Dunwoody's tuition is $18,000 a year, so its students must earn a good wage when they graduate, he said. Dunwoody graduates, on average, have a starting salary of about $42,000 a year. The school places 99.3 percent of the students in the fields for which they were trained.

**Dunwoody looked at which new programs would be a good fit with its brand and decided to start a School of Engineering.** Dunwoody decided to start a school of engineering, Wagner said, that will be different. "It'll serve a need in the Twin Cities and in the state," he said. "It's going to be unique, project-based and hands-on. It will leverage all our two-year programs, so now the mechanical engineering program, which will start in 2016, will have access to a full line of computer-controlled machines, welding and robotics. We've had great support from local industries, such as Polaris, General Mills and 3M."

**The aging of our workforce is another dynamic facing both Dunwoody and the state.** "We hear from our employers that they'll take our entire class of machinists or construction managers," Wagner said. "While it sounds good for us, it's bad for us, because we're not meeting the needs of industry."

**The constraint that prevents expansion of programs is primarily student and parent interest.** Wagner explained that parents who are both educated are going to convince their high school senior to go to a four-year college, rather than a two-year technical college. He suggested that an education model for parents to consider is to send their kids to Dunwoody at age 18. The students get a good value at Dunwoody at $18,000 a year and after two years, they can get a job at $40,000 a year. They can earn some money for a few years and then come back for a bachelor's degree at night and their company will help pay for it. "It's a pretty good model," Wagner said.

**The press seems to talk about workforce issues as if the skills gap-between jobs available for skilled people and the number of people qualified for those jobs—doesn't exist.** Wagner said a Dunwoody board member in the medical device industry says he can't find machinists, welders, or engineering designers and drafters. "It's not just the skilled trades," Wagner said. "It's every industry across the board."

**We must graduate all of our kids from high school.** "If we did that," Wagner said, "we wouldn't have a pipeline problem. If we fix that problem, we'll have a bigger talent pool," he said.

**Another problem is the lack of career and technical education (CTE) in high schools.** CTE is expensive and it's easy to let those programs go, Wagner said, but we need more CTE in high schools.

**Dunwoody has a Youth Career Awareness Program (YCAP) that provides Minneapolis high school students with an opportunity for career exploration.** Dunwoody goes into the high schools and recruits students during their junior year, Wagner said. Dunwoody pays the students to be on campus for six weeks in the summer between their junior and senior years. They do career exploration by visiting all of the school's programs, they take a college-level class and they take a test that shows them their academic preparedness.

During their senior year, the college provides a mentorship on its campus once a month. If students have met all of the obligations of the program by the time they finish their senior year, they get a substantial scholarship to Dunwoody, paid for from private funds raised by the college. Twenty-four high school seniors have been accepted into the fall YCAP program.

**There are more short-term training programs, like Right Skills Now, that get people into the workforce right now.** Wagner said Right Skills Now is a one-semester certificate program that trains people to go in as entry-level machine-tool operators, ensuring companies get the skills they need now. Students can then come back and get an associate's degree or get a bachelor's degree as an industrial engineer.

**Dunwoody hires faculty who've worked in the field in which they'll be teaching.** Wagner said the college has a "very robust teaching program" with the University of Wisconsin-Stout to train new faculty members how to teach. And all faculty members are required to finish their bachelor's degree, if they don't have one. The college will help pay for people who want a master's degree. Faculty in the arts, math and sciences all need master's degrees and Ph.Ds and the college will help pay for those degrees.

He said Dunwoody allows faculty members to drive their own curriculum to a large degree. The school provides ongoing professional development opportunities for the faculty, who are there to teach and connect to industry. They don't have to do research or publish.

**Every year Dunwoody does an environmental scan, collecting data about the employee outlook for different industries and doing a robust analysis of all its programs.**

**Dunwoody students are not discouraged by average starting wages of $40,000, because after working in an industry for three or four years, they'll be earning $60,000 to $80,000 or more.** Wagner said wages have been fairly stagnant since the recession ended, but are now starting to go up. However, he noted, there are some industries, such as the auto industry, that haven't responded by raising their entry-level wages. "The solution has to come from industry," he said.

**Dunwoody does not view the two-year schools in the MnSCU system as competition.** Wagner said the challenge those schools face is their sheer size and bureaucracy. Dunwoody has 1,200 students and there are 183,000 students in the MnSCU two-year schools.

He noted that some MnSCU two-year technical colleges now offer transfer programs for students wanting to move on to four-year colleges. The two-year colleges also continue to offer the associate of applied science (AAS) degree, a two-year technical degree. "I hope we don't dilute the career-technical aspect of MnSCU two-year schools, just because it's less expensive to run the transfer programs," Wagner said. "That would be bad for the technical workforce we so desperately need."

**Geographic expansion is not Dunwoody's strategic driver right now.** Wagner said employers in Winsted, Minn., told Dunwoody they needed more welders, so the college opened a welding facility there last year that is putting welders right into the workforce. He said several other mayors who

would like the school to have a presence in their cities have approached the college. "We won't rule it out, but it's not our strategic driver now," Wagner said. "We have a campus plan to develop all of the 14 acres we own. When we fill that up, we'll look at expansion."

**The key piece is teaching students how to learn.** Wagner said Dunwoody's challenge is, as technology in the workforce changes, to be training technicians who can function in that technology. And as technology changes, he believes the college must be offering evening and weekend continuing education.

**Dunwoody has decided to change its approach to developmental education.** A study by Complete College America entitled "Remediation: Higher Education's Bridge to Nowhere," illustrated the problems with traditional remedial, or developmental, education programs. He offered an example of how poorly he believes traditional developmental education works. He said in those programs, if 600 students are identified as needing developmental education, about 300 show up for it, 100 finish and only 50 go on to take classes.

He said Dunwoody's approach is to take a chance on some of these 600 students. The college has changed the whole paradigm for developmental education from a prerequisite to a co-requisite model. This means students get the help they need while they are taking their regular classes, not before they can enroll in those classes.

"We use intrusive advising," Wagner said. "Students start their classes and we then identify students who need, for example, help with math." Then the college offers a small class, taught by a math teacher partnering with a technical instructor, to help students who are struggling in math. That happens while the students are still taking their regular technical classes. That helps them see the importance of what they're learning in the math class. "It's a different way of teaching," he said. "We're going to do everything we can do to help students achieve success."

**Minnesota's currently vibrant economy is in a lot of trouble if other states are doing a better job of preparing their workforces to meet the needs of employers.** "When was the last time a manufacturing company came to Minnesota?" Wagner asked. He recently spoke with people from Volkswagen about the company's decision to locate a factory with 2,500 employees in Chattanooga. The representatives said they made the decision because they have a guaranteed workforce there. The state of Tennessee has located a facility near the factory that is training people to meet Volkswagen's workforce needs.