

Should Quality Professionals Pursue Master's Degrees?

By Daniel Lowery

In 2006, Calumet College of St. Joseph in Whiting, IN, launched a master's program in quality assurance. Before doing so, we examined the extent to which quality professionals might benefit from securing an advanced degree. Although master's degrees are not required of nonmanagement professionals employed in some sectors of the economy, they are believed to be of value in the manufacturing and healthcare sectors.

In fact, our research revealed that two distinct motivations are relevant to individuals in the several industries we hoped to target with our new academic program, a master's of science in quality assurance (MSQA) degree:

- The prospect of increased pay.
- An increase in job opportunities.

We determined that the concept of job opportunities could be further parsed in two ways: first, by the extent to which quality professionals are now being considered for promotion; and second, by the sheer number of job opportunities expected to come online over the course of the next several years. The analysis we conducted follows.

Survey results

In all, 25.4% of the 6,500 quality professionals who participated in ASQ's 2004 salary survey reported they had earned graduate degrees. Their mean salary was \$82,736, 9% higher than the mean salary of the 45.4% of respondents who reported holding just a bachelor's degree. Similarly, graduate degree-holding respondents to a 2005 online survey by *Quality Magazine*, which caters more specifically to manufacturers, reported an average salary of \$85,350. These data suggested that quality professionals benefit financially to a considerable degree from holding master's degrees.

With respect to promotion potential, respondents to ASQ's 2004 survey reported holding a wide variety of jobs, which can be divided into two broad categories: technical jobs focused on quality-specific job tasks, such as quality analyst, quality associate, auditor, Black Belt, quality consultant, quality coordinator, educator/instructor; and supervisory and management jobs. Managers comprised 27.7% of the respondents to ASQ's 2004 survey, while 3.7% identified themselves as supervisors and 2.9% as vice presidents or executives.

These data suggested that a focus on quality can improve an employee's career prospects. In fact, a quality credential need not relegate an employee to a career as a quality professional per se. This is important because it can be a key consideration among those

choosing between an MBA and an MSQA degree. Confirming this view, Allan J. Sayle, the president of Allan Sayle Associates, noted in an article in ASQ's *Quality Progress* magazine that:

The distinction between quality management and business management is blurring and will eventually disappear ... Smart organizations are beginning to look at quality in a different light. It is the key strategy upon which cash flow and survival depend, and adept quality personnel are beginning to be integrated into the management of the business itself. Since the focus of management is to prevent loss and improve results, this development offers a fine career path to the executive suite.¹

We determined that students in our MSQA program would experience dramatically improved job prospects over time. At the same time, we recognized that cost would be a factor. We recognized that a clear industry focus and individual benefits may not be sufficient to overcome a prohibitive tuition structure. We know that tuition reimbursement tends to be higher among manufacturing firms than among healthcare providers, the service sector, government agencies or education providers.

Based on a number of focus groups we conducted during summer 2005, we determined that manufacturing entities reimburse virtually all expenses associated with relevant master's degrees. Healthcare concerns and governmental entities tend to cap tuition reimbursement on a semester or annual basis. Overall, we decided that tuition reimbursement is available to the particular population of prospective students we planned on recruiting.

Region by region

As is noted earlier, the job market of the region in which a master's program is offered is also pertinent. Presumably, high levels of job growth in sectors of the economy that value formal quality programs would bode well for those seeking an MSQA degree. Our analysis showed that industries in which formal quality programs are important remain vital in northwest Indiana. Although the steel industry is highly volatile, employment had stabilized after a period of sharp decline.

Employment in the healthcare industry, which is grouped with social services in data maintained by the Indiana Department of Workforce Development, was also growing. The logistics industry is also expanding and should grow even more quickly as automation drives further consolidation in this rapidly evolving sector of the economy. Table 1 identifies the employment losses and gains experienced in these several industries.

Table 1 Changes in the number of jobs from 2001-2004

Industry (Northwest Indiana)	2004 employment	Percentage of Indiana employment	Change in number of jobs 2001-2004	% change
Manufacturing	26,506	27.8%	-5,342	-17%
Healthcare/social assistance	27,486	9.9%	2,154	+9%
Transportation/warehousing	7,965	3.8%	+581	+5%

Source: Indiana Department of Workforce Development, 2004

The relative strength of these several industries became even more apparent when our focus broadened to include a wider geographic area. Harvard Professor Michael E. Porter's highly acclaimed cluster analysis strategy groups Northwest Indiana with the City of Chicago. The auto industry is included in Table 2 because formal quality programs are fully developed in automobile manufacturing and because a significant number of individuals are employed in this industry in south Cook County, IL, which lies in close proximity to Calumet College of St. Joseph. Collectively, these data demonstrated that a sufficient concentration of industries that value formal quality programs existed in the catchment area served by the college.

Table 2 National ranking among economic clusters in the economy

Industry (Northwest Indiana)	Number of jobs (2002)	National ranking among economic clusters in economy
Metal manufacturing	105,037	1st
Transportation and logistics	79,284	3rd
Local health services	481,768	4th
Automotive	36,979	7th

Source: Institute for Strategy and Competitiveness

Having completed our analysis, we determined that quality professionals can benefit from holding master's degrees focused specifically on the quality field's body of knowledge. Master's degrees make a significant difference when it comes to pay. More importantly, perhaps, quality professionals are becoming eligible for more middle and upper management positions as quality principles and practices are integrated into the operations and business practices of key industries.

Finally, we determined that an MSQA program makes sense in geographic areas in which manufacturing and healthcare firms play a major role in the local economy. As should be obvious, these several factors can be important as well for quality professionals to consider as they decide how best to advance their individual careers.

Reference

1. Allan J. Sayle, "Opportunities are Everywhere," Quality Progress, Vol. 38, No. 4, pp. 33-38.

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