

# Reimagining Higher Education for Contract Managers

**Lifelong learning leverages knowledge from many sources and understands that experiential knowledge is cumulative.**

By Jimm Rich, Ph.D and Jim Bryant, Ph.D

*“In school, you’re taught a lesson and then given a test. In life, you’re given a test that teaches you a lesson.”*

— Tom Bodett



**T**he past two years have been a challenge on many levels. Those of us in higher education were tasked with executing an unprecedented shift to enterprise-wide online learning. Then we were told the transition would not be back to the classroom but to a robust and sustainable model of remote teaching and learning.<sup>1</sup> But the path to a new normal raises issues other than how to leverage technology and harness the power of collaborative software platforms effectively and creatively. If we are on a path that requires us to reimagine the virtual classroom and how we deliver content to the remote learner, perhaps it is also a good time to reflect and examine our role and relationship with the professional community we seek to serve.

### **Education or Training**

What is the role of higher education in the development of 21st century contract managers – and why should you care?

While there appears to be near unanimous support in the contract management community that education is important, it is less clear what the community means when they endorse the “education” of contract managers. It is also not clear who will do the educating. That question is further burdened by the need to discriminate between training and education. While those terms are routinely commingled in professional development discussions, there is substantial research and evidence differentiating education from training and why those discriminators are important.

The classification of training and education into separate and exclusive categories is helpful and misleading and somewhat a distinction without a difference. From the standpoint of the rising professional, there is likely not an either/or choice as Figure 1 might indicate. Heidi Timmerman emphasizes a practical piece of leadership advice is the need to exploit learning opportunities.<sup>2</sup> And those opportunities will come in all shapes and sizes. To leverage learning opportunities, you need to be open to what is available irrespective of how the opportunity is characterized.

So much has been written about the differences between training and education that artifacts of that discussion provide an excellent starting point to examine the role of education and training in professional development.

**FIGURE 1**

BASIS OF COMPARISON	TRAINING	EDUCATION <sup>3</sup>
Meaning	The process of inculcating specific skills in a person is training.	Theoretical learning in the classroom or any institution is education.
What is it?	It is a method of skill development.	It is a typical form of learning.
Based on	Practical application	Theoretical orientation
Perspective	Narrow	Wide
Involves	Job experience	Classroom learning
Term	Short term	Comparatively long term
Prepares for	Present job	Future job
Objective	To improve performance and productivity.	To develop a sense of reasoning and judgement.
	Specific task	General concepts

The literature on education and Figure 1 suggest that education is foundational while training is more specific to acquiring a skill through coaching and repetition. Though it would not always be the case, partitioning education from training implies a linear relationship. Education necessarily precedes training because education provides the theory, concepts and principles that offer context and prepare the learner to acquire skills (typically job related) that make the student/employee more proficient or competent in executing a specific task. Consider the role of dental school in preparing the individual who is going to perform your root canal. Are you hoping that

the individual is well educated or well-trained or both?

There is a pernicious stereotype that higher education is more an extension of high school than an incubator for a highly skilled workforce. It creates the enduring perception that the only thing you learn in college is theory. This view has found voice among those who believe linking learning with a student’s career aspirations amounts to advocating that education should be about training graduates for jobs rather than improving their minds. As if teaching work skills will somehow dilute the learner’s intellectual curiosity.<sup>4</sup>

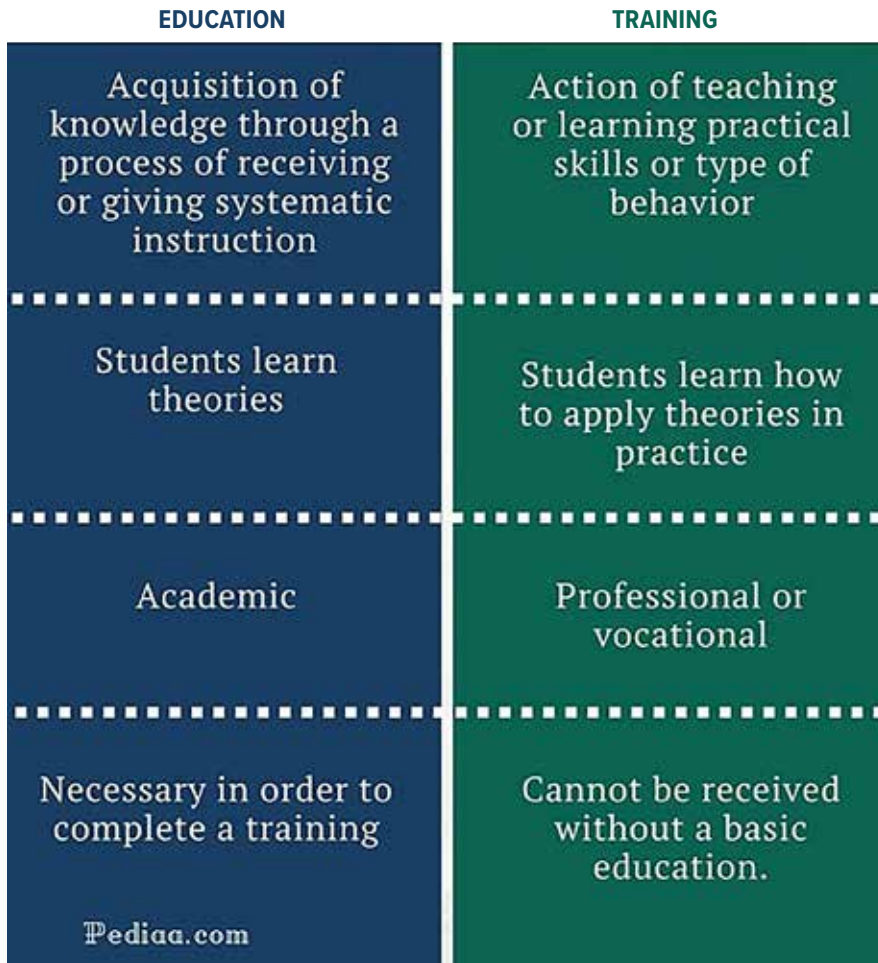
The comparison chart in Figure 2 reflects the challenge in

higher education when designing curriculum for working adults seeking to develop professionally and grow both their careers and their employability.

**What Non-traditional Looks Like**

Those of us who develop and deliver graduate-level contract management programs would take serious issue with Figure 2. The student profile for an individual interested in pursuing an academic certificate or degree in contract management is likely to be either an adult learner already in the field or an individual seeking entry to the profession because of a career pivot. It is fortunate that we work with adult learners because it is hard to imagine what it would be like to

**FIGURE 2**



teach formal source selection to junior high students.

The demographics of students pursuing graduate studies in contract management reflect the overall college population. More than 42% of full-time college students and over 80% of part-time students also hold jobs. About one-third of these working learners are 30 or older, roughly 20% have children and 60% are women.<sup>6</sup> We code them as non-traditional learners but to a large extent, that is because they do not look like we think they do.

Of course, there are advantages and disadvantages to working with

“non-traditional” learners. They are more independent and self-directed, and they have a wealth of experience that they can use as a learning resource. As Piaget noted, adults are better at thinking about thinking and able to develop and evaluate hypotheticals.<sup>8</sup> They also come with an array of professional and personal responsibilities that make showing up for class a daunting proposition. That is why we have come to appreciate collaborative software and asynchronous online learning models. That is also why the post-pandemic future of adult education will likely be a matrix of synchronous online,

asynchronous online and in-person classes with no one excluded because of geography. Think the University of the Cloud with mascot Nimbo.

Though not always the case, many adults are self-regulated learners. While the classifying language varies slightly, 70% of adult learners are thought to be self-directed.<sup>9</sup> They embrace the opportunity to learn and improve their craft. Self-regulated learners take responsibility for their education and try to maximize the return on investment by being conscientious, well prepared and disciplined. As a result, they leave learning opportunities with a deep, reflective understanding of what they have learned and how to gainfully apply that knowledge.<sup>10</sup>

One observation about our adult learning demographic is consistent. They are seeking knowledge that will help them perform effectively as a member of a contract management team, instill confidence in their ability to take on challenging assignments and hone their critical thinking skills. In short, they become the problem solver everyone wants to work with. They are also looking to make a statement about their commitment to the profession and being a lifelong learner. And they are hoping that their employer notices.

### The Balanced Curriculum

What does an education look like that is both theoretically substantive and competency driven?

There is a substantial number of excellent academic institutions that have contract management programs. Providers of contract management education generally strive to address

both the foundational principles of the profession and the competencies that are required to be a contract management professional. The NCMA Contract Management Standard™ (CMS) provides some guidance in developing curriculum. Studies of contract management should emphasize the examination of contract management processes created through the integration and interaction of job tasks and skills and the purposes they serve. A dual focus on principle and process provides curriculum developers the opportunity to shape courses that teach the “why” and “how” of contract management. It also encourages the student to think about future applications, the balance of mindfulness and prospection.

We reviewed a number of current graduate-level contract management programs and selected several examples of course offerings that seek to achieve that balance.

### Example A

In the first example, the curriculum emphasizes a blend of academic study in the field and hands-on experience aligned with the following objectives:

- a. Emphasizes the need to be a critical thinker and innovator in an environment that is perceived as rule bound.
- b. Exposes students to emerging technologies they may not experience at their current job but are driving changes in contract management processes (artificial intelligence, robotic process automation, blockchain, etc.).
- c. Offers challenging course work that allows students to build

confidence in their abilities to succeed (a safe place to fail, learn and develop resiliency).

- d. Provides evidence of a commitment to the profession and lifelong learning.

The program objectives provide explicit examples of how the learning landscape of academia may differ from the workplace.

- a. Contract management is a rule-bound profession that does not always reward innovation and critical thinking in the workplace. Sometimes the direction is simply do your job and follow the rules – which is not altogether bad advice. But it is not an environment in which critical thinking will flourish. Academia, however, offers a safe space to think critically, question and recommend innovation when prudent. The ability to constructively implement critical thinking on the job is a learned behavior and a necessary skill if you aspire to be a leader.
- b. We do not all work in research and design or innovation labs. In fact, many contracting offices plod along doing their best to incorporate technology that increases efficiency – doing the routine task faster. In the classroom (virtual or face-to-face) you are exposed to disruptive technologies that are driving change in how contract managers meet their mission.
- c. Academia is a safe place to “fail.” You have the freedom to test ideas, run models and challenge assumptions without fear that being wrong will cost the company money or you your job. With failure comes resiliency,

the ability to recover quickly and capture lessons learned that will improve your chance of success on the next try. With resilience comes confidence, an absolute necessity if you want to be a leader in your profession.

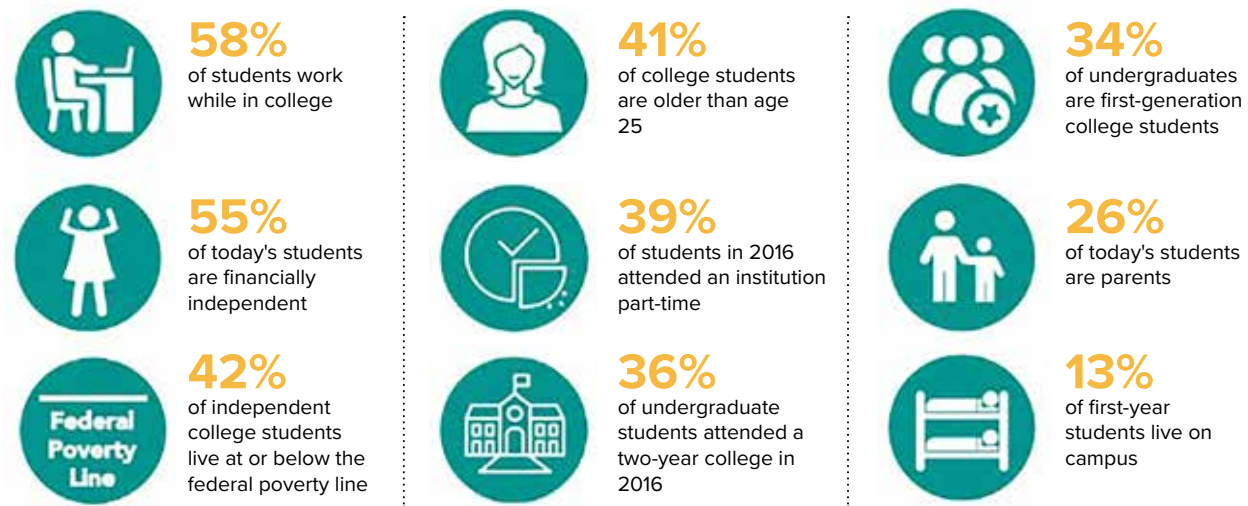
- d. Engaging in graduate level studies is a sign that you take your profession seriously and are willing to take positive action to be your best professional version. While there is no substitute for being a high-performing employee, to stand out you need to step up.

The program curriculum is focused on processes that contract managers engage across the contract life cycle. It is career-focused learning that offers the student a deep dive into real challenges facing the profession.

A student expectation of graduate level education in a professional school is hands-on application accompanied by a historical or theoretical context. An example in this program is the study of supply chain management. The course makes clear that supply chain issues have always been with us. Otto von Bismarck, the first chancellor of Germany, once said, “Never take your first step until you know what your last step is.” This advice was offered during the Napoleonic era, famous for the supply chain failures in Russia. Then there was that whole Hannibal using elephants to cross the Alps thing. The learning point is that the contracts you’re working on or developing are going to be executed throughout the supply chain.

Among the many impacts of the pandemic is a near universal

FIGURE 3



awareness that your quality of life and livelihood depends on a concept you paid little attention to until the toilet paper disappeared from the shelves. Lessons learned from the past two years include an agreement that supply chains must be broader, deeper and more sustainable. Sustainability is a lesson that is often learned the hard way. Fully two-thirds of the businesses in the World Trade Centers without a business recovery and sustainment plan on September 11, 2001, were out of business a year later.

Students use a modeling and simulation tool to explore the five drivers that shape supply chain capability (see Figure 4). Decisions made about how each driver operates will determine the blend of responsiveness and efficiency a supply chain can achieve. Since the simulation is all about experimentation and testing ideas, every student brings something different and there are many possible outcomes.

### Example B

This example focuses on a school whose target audience is the working adult either currently employed in some aspect of contract management or looking at jump-starting a new career in contracting. Not surprisingly, the two most common questions potential students pose are, “Will this program help me get a job in contracting?” and “Will this program help me get a promotion?” Students in the program are seeking applied learning and skill acquisition tied directly to tasks they will be required to execute as contracting professionals.

As in many academic programs that teach contract management, the instructors are all current or retired practitioners with experience in business or law. Like many “adjunct” populations, practitioner instructors choose to engage with academia because they want to help shape the future force of the profession. We find that students are more open to studying theory, legal context and

principles of contract management if they are also learning “real world” ideas, perspectives and skills they can use in the office. In fact, the program invites the student to bring work to the classroom. Why solve scenarios in the abstract when you can work on issues you are going to face the next day?

An elective course, Advanced Cost and Price (ACP), provides an example that requires the student to learn pricing skills and the resources publicly available while solving actual pricing scenarios. Contract managers should have a familiarity with the concepts and principles of pricing, but it is not a skill that every contract manager learns on the job.<sup>11</sup> Contract specialists and procurement analysts are more likely to be familiar with the end product of the pricer than the in-depth mathematical and mechanical operations required to produce the product. The ACP course allows the student to explore, in some level of detail, how contracts

are priced using both market and cost-based pricing models.

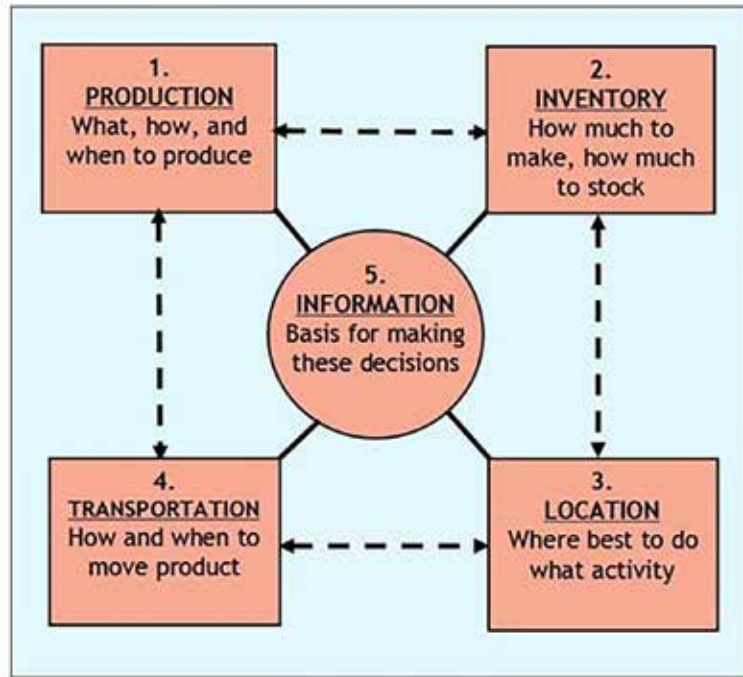
Below are some sample assignments that emphasize applied learning.

1. You have entered negotiations with contractor X for a non-commercial supply acquisition. Your pre-negotiation objective is 23% below the proposed offer; negotiations have closed the cost line gap to 17%. Your management has tasked you with changing the contract type from FFP to FPIF. How is profit affected by the contract type being changed to FPIF? Your analysis shall discuss targets, ceilings and over/underrun ratios. For the purposes of this exercise, the following information is provided:

- Performance Risk: Normal (5%)
- Management/Cost Control: 5%
- Contract Type
- Download DD1547 Weighted Guidelines Tool.xls
- Contract Length: 5 years
- Facilities Capital Employed: N/A
- Cost Efficiency Factor: 1%

2. The 2018 National Defense Authorization Act established a new threshold for submission of certified cost or pricing data. First, read the language of the law at [www.law.cornell.edu/uscode/text/10/2306a](http://www.law.cornell.edu/uscode/text/10/2306a). The law changes the threshold to \$2 million for contracts entered into after June 30, 2018. However, the law does not specifically address unpriced task or delivery orders issued against a prime contract after June 30, 2018, where the prime

**FIGURE 4**



contract was issued on or before June 30, 2018.

Scenario: You have issued a request for proposal for a non-commercial, \$1.5 million effort projected to award September 30, 2018. You intend to issue an order against an existing IDIQ contract that was awarded February 1, 2017; the original award was a sole source award. Is the contractor required to submit a certificate of cost or pricing data once an agreement has been reached? Offer a convincing argument based on facts, not opinions.

**Conclusion**

So why should career and talent managers care about what colleges are teaching?

One reason is that your employees and our students are starting to look a lot alike. Working adults do not learn one way on the job during the day

and another in their online class that evening. Whether trainer or educator, we are all seeking to provide new formats for working learners and helping learners acquire the skills that will allow them to grow as effective professional contract managers. We are assisted in that effort by the development of the NCMA CMS. The CMS provides a common vocabulary for the profession that should promote our ability to communicate and collaborate.

In their excellent article in *Contract Management* (February 2021), Joni Dowling and William Schleckser project the outcomes of the Defense Acquisition University (DAU) transformation and the characteristics of post-DAWIA training. The new model focuses on a frictionless student learning experience that provides content at the time it is relevant and with easy access to learning resources.<sup>12</sup> While the article

is specific to the transformation of the DAU curriculum it is likely that the contract management training industry will follow suit.

We will continue to hear much about the need for re-skilling and up-skilling the future workforce across disciplines. Of course, someone must identify the broad, interdisciplinary object skills to target. A good start was achieved by the Burning Glass Technologies Business-Higher Education Forum whose study identified a set of “New Foundational Skills” that employers seek across industries.<sup>13</sup> They found these key skills cluster into three primary groups:

- ▶ Human skills applying social, creative and critical intelligence (sometimes called “soft skills” or emotional intelligence).
- ▶ Digital building block skills, including analyzing and managing data, programming and software development, as well as cybersecurity and privacy.
- ▶ Business enabling skills, including communication of data, digital design, project management, and business processes.

For those engaged in the CMS rollout, those findings should sound familiar.

This shift creates an excellent niche for higher education in a role that complements, rather than competes with, the trend in micro-credentialing/skills certificate. Focused, skill-based training is a critical preparation to execute the tasks required by a job. A good example is on-the-job training (OJT), a practical approach to acquiring new competencies and skills needed

for a job. A job is learned by actually doing it in a real, or close to real, work environment. No one does that better than the employer that funds and manages the job.

What does higher education add to the mix?

Done right, academic study prepares the learner to respond to challenges that transcend disciplines and work effectively with those with different training, experience and points of view. Successful lifelong learners know how to leverage knowledge from many sources and understand that experiential knowledge is cumulative. You really do learn something new every day – you just have to reflect on the experience and the product of your day. **CM**

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Lifelong learner and coach to people trying to advance their knowledge and education

### ENDNOTES

- 1 “Will the Pandemic Change Higher Education for Good?” Harvard Graduate School of Education,” (February 8, 2021), available at <https://www.gse.harvard.edu/news/21/02/will-pandemic-change-higher-education-good>
- 2 Heidi Timmerman, “Skill Based Leadership: Practical Steps for Technical Proficiency for Contract Managers,” *Contract Management*, August 2021, p. 27.
- 3 S. Surbhi, “Understanding the Difference Between Training and Education,” *Key Differences*, October 24, 2021, available at <https://keydifferences.com/difference-between-training-and-development.html>
- 4 Several literary works on pure intellectualism have been produced though Herman Hesse’s, *The Glass Bead Game*, is likely the best in-depth treatment of the topic. The setting, in the distant future, is a fictional province of central Europe called Castalia, which was reserved by political decision for the life of the mind; technology and economic life are kept to a strict minimum.
- 5 Hasa, “Difference Between Education and Training,” *PDIAA*, April 26, 2016, available at <https://pediaa.com/difference-between-education-and-training>
- 6 Anthony P. Carnevale, Nicole Smith, Michelle Melton, Eric W. Price, “Learning While Earning: The New Normal,” Georgetown University, Center on Education and the Workforce, 2015, available at <https://cew.georgetown.edu/cew-reports/workinglearners/>
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- 8 Javad Ahmad, “What are the 4 stages of Piaget’s cognitive development,” *EngloPedia*, April 9, 2021, available at <https://englopedia.com/piagets-stages-of-cognitive-development-with-explanation/>
- 9 K.P. Cross, (1981). *Adults as Learners*. San Francisco: Jossey-Bass.
- 10 Joni Dowling and William Schleckser, “Self-Regulated Learners Meet Frictionless Learning,” *Contract Management*, February 2021, p. 33.
- 11 Federal contract managers who were FAC-C or DAWIA certified were required to take cost and pricing courses (2) that provided an excellent overview of the discipline but did not qualify someone to immediately serve as a “pricer” upon completion of the coursework. Pricing has always been somewhat of a sub-specialty in the federal government and pricers were generally a centralized commodity in that the subject matter expertise was consolidated in offices and organizations dedicated to pricing.
- 12 Joni Dowling and William Schleckser, “Self-Regulated Learners Meet Frictionless Learning,” *Contract Management*, February 2021, p. 35.
- 13 Brian K. Fitzgerald, Matt Sigelman, “The New Foundational Skills of the Digital Economy,” *Burning Glass Technologies/Business Higher Education Forum*, available at [http://www.bhef.com/sites/default/files/BHEF\\_2018\\_New\\_Foundational\\_Skills.pdf](http://www.bhef.com/sites/default/files/BHEF_2018_New_Foundational_Skills.pdf)



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