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# Expectations, Challenges, and Motivations for Early Career Faculty Who Transitioned from Industry to Academia: A Literature Review

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Industry experience is desired by construction management education program chairs and advisory boards and required by the construction management accreditation board. This paper based on extensive literature review explores the expectations, challenges, and motivations for early career faculty who transitioned from private industry to academia. New faculty are expected to understand how to teach, be prepared to research and publish academic work, and be oriented to academe. New academics face various challenges in the early transitional years such as a lower starting position, lower starting salaries than in industry, removal from hands-on practice, doctoral degree requirements, and stress and heavy workloads. However, practitioners are also motivated to decide to make the move to academia by factors such as a second career after retirement, having a calling to teach, wanting a better work-life balance, and giving back to education. As universities are challenged to hire faculty with industry experience, administrators must be aware of the expectations, challenges, and motivations facing new faculty from industry. The existing literature regarding factors for transitioning to academia seem to be limited, particularly regarding the construction industry. Future research will seek to develop a set of training resources for early career construction management faculty that have transitioned from industry.

Key Words: Academia, Industry, Transition, Motivations, Challenges

## Introduction

Industry experience is desired by construction management education program chairs and advisory boards (McCuen et al., 2019) and required for the American Council for Construction Education (ACCE, the accreditation board for construction management programs) accreditation (ACCE, 2019).

> "The faculty shall possess appropriate academic qualifications, *professional experience*… The faculty shall have *demonstrated expertise in the areas* for which they have teaching responsibilities and *possess adequate background in the supporting disciplines* from which their area of specialty draws major concepts and principles. Evaluation of faculty competence shall recognize appropriate *professional experience* as being equally as important as formal educational background."

In a study by McCuen et al. (2019), interviews were conducted with department heads and chairs of fourteen United States (US) construction education programs. Ten of the fourteen interviewees confirmed that the construction management programs, and advisory boards place a high level of importance on construction education faculty having industry experience. Construction management education is an *applied* field of study therefore it is essential for construction management educators to have industry experience (McCuen et al., 2019). The ACCE does not prescribe a minimum level of industry experience for construction education faculty. However, professional experience and demonstrated expertise are stated requirements by the ACCE for construction education faculty. This is in addition to required educational and scholarly credentials (Reginato, 2010).

Faculty who transition from industry work to academia must be prepared to teach, research, and socialize into academic life (Adams 2002). The reality is there is little to no preparation for these early career faculty members even as universities and programs are constantly challenged to attract and hire faculty with industry experience (Garrison, 2005; Bandow et al., 2007). Furthermore, there are considerable differences between working in industry and working in higher education. Academia when compared to working in industry can be a completely new career for the transitioned practitioner (Mabry et al., 2004; Barrow, 2019).

Challenges arise when practitioners make the transition from industry into academia without sufficient training or mentorship. Except for new college professors, training is generally provided for most professions prior to starting a job (Felder, 2012). Early career faculty are motivated to transition into academia by various factor however, these faculty members face challenges due to inadequate preparation for an academic position.

Early career faculty are those faculty members with less than seven years of service or have not attained tenure (Austin et al., 2007). These early career faculty members are hired on two separate tracks – tenure track positions and non-tenure track positions. Tenure positions tend to require a PhD degree and interest in research. The non-tenure track positions (instructors, professor of practice, adjuncts, etc.) tend to require more industry experience and a master's degree (McCuen et al., 2019).

Practitioners as referenced in this paper represent professional workers with substantial industry experience who transition into academia (Garrison, 2005). These professionals may contribute significant proficiencies and knowledge when coming into academia (LaRocco and Bruns, 2006). Practitioners' experience may range from mid-career (10 years or more ("Career Patterns: A 21st Century Approach to Attracting Talent", 2006)) to retirement before transitioning into a second career in academia.

This paper based on extensive literature review examines early career faculty who were previously practitioners with substantial experience working in an industry position. The author's future research goal is to develop a set of training resources for early career construction management faculty that have transitioned from industry.

## Objectives

The objectives of the research were to explore the existing literature to understand:

1. What are the expectations of early career faculty?
2. What are the challenges in transitioning from industry to academia for early career faculty?
3. What are the motivations in transitioning from industry to academia for early career faculty?

## Methodology

The literature review was conducted by key word search using academic databases and Google Scholar. The academic databases included Taylor and Francis Online, ASCE Library, Engineering Village, Business Source Premier, ICONDA, and Engineering Village. The key words/phrases include *faculty, new faculty, novice educator, practitioner, training for new faculty, teaching, transition to academia, transition from industry to academia, non-academic to faculty careers, second careers, transition, challenges, opportunities, motivations, academia, industry, and construction industry*. Once academic publications were identified then the references from some of those publications were also used to identify other relevant publications.

The selection criteria included publications between the years 2000 and 2020. Between 2000 and 2010 there were eight (8) publications identified and between 2011 and 2020 there were sixteen (16) publications identified. After screening all publications fifteen were used for this literature review paper. The fifteen papers that were selected for this paper were used because each contain relevant information regarding expectations, challenges, and motivations for early career faculty who transitioned into academia from industry.

## Findings

There were twenty-four potential publications identified for literature review. Publications seem to be limited on the subject of transitioning from industry to academia (Bandow et al., 2007). Therefore, the research considers various industry disciplines including accounting, education, construction, family medicine, human development resources, management information systems, medicinal chemistry, and nursing. The aim of this paper is to assess the expectations, challenges, and motivations for early career faculty who transition from industry to academia through a literature review. See Figure 1.

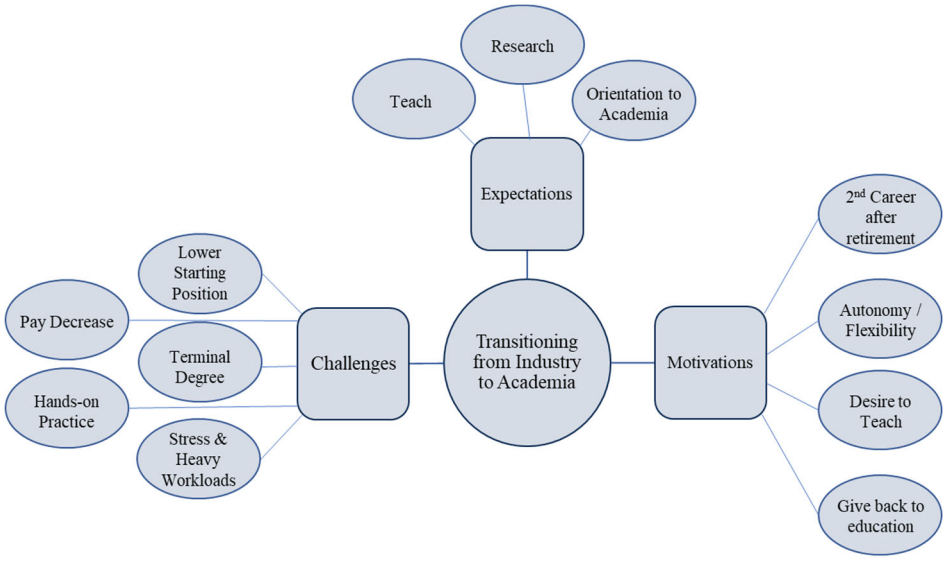


Figure 1: Concept Map

## *What are the expectations of early career faculty?*

### *Understanding how to teach*

New faculty are expected to have a variety of qualifications in addition to industry experience when entering academia. New educators are expected to have knowledge of how to teach, prepare courses, and evaluate students (LaRocco and Bruns, 2006). Without formal teaching training, proper faculty orientation/development, and peer mentoring prior to entering the classroom, the practitioner turned educator may experience anxiety and challenges in the early transition years (Levy et al., 2018; Brown and Sorrell, 2017). Starting a new career in academia often creates uncertainty and worry regarding having credibility with students and fellow colleagues (Crowder and Mouratidou, 2020).

Teaching requires more proficiencies than being able to lecture about specific topics. Instructors must understand how to employ different pedagogical styles to accommodate the various learning styles that may occur in each class. In addition, new instructors must also learn and understand the daily activities of an educator, how to create syllabi, assess students' knowledge, and socialize students to a particular environment (Brown and Sorrell, 2017). Institutions of higher learning stress the importance of providing quality teaching by expecting faculty to devise innovative methods to teach so that students are engaged in learning (Adams, 2002).

### *Research and publishing requirements for promotions*

There is constant pressure for educators to attain tenure at research universities. There are aspects of the tenure process that may overwhelm and may be unfamiliar to a new professor coming from industry. In addition to developing teaching skill and performing community and university service, tenure-track professors also have research and publishing requirements to satisfy (Fleishman and Braun, 2010). The literature supports the notion that practitioners are hesitant to transition to academia due to lack of interest in research and publications to teach or to attain a tenure-track academic position (Burgett et al., 2017). Aside from having a desire to perform research, new educators may not have the experience in research that is sufficient to get through the first few years in academia.

### *Orientation to academia*

In a study by Levy et al., 2018 on new family medicine faculty members at the beginning of their academic career, participants stated that there was no orientation into academia. New faculty are left to learn and figure out how academia as a whole works. Other participants felt like the orientation that was offered was inadequate and not specific to the needs of new faculty transitioning into academia. Participants recommended "customized or personalized orientations" to help understand the various requests and demands that are placed upon the new faculty member at the start of the academic career.

## *What are the challenges in transitioning from industry to academia?*

### *Lower starting position*

Regardless of experience level in industry, a transition to academia classifies the new faculty member as a novice (an *individual with less than three years of experience* (Brown and Sorrell, 2017)). Practitioners typically transition from industry to academia at the beginning of a career or after retirement when there is less to lose (Myers, 2006). However, when practitioners make the move to

academia it can be for the sheer love of teaching and giving back rather than considering the starting position (Myers, 2006). In an article by Mabry et al. (2004) three Human Resources Development (HRD) practitioners shared their transition from industry to academia. One of the interviewees responded that the most difficult challenge was "starting over on the career ladder as a 'junior faculty' member".

There is a perceived "prestige factor or status" that the nonacademic public has regarding those working in academia (Wilson et al., 2014; Crowder and Mouratidou, 2020). If a practitioner wants to start a new career in academia, then it is likely that the starting position will be at entry level. A senior faculty position is earned over time and is not tied to the years of experience in industry (Crowder and Mouratidou, 2020).

### *Pay decrease from industry*

Starting over with a new career can be further challenged by a lower starting salary (Mabry et al., 2004). In the construction industry there could be a $9,000 to $10,000 salary difference between industry practitioners and entry-level faculty positions (Burgett et al., 2016). Study participants in the UK reported pay reductions from 2,000 to 15,000 pounds (Crowder and Mouratidou, 2020). Pay may be further decreased by the nine-month work period. Most new faculty will need to find supplemental work for the summer months to help offset the pay decrease (Fleishman and Braun, 2010). However, long work hours and other work obligations may limit faculty's ability to find supplemental work during the academic year.

### *Removed from hands-on practice*

Institutions of higher learning expect new faculty to have some industry experience. Colleges and universities urge faculty to seek industry work during the summer months and sabbaticals to enhance the teaching and learning experience with industry experience. Other faculty may be urged to work with public and private organizations to gain industry experience (Garrison, 2005). While industry experience is an advantage when transitioning to academia, once the hands-on skills are discontinued then the experience becomes outdated. If there is no continuous contact with industry, then it becomes difficult to attain new knowledge that is only gained through industry practice (Jensen et al., 2006).

Kalensky and Hande (2017) suggests that nurses should maintain clinical practice time after transitioning to academia as it is important "to faculty development, gains credibility with students, and enriches the college". However, balancing between academic duties and clinical practice time may prove challenging to nurses. Kalensky and Hande (2017) recommends having a faculty mentor and negotiating accommodations to protect the nurses' clinical practice time.

### *Terminal degree requirements*

In a survey conducted by Burgett et al. (2017), the primary reason that prevented practitioners from pursuing a career in construction education is a doctoral degree. In another study by Boyle et al., (2013) on examining the interest of accountants who transition from practice to academia, participants indicated a "very low likelihood" of leaving an industry position and pursuing a PhD degree full-time and a "low likelihood" of pursing a PhD degree on a part-time basis. Only 13.8% of the Boyle study participants indicated a high likelihood of pursuing a doctoral degree on a part-time basis.

### *Stress and heavy workloads*

Newly transitioned faculty reported job-related stress during the first years of teaching in higher education (LaRocco and Bruns, 2006). In a survey of 226 nurses, 65% of the new faculty nurse who transitioned from industry experienced heavy workloads (Brown and Sorrell, 2017). It may be a misconception to some new faculty coming from industry that professors' workloads are reduced because of the nine-month work year. In addition to finding work for the Summer to offset the pay decrease, new faculty may have an increase workload with more course preparations and research for tenure requirements (Fleishman and Braun, 2010).

In a study by Levy et al., 2018 on new family medicine faculty members at the beginning of their academic career, participants described being "overwhelmed by their new role as an academic family physician". The overwhelming feeling derived from being asked to serve on various committees and activities and lack of proper orientation to help new academics sift through the various requests. Being overtasked with academic responsibilities also affected the participants' personal/family lives. The study participants recommended having mentors to help find balance in the new academic role.

## *What are the motivations in transitioning from industry to academia?*

### *New career after retirement*

As ageing faculty phase out of academia, practitioner who are looking for a second career after retirement from industry may be a source for new educators (LaRocco and Bruns, 2006; Matthews et al., 2014). In a study by Garrison (2005), thirteen survey participants retired from a previous career in industry before making a transition to academia. Practitioners who make a career change as a second career after retirement are not likely concerned about the reduction in pay from industry.

### *Calling to teach / Desire to Teach*

A calling to teach has to do with having a passion to teach. HRD professionals in the article by Mabry et al. (2004) stated that the main reason for transitioning from industry work to academia was an "enjoyment of sharing knowledge and experience" and a "call to teach". Practitioners make the transition to academia simply because there is a "desire to teach" (Garrison, 2005). Many educators who profess to being "called to teach" consider it an honor to be involved with students' educational journeys (Crowder and Mouratidou, 2020).

### *Autonomy/flexibility/work-life balance*

Some practitioners working in industry may work long hours, be required to follow company protocols/policies, and travel extensively to the detriment of health, family, and other personal life responsibilities. This type of stressful work environment is a motivating factor for some in industry to make the move to academia where one can self-govern and enjoy a flexible work schedule without sacrificing family and other personal obligations (Crowder and Mouratidou, 2020).

Of the eleven respondents interviewed by LoRocco and Bruns (2006), about half reported having a sense of independence and autonomy in the new faculty roles as a positive experience. Most of the faculty also reported having "at least one supportive relationship" in the form of faculty colleagues who assisted in acclimating to academia.

### *Giving back to education*

Human Resource Development professionals in the article by Mabry et al. (2004) stated that the main reason for transitioning from industry work to academia was an "enjoyment of sharing knowledge and experience" and a feeling of "great fulfillment from coaching and encouraging".

In the "Teaching for the Love of It" article by Randy Myers (2006), one of the eight accountant who transitioned from industry to academia stated that one should "go into academia when they feel they have something to say and want to make a difference". The accountant further stated that a career in academia is a "journey meant to be of service to others". Another accountant commented that becoming a professor is not for the money but for the "love of teaching and for the students".

## Discussion

Of the 24 publications identified for literature review only one was related to the construction industry. Generally, the existing literature appears to be limited regarding the expectations, challenges, and motivations specific to transitioning from the construction industry to construction education. Publications on various other professions were used in this literature review to evaluate factors affecting why and how early career faculty transition from industry into academia.

Early career faculty are expected to understand how to teach almost immediately upon entering academia. However, practitioners moving from industry generally do not have the proper training required to accommodate the various skills necessary to teach and prepare courses. Universities and construction management programs must provide adequate training and faculty development with specific focus on early career faculty that transitioned from industry. New faculty transitioning from industry are also anticipated to research and publish academic work in order to attain tenure status. Research and publishing are also areas that industry professionals may not have the experience to undertake. Industry professionals may be less reluctant to transition to academia if the research and publishing criteria were removed. These professionals have valuable knowledge to impart to students and may desire to teach only (*with proper training*) without the pressures of attaining tenure. Research universities/programs should allow more flexibility regarding research and publications if the desire/requirements to hire more industry practitioners in academia remains. However, allowing flexibility in research should be limited to the early transition years for new faculty. Continued research is important to stay current with the latest professional trends and developments and to maintain credibility with students and colleagues.

As universities seek to hire more faculty with industry experience there must be an awareness of the numerous challenges that these new faculty members face while transitioning into academia. Lack of orientation to academia and inadequate training are reasons that new faculty moving from industry to academia experience frustrations, stress, and feelings of being overwhelmed in the early years. Universities must realize and provide these early career faculty members with appropriate orientation and training that address the specific concerns that newly transitioned faculty face.

There are motivating factors that cause practitioners to leave an established and well-paying industry career to start a second career in academia. Some of those reasons include starting a second career after retirement, having a calling/desire to teach, wanting a better work-life balance, and giving back to education. Universities and construction management programs should consider these factors as recruitment resources when seeking to hire new faculty with industry experience.

## Conclusion, limitations, and future research

Practitioners turned faculty are presented with multiple challenges in academia including starting in a lower position, pay decrease, removed from hands-on practice, PhD degree requirements, and stress and heavy workloads. However, there are certainly motivations to making the transition from industry to academia which include starting a second career after retirement, having a calling to teach, wanting autonomy in work life, and giving back to education.

Universities are challenged to attract new faculty with industry experience as the current population of faculty members are ageing and retiring. The existing literature regarding transitioning to academia from industry is neither comprehensive nor cohesive for one particular subject matter. Inferences were made in this literature review from various disciplines regarding the expectations, challenges, and motivations that practitioners experience when transitioning from industry to academia.

There are limitations to the literature review in that the publications were only considered from the years 2000 through 2020. There may be other research prior to 2000 that was not considered for this paper. Furthermore, the search databases were limited to Google Scholar, Taylor and Francis Online, ASCE Library, Engineering Village, Business Source Premier, ICONDA, and Engineering Village. Other databases may yield more publications for review.

This literature review in partial fulfillment for a dissertation titled "Development of a Training Guide for Construction Practitioners' Transition into Academia". The literature review did not reveal a list of construction-related training resources. In the authors' opinion a training and faculty development guide would be valuable for future research. Future research for the training guide would also include information for orientation to academia and peer mentorship specific to new construction education faculty who transitioned from the construction industry.

## References

Adams, K. A., & Association of American Colleges and Universities. (2002). *What colleges and universities want in new faculty*? Association of American Colleges and Universities.

American Council for Construction Education (2019). Document 103B: *Standards and criteria for the accreditation of bachelor's degree construction education programs*.

Austin, A., Sorcinelli, M., & McDaniels, M. (2007). Understanding New Faculty Background, Aspirations, Challenges, and Growth. In R. Perry & J. Smart, *The Scholarship of Teaching and Learning in Higher Education: An Evidence-Based Perspective* (1st ed., pp. 39-89). Springer. Retrieved 15 November 2020.

Bandow, D., Minsky, B. D., & Voss, R. S. (2007). Reinventing the future: Investigating career transitions from industry to academia. *Journal of Human Resources Education*, *1*(1), 15.

Barrow, J. C. (2019). A medicinal chemist's perspective on transitioning from industry to academic drug discovery. *ACS Medicinal Chemistry Letters*, *10*(5), 687–689.

Boyle, D. M., Carpenter, B. W., Hermanson, D. R., & Mensah, M. O. (2013). Transitioning from practice to academia: Examining the interest of accountants. *Management Accounting Quarterly*, *15*(1), 10.

Brown, T., & Sorrell, J. (2017). Challenges of novice nurse educator's transition from practice to classroom. *Teaching and Learning in Nursing*, *12*(3), 207–211.

Burgett, J. M., Smith, J. P., & Lavang, Y. (2017). A comparison between industry's and academia's perceptions of a career in construction education. *International Journal of Construction Education and Research*, *13*(4), 251–266.

*Career Patterns: A 21st Century Approach to Attracting Talent*. Opm.gov. (2006). Retrieved 25 November 2020.

Crowder, M., & Mouratidou, M. (2020). Career transitions from industry to academia. *Modern Day Challenges in Academia*.

Felder, R. M. (2012). *New STEM Faculty Support: Why Aren't We Providing It? 13*(5), 2.

Fleishman, S., & Braun, J. (2010). Caution! Rough road ahead—The transition from industry professional to engineering educator. *2010 ASEE Annual Conference and Exposition, June 20, 2010 - June 23, 2010*.

Garrison, C. P. (2005). Who moves from industry to academia and why: An exploratory survey and analysis? *Education*, *125*(3), 414–421.

Jensen, J., Rabe, C., Runde, S., & Wee, L. C. (2006). *Transition from industry to academia: Reflections of three new faculty members*. 11.

Kalensky, M., & Hande, K. (2017). Transition from expert clinician to novice faculty: A blueprint for success. *The Journal for Nurse Practitioners*, *13*(9), e433–e439.

Larocco, D. J., & Bruns, D. A. (2006). Practitioner to professor: An examination of second career academics' entry into academia. 15.

Levy, M., Koppula, S., & Brown, J. B. (2018). Transitioning to academia: Exploring the experience of new family medicine faculty members at the beginning of their academic careers. *Canadian Family Physician*, *64*(12), 907–913.

Mabry, C., May, G. L., & Berger, N. (2004). Moving from practice to academia: Three perspectives. Human Resource Development International, 7(3), 395–402.

Matthews, K. E., Lodge, J. M., & Bosanquet, A. (2014). Early career academic perceptions, attitudes and professional development activities: Questioning the teaching and research gap to further academic development. *International Journal for Academic Development*, *19*(2), 112–124.

McCuen, T. L., Rahman, M., & Gunderson, D. E. (n.d.). Current state of construction management faculty searches in the United States. 8.

Myers, R. (2006). Teaching for the love of it. *Journal of Accountancy*, 10.

Reginato, J. M. (2010). Education and construction industry experience desired of new construction management faculty. *Associated Schools of Construction Proceedings of the 46th Annual Conference.* Wentworth Institute of Technology – Boston, Massachusetts, April 7-10, 2010.

Wilson, M., Wood, L., Solomonides, I., Dixon, P., & Goos, M. (2014). Navigating the career transition from industry to academia. *Industry and Higher Education*, 28(1), 5-13.