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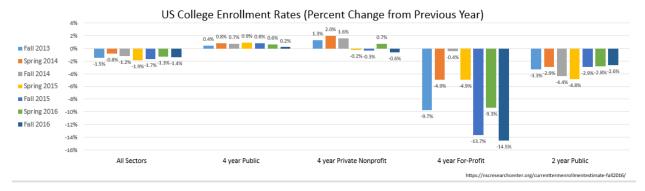
#### **Abstract**

With advancements in computing and the Internet, higher education saw a major transformation in the late 1990's and into the new millennium. With online education, regional boundaries and service areas soon disappeared and institutions of higher education began competing more directly with one another. With greater competition, the degree and higher education experience was quickly changing as power began shifting toward the student-consumer and towards those campuses that built out their online infrastructure and increased their tuition income. We are witnessing a significant redistribution of enrollments and revenue, as institutions are no longer secure in their local monopolies and regional dominance.

As tuition continues to rise along with a growing concern that degree programs may be out of touch with student and employer needs, future students and decision-makers in business and industry are now more willing than ever to try new modes of higher education. The acceleration toward institutional change increased along with changing economies, shifting demographics and new technologies.

Over the past decade, the traditional continuing education unit soon found itself at risk of becoming obsolete and marginalized, shedding names such as "lifelong learning," "adult education," or "extended learning," in favor of schools or units that unify professional, continuing and online education (PCO).

As Millennials move into corporate decision-making roles or to positions of leadership regarding educational standards, it is likely that the portfolio that a PCO unit offers as well as how education is delivered will evolve. The chart below shows that the U.S. has seen a drop in post-secondary enrollment rates despite higher high school graduation rates. This paper reflects some possibilities and scenarios to consider regarding those factors impacting higher education participation and the increasingly vital role of professional, continuing and online higher education.



# The Economy is Moving Faster than Education

Many reports show that the U.S. economy is undergoing a major workforce change. Just as the Internet fueled the late 90s and early Millennium, the cloud generation has fueled the current decade, with Internet and mobile technology advancements and favorable demographics stimulated major developments in social media, sharing economy (Uber, AirBnB, Lyft, ZipCar, Rover), crowdsourcing and ecommerce (the rise of Amazon). Given the rate of change during this time, one could argue that business and industry have been disillusioned and disenfranchised with higher education as the sole solution for workforce education and development. Numerous failures can be cited in the corporate university partnership model, most evident the decline in tuition reimbursement during this time. In 1996, three-quarters of businesses offered tuition reimbursement, as compared to 64% in 2010 and 52% in 2015<sup>1</sup>. Contrasting this, training dollars over the last six years has increased significantly, growing from 10% in 2011 to 15% in 2016. Though few universities are able to track their dependency on corporate tuition reimbursement, this is likely a substantial source of financial aid for their working, part-time student population and impetus for pursuing university degrees. In the past, business demonstrated its trust in higher education through generous tuition support for their employees, without too many restrictions or much oversight. This generosity and trust is now in question.

Case Study: Penn State University, World Campus



As a land grant institution, Penn State University had been known as a national leader regarding outreach and extended education. For over a century, the institution adapted its approach for extended education by going from classroom to correspondence and then to online education. However, the major transformation occurred in the late 1990s with the creation of the Penn State World Campus.

At the time, while the institution offered traditional credit and noncredit continuing education through its many branch campuses, it identified an opportunity to expand its academic strengths through online education by initially launching its first fully online programs in 1998. Penn State World now offers over 50 graduate degrees and certificates, as well as more than two dozen associate and baccalaureate degrees online. While enrollment is flat for much of the University, World Campus continues to grow (up 10% from 2015 to 2016) and now serves over 13,000 students across the globe. Most recently, Penn State launched its fully online bachelor's degree in engineering.

On the horizon, advances in artificial intelligence and computing are quickly becoming a reality for the upcoming decade. While degrees are still important in today's economy, new forms of pedagogy and credentialing may have a more prominent place. Higher education is showing a response to the new economy in the form of credit and noncredit certificates, advances in online education, and competency-based learning initiatives among others. Partnerships with business and industry are helping to accelerate other forms of learning including Massive Open Online Courses (MOOCs), badging and bootcamps.

<sup>&</sup>lt;sup>1</sup> Society for Human Resource Management Reports.

MOOC providers such as Edx, Cousera and Udacity have partnered with hundreds of colleges and universities to deliver thousands of learning programs aimed at individual students as well as working professionals in highly specialized fields. Some successful partnerships include Georgia Tech's \$6,000 master's degree sponsored by AT&T through Udacity, as well as the University of Pennsylvania working with Instagram through the Coursera platform. While there are a growing number of partnerships, they remain far from the norm in higher education's engagement with business and industry.

#### Case Study: The Georgia Institute of Technology Professional Education

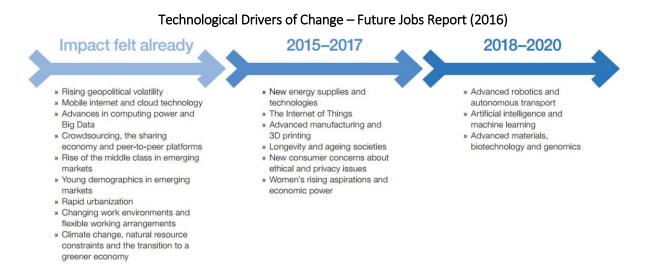


Identifying that the university had significant strengths that were underleveraged and seeing the marketplace rapidly changing, Georgia Tech made a number of organizational changes to strengthen its offerings and better aligning its portfolio to the marketplace.

Continuing and distance education was previously offered through a unit called Georgia Tech Distance Learning and Professional Education. Identifying a need to better serve the institution's academic and major corporate partners, the unit was transformed into Georgia Tech Professional Education, an academic division reporting to the Provost with a Dean as its leader to interact with other deans.

Over the past five years, Georgia Tech Professional Education has been a national and international leader in innovative graduate and professional education. The unit has partnered with a number of academic units of the University to launch a number of high-quality, lower- cost graduate programs, such as an Online Masters in Analytics, Professional Masters in Occupational Safety and Health, and MOOC-based Online Master of Science in Computer Science. This groundbreaking degree has now attracted over 4,500 individuals and has been recognized as a best practice within the online higher education community. In addition to these highly visible graduate degrees, the unit is also well-diversified in graduate certificates and noncredit professional certificates and programs.

As our society evolves from its current state of cloud generation maturity (see figure below), where our economies have been transformed via e-commerce, the Internet of things and digital and social media, into a society where robotics and artificial intelligence (AI) will play a greater role, other industries will also grow and workforces are expected to shift. Some of these industries will include the auto industry, where autonomous vehicles will certainly advance. At the time of this article, nearly two dozen companies alone have autonomous vehicle plans or prototypes in the works, ranging from market leader Tesla to start-up Uber to traditional manufacturers such as GM, Honda and Mercedes Benz. Related technologies, such as fuel cells and automated signaling, will also grow, as will related industries of trucking and transportation. An underpinning of these industries will rely on data mining and predictive analytics, geographic information systems, radar and signal processing, natural language processing and many other technologies where the transformation of the workforce is imminent. Many of these technologies will also shift in smaller forms to our homes, as the smart home will have technologies that will transfer throughout.



Other industries that will also experience change include our healthcare systems. In addition to the aging population, new advances in technologies will force workforce change. Fitness and health monitoring, advancements in robotics, food and nutrition manufacturing, and 3-D printing are just a few which will have a major impact.

# **Changing Demographics**

There are many factors that are clearly impacting higher and continuing education, many of which are interwoven with each other and are not solely the reason or driver for educational change. The diversity of age, income and ethnicity in the United States and their intersections are major factors reshaping traditional and PCO units.

The United States is becoming a more diverse nation as nearly 59 million immigrants, mostly from Latin America and Asia, have come to the U.S. in the past 50 years. It is projected that America will not have a dominant ethnic majority by 2055. Today, nearly 15% of the U.S. population is foreign born compared with 5% in 1965. The number of Asian immigrants is rising and it is expected that they will outnumber Latin American immigrants within the next four decades.<sup>2</sup> While these statistics are commonly known, there are implications for high school graduation rates and the percentage moving on to college.

While tuition at colleges and universities continues to rise, only half of American households consider themselves to be middle class, down from 61% in 1971. The financial gap between middle- and upper-income households is also widening.<sup>3</sup>

The U.S. workforce is very diverse in age demographics. With changes in technology and shifts in the economy, according to the Bureau of Labor Statistics, 40 million people will enter the U.S. workforce over the next decade. Another 25 million will leave and 109 million will remain in the overall workforce. There will be a slight reduction in the overall growth of the workforce; however, there will be a rise in the number of young workers (under 25 years-old) and older workers (45 years-old and older), resulting in a decline in middle-age workers.<sup>4</sup> The age distribution, educational attainment, and skills of the workforce will not only change considerably but perhaps be further out of alignment with the needs of the American workplace.

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 $<sup>^2</sup> http://www.pewresearch.org/fact-tank/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demograph-the-u-s-and-the-world/2016/03/31/10-demograph-the-u-s-and-the-world/2016/03/31/10-demograph-the-u-s-and-the-world/2016/03/31/10-demograph-the-u-s-and-the-world/2016/03/31/10-demograph-the-u-s-and-the-world/2016/03/31/10-demograph-the-u-s-and-the-world/2016/03/31/10-demograph-the-world/2016/03/31/10-demograph-the-world/2016/03/31/10-demograph-the-world/2016/03/31/10-demograph-the-world/2016/03/31/10-demograph-the-world/2016/03/31/10-demograph-the-world/2016/03/31/1$ 

<sup>&</sup>lt;sup>3</sup> http://www.pewsocialtrends.org/2015/12/09/the-american-middle-class-is-losing-ground/

 $<sup>^4 \</sup> https://www.dol.gov/oasam/programs/history/herman/reports/futurework/conference/trends/trendsi.htm$ 

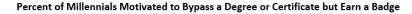
# Millennials are Today's Foundation of Change

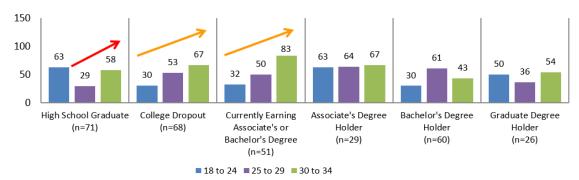
Millennials have surpassed Baby Boomers as the nation's largest living generation, according to population estimates released by the U.S. Census Bureau. Millennials, those born between 1980 and 1997 (ages 20-36)<sup>5</sup>, now number 75.4 million in the United States, surpassing the 74.9 million Baby Boomers (ages 52-70). Generation X (ages 37-51) is projected to pass the Boomers in population by 2028.<sup>6</sup>

The Millennial generation is also growing as young immigrants expand its ranks. The number of Baby Boomers is shrinking as the number of deaths among them exceeds the number of older immigrants arriving in the country. Forty-three percent of Millennials are non-white, making them the most racially diverse generation in U.S. history.<sup>7</sup>

While much has been written about the Millennial generation, they may now represent the majority of a PCO unit's enrollments, where PCO units and support systems had previously been designed to serve the Baby Boomer population. Much has been written about how Millennials differ even within their own cohort. Their impact is critical to the economy and higher education, especially within the PCO community. The most relevant facts about Millennials related to PCO include:

- Older Millennials have differing perceptions and needs compared to younger millennials. UPCEA research also shows that they remain interested in certificates and badges regardless of their existing level of education, which may suggest a reliance or appreciation for just-in-time or module-based education. The chart<sup>8</sup> below also shows that those without a degree or in the process of a degree have high interests in badges.



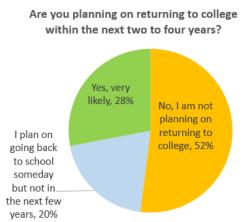


<sup>&</sup>lt;sup>5,6</sup> http://www.pewresearch.org/fact-tank/2016/04/25/millennials-overtake-baby-boomers/

 $<sup>^7 \ \</sup>text{http://www.pewresearch.org/fact-tank/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/10-demographic-trends-that-are-shaping-the-u-s-and-the-world/2016/03/31/2016/03/2016/$ 

<sup>&</sup>lt;sup>8</sup> 2015 UPCEA Millennial Research Study

- Millennials not completing or not going to college have a more positive view of alternative forms of education, such as certificates and badges. UPCEA research shows that those not moving on to higher education have a stronger interest with alternative credentials. This interest grows as a Millennial becomes older. This is extremely critical as Millennials, once they withdraw from a college and do not graduate, often do not see returning in the near future. 10
- As Millennials age, their interests, needs and perceptions toward education change. This can be seen through The Millennial Impact Report which shows that over time, the cohort now views the economy as the most important issue. Education was previously the most important issue in earlier studies. 11



Source: 2017 Blackboard/UPCEA Millennial and Gen Z Study

<sup>9</sup> http://www.rickesassociates.com/wp-content/uploads/2016/12/Generations-in-Flux-2016-SCUP.pdf

<sup>&</sup>lt;sup>10</sup> 2017 Blackboard/UPCEA Survey of Millennials and Gen Z'ers

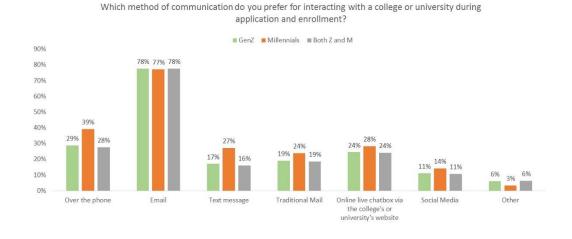
<sup>&</sup>lt;sup>11</sup> The Millennial Impact, 2016

# Generation Z May Start Bucking the Trend

Just as PCO units have started transforming their units to be Millennial-focused, just behind them are the emerging cohort of Generation Z. Generation Z, or the post-millennial generation (those born in 1995 or later), comprise 26% of the U.S. population, making them a larger cohort than both Millennials or Baby Boomers. There are approximately one million more Gen Z'ers than there are Millennials. By 2020, their numbers are expected to increase to nearly one-third of the population. Currently, with the oldest members of this cohort barely out of high school, Gen Z differs from Millennials in several interesting ways. They have grown up with the Internet and advanced computer technology and are the first generation to live completely in the era of smart phones. They are comfortable adapting to changing technologies, thrive on a constant flow of new information, and are adept at multi-tasking.

The oldest members of Gen Z were children when the September 11 terrorist attacks occurred and most of them grew up during the "great recession." These formative events may have led to unsettled feelings as well as higher rates of insecurity among Gen Z almost solely because of the environment in which they were raised. <sup>12</sup> The financial stresses experienced by their parents, who are themselves members of Generation X or older Millennials, may have helped shape the attitudes and habits of Generation Z. The authors of the book *Generation Z Goes to College* suggest that Generation Z students collectively self-identify as being more positive than previous generations and are better at being open-minded, compassionate, determined, loyal, and responsible. <sup>13</sup>

The figure below shows the results of a 2017 Blackboard/UPCEA survey of Gen Z'ers and Millennials and their preferred form of communication. The research shows that when engaging with a college or university, email is most preferred, although Gen Z'ers are more open to other communication styles than Millennials.



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 $<sup>^{12}\</sup> http://usatoday 30. usatoday. com/news/opinion/forum/story/2012-06-27/generation-z-work-millenials-social-media-graduates/55845098/1$ 

<sup>&</sup>lt;sup>13</sup> Seemiller, Corey, and Meghan Grace. Generation Z Goes to College. San Francisco, CA: Jossey-Bass, 2016. Print.

Gen Z has higher high school graduation rates than all previous generations. According to the National Center for Education Statistics, the adjusted cohort graduation rate (ACGR) for public high schools rose to an all-time high of 82% during school year 2013–14. Approximately four out of five students graduated with a high school diploma within four years of the first time they started 9th grade. <sup>14</sup> The latest NCES findings released by President Obama in October 2016 show that America's high school graduation rate has reached a new high of 83.2%. According to the report, this includes students of color, students in low-income families, students with disabilities, and students whose first language is not English. All demographics made progress in graduation rate, however the biggest gains were seen from Black, Hispanic, and Native American students who have successfully gained closer graduation rates to those of their white peers. <sup>15</sup> In the fall of 2016, approximately 50.4 million students attended public elementary and secondary schools. Of these, nearly 15 million were in grades 9 through 12. These enrollment figures are slightly higher than the 50.3 million enrolled in fall 2015 and are projected to remain relatively flat through 2025. At the same time, approximately 20.5 million students attended American colleges and universities, constituting an increase of about 5.2 million since fall 2000. <sup>16</sup>

However, given what appears to be generally favorable statistics, **enrollment in college directly out of high school is flat or declining overall, which in turn has implication for those offering professional and continuing education programs**. According to the National Student Clearinghouse Research Center, the overall postsecondary enrollments lowered by 1.4% in fall 2016 when compared to the enrollments from fall 2015. Much of this decline is attributable to a dramatic 14.5% drop in enrollments at four-year forprofit institutions. Undergraduate enrollments at four-year public institutions declined 0.3% while graduate enrollments increased 2.7%. Undergraduate enrollments also declined 1.1% and graduate enrollments increased 0.7% in four-year private, non-profit institutions. <sup>17</sup>

Barnes and Noble conducted a recent survey of the collegiate educational-technology expectations of 1,300 middle and high school students entitled "Getting to Know Gen Z." Many of the Gen Z students surveyed are entrepreneurial, with 35% currently owning their own business or planning on owning one in the future. When asked about hands-on learning over fifty percent said they prefer this type of learning and the vast majority said they preferred to collaborate with peers and friends when studying for exams. Overall, Gen Z tends to place more weight on financial success than Millennials, "who are more likely to define success in terms of personal fulfillment." <sup>18</sup>

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<sup>&</sup>lt;sup>14</sup> https://nces.ed.gov/programs/coe/indicator coi.asp

 $<sup>^{15}</sup>$ https://www.whitehouse.gov/the-press-office/2016/10/17/fact-sheet-president-obama-announces-high-school-graduation-rate-has

<sup>&</sup>lt;sup>16</sup> https://nces.ed.gov/fastfacts/display.asp?id=372

<sup>&</sup>lt;sup>17</sup> https://nscresearchcenter.org/currenttermenrollmentestimate-fall2016/

<sup>&</sup>lt;sup>18</sup> https://www.bncollege.com/Gen-Z-Research-Report-Final.pdf

#### The Professional, Continuing and Online Education Unit of the Future

In large part, educating and reaching the current Baby Boomer adult learner a decade or two ago was fairly easy, as there was closer alignment between business and industry and the bachelor's and master's degree and a large market to share among competitors. Marketing to them was also easy, as print and broadcast media reached the mass markets with competition fairly thin and defined by geographic borders. Adult and corporate learners were also willing to sacrifice evenings and weekends for face-to-face instruction, as there were few alternatives and higher education held the keys to successful employment. As part of the evolution, the following system migrations have also occurred over the past decade:

Increased adoption of online as an accepted means of delivery. In both 2011 and 2014, 89% of UPCEA's membership offered online programs; however, the magnitude of an online presence differed as 2011 enrollments were approximately 1,800 credit enrollments, while in 2014, there were three times as many or over 6,000. In 2016, 90% of UPCEA members reported offering online programs. It is expected that average enrollments will increase again, and this information is expected to be captured from the UPCEA membership in late spring.

Case Study: The University of Illinois Springfield



The University of Illinois Springfield (UIS) is the newest campus of the University of Illinois System. Located some 175 miles from Chicago and 100 miles from St. Louis, the campus is surrounded by farmland. With the potential for only a small commuting population, the university pursued online/distance learning 20 years ago. While the campus remains small, the online enrollment accounts for 33.7% of the headcount and online courses generate more than 45% of the total at UIS. The footprint of UIS is greatly enlarged by the online program which reaches students in 47 states and 10 foreign countries. Students in the online programs are considerably older than the on-campus average (32 at the undergraduate level and 36 years at the graduate level).

More than two dozen online degrees and degree completion programs are offered in addition to an ever-growing number of certificate programs. With nearly 50% of non-appropriated revenue coming from online classes, the initiative is an integral part of the university.

- Acceptance of online programs, despite its critics,
appears to be meeting needs of both students and faculty. A recent study<sup>19</sup> conducted by UPCEA shows that more than three-quarters of institutions surveyed who offer online programs believe their students to be very satisfied with their programs. Sixty-eight percent of institutions report that faculty are exceptionally satisfied with the support they receive.

<sup>&</sup>lt;sup>19</sup> 2017 UPCEA Hallmarks of Excellence Benchmark Survey

- With rapid transformation happening in online education, colleges and universities often have difficulties keeping pace with technology, marketing, talent retention and operational efficiency, among other challenges. Many struggle with whether their organizational structures are optimally arranged to best serve their learners, meet the needs of their academic partners, fulfill their institutional missions and maximize revenues/enrollments while controlling costs. As a result, UPCEA created its Hallmarks of Excellence in Online Leadership to best assess institutional readiness and operational excellence around the management and leadership of their online enterprises.
- There has been greater integration of corporate or student learners, as PCO units have improved enrollment management functions, added CRM systems and invested in coaching and advising. As part of greater centricity around the learner, data-driven environments also evolved. In 2006, less than half of the UPCEA membership reported having a CRM system in place. In 2016, that number was 77%<sup>20</sup>.
- While marketing staffing has decreased over the past decade (7.7 marketing staff in 2011 and 6.1 in 2014), major shifts in media channels have transformed the PCO marketing

department as it shed some creative staff and copywriters in favor of digital marketers and analysts. Most marketing departments spend between 5% and 10% of gross revenues on

marketing, with half going to staffing and the other half to media.

Case Study: Brown University's School of Professional Studies



In response to a rapidly changing marketplace, Brown University underwent a major transformation regarding its continuing education programming. Early in the millennium, continuing education at Brown consisted of being one of the nation's leading summer academic youth programs and having a portfolio that consisted of noncredit academic workshops. Over the past five years, continuing education transformed itself to focus on executive leadership and the School of Professional Studies was formed.

Despite being in a highly competitive marketplace, the school, in partnership with various academic units, launched a number of successful low residency/hybrid delivered online professional master's degrees, including the IE Brown Executive MBA, Executive Master of Healthcare Leadership, Executive Master in Cybersecurity and Executive Master in Science in Technology Leadership.

<sup>&</sup>lt;sup>20</sup> UPCEA Helix Survey 2016

- Over time, PCO units have learned to add and better manage marketing, technology and advising staff among others. Evolving within the organization is the instructional designer. This individual serves as a learning expert, a bridge between faculty and online learning technologies, and with the student learning experience. This evolving employee class will be critical in the future success for many online learning initiatives<sup>21</sup>, as they are responsible for moving content online, supporting content experts, faculty training in online teaching pedagogy and serving as experts in the use of multimedia, in addition to other duties.
- There has been a migration of face-to-face summer and winter sessions to online delivery, as many UPCEA institutions have presented at national and regional conferences either an increase in the number of online courses offered in the summer (replacing face-to-face summer courses) or the total elimination of face-to-face summer or winter programming (replacing them with online courses).

Case Study: Boston University's Metropolitan College



Boston University's Metropolitan College has served as the university's professional and continuing education enterprise for over 50 years. Along with noncredit certificate programs, MET offers its own undergraduate and graduate degrees, often in partnership with other schools at BU. MET has about 40 full-time professors, who oversee the academic programs, and adjunct faculty. MET offers accredited degree programs in computer science, business management, and many other professional fields – often in partnership with corporations and foreign academic institutions – and has over 30,000 alumni.

Since 2000, MET doubled revenue and raised enrollments by over 50% largely by creating a major distance learning infrastructure which is now shared with the rest of Boston University. Metropolitan College also oversees BU's summer term. MET's reach is now regional, national, and increasingly international – generating over one hundred million dollars in revenue, most of which is retained by the university as contribution margin.

With many of the above challenges still existing at many institutions and with many more not listed, units are faced with major obstacles to compete in the higher education arena for professional, continuing and online education. While this paper only outlines many of the issues institutions face, the purpose is to encourage discussions around developing and supporting PCO infrastructures that are sustainable long-term, and adaptable to marketplace changes. The economy is rapidly changing and the workforce will be highly influenced by the maturing of Millennials and Generation Z.

<sup>&</sup>lt;sup>21</sup> 2017 UPCEA eDesign Collaborative Survey of Instructional Designers and Multimedia Specialists

To leverage and capitalize on anticipated changes, the PCO unit must address operational challenges and factors, many of which are outlined in the UPCEA Hallmarks of Excellence in Online Leadership and the UPCEA Hallmarks of Excellence in Professional and Continuing Education. The creation, leadership and management of an effective PCO operation should be done in a manner that best serves the mission, vision and goals of the institution.

The academic landscape is changing, as universities shift in their market share of enrollments especially from part-time working students. Complacency and antiquated models will pose enormous, if not catastrophic, opportunity costs for their institutions. Savvy university leadership increasingly will look to their professional and continuing education leadership as an agile and creative means to expand and adapt to new threats and opportunities. Those who unleash these units to respond to the needs of emerging generations of students will be able to survive and even thrive in this changing environment.

#### **About the Authors**

#### Jim Fong

Jim Fong is the Director of UPCEA's Center for Research and Marketing Strategy. The Center primarily addresses the need for market research and benchmarking information among nearly 400 UPCEA member colleges and universities. Prior to UPCEA, he held leadership positions at Penn State Outreach and a number of consulting and analytics companies. He holds an M.S. in statistics, an MBA with a concentration in marketing and business strategy and a B.S. in mathematics from the University of Vermont.

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Ray Schroeder is UPCEA's Director of the Center for Online Leadership. The Center focuses on the factors that drive successful online initiatives relating to higher education including leadership, strategy, financial models, program development, student services, and effective partnerships.

#### **UPCEA**

UPCEA is the leading association for professional, continuing, and online education. Founded in 1915, UPCEA now serves most of the leading public and private colleges and universities in North America. For more than 100 years, the association has served its members through its Center for Research and Strategy, National Council for Online Education, innovative conferences and specialty seminars, professional networking opportunities, and timely publications. The Center for Research and Strategy is the research and consulting arm of the association, formed to meet the research needs of its members.

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