Lifetime Learning Initiative
Final Report

Working Draft:
submitted May 2023

Final Report:
approved September 2023

Preface

This report represents the culmination of Phase 1 work of the Georgia Tech strategic plan initiative focused on Lifetime Learning. Phase 1 was co-chaired by Dean Nelson Baker and Dean Charles Isbell and was supported by three working groups. The groups were charged to perform analyses and to develop a set of recommendations around a potential new academic unit in the areas of: Academic Vision, Research, Faculty Governance & Strategic Planning, Business Model and Operations, and Change Management and Communications. Phase 1 resulted in this report — a comprehensive set of recommendations and decision points to prepare the Institute to move forward, using guidance from University System of Georgia leadership, into the next phase of work, that is the detailed planning and implementation of the new college.

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Introduction

Changing Landscape

From shifting demographics to the acceleration of automation and technology, the world is increasingly dynamic and intricate. The landscape is changing faster than many of our systems can adjust, which presents a number of challenges for institutions, industries, and individuals alike. It is essential that higher education evolve to meet the needs of the workforce across their lifetime, not only in providing relevant, real-time upskilling and reskilling but also by preparing that workforce to be more resilient, perpetual learners.

Technological Advances

For those currently in the workforce - and the companies and industries they represent - the rapid pace of change can be daunting. Technology refreshes seemingly overnight, producing a high demand for workers to fill roles that barely existed a few years prior. In fact, some researchers have suggested that over 80% of the jobs in 2030 will have only been invented in the prior decade [1]. While predicting an exact number would be impossible, it is safe to speculate that the vast majority of jobs over the next 10 years will be affected by automation and technological advances in some way.

We do not need to look into the future to see the effects. In a report prepared with Boston Consulting Group, Burning Glass reports that over the past 5 years, 37% of the skills needed in the average job in the US have changed [2]. Essentially, a wide swath of the workforce now needs different skills to successfully complete their daily work, even if their job title has not changed. Digital transformation is responsible for many of these changes, but softer skills such as communication, listening, collaboration, and customer service are also becoming increasingly important. These dramatic shifts will require individuals to reskill, upskill, and retrain - perhaps many times over one's career - to transition through this digital disruption and remain relevant, productive members of the workforce.

Demographic Changes

Additionally, due to increased lifespans, the amount of time one spends in the workforce has grown. The Bureau of Labor Statistics reports that the oldest working generation, Baby Boomers, have held an average of 12.4 jobs over the course of their lifetime [3]. They also estimate that by 2030, 9.5% of the labor force will be 65 or older [4].

For the first time in history, it is also estimated that children in the Western world now have a 50% chance of living to be 100 years old, and over the past twenty years, the number of centenarians living in the United States has doubled [5]. These shifting demographics and life expectancy changes are not only drastically pushing the parameters of our workforce, but also the higher education systems that support them.

While some at one end of the spectrum are staying in the workforce much longer, the pool of new entrants is shrinking. Since 2008, birth rates have declined every year except one. The Bureau of Labor Statistics reports that the percentage of people 75 and older in the workforce has increased while those under 25 has decreased [4]. Compounding this, fewer K-12 students are choosing a traditional college pathway [23].

Barriers to Access

Increases in tuition and in the cost of living have left many – at all stages of life —unable to afford public higher education, career upskill/reskill training or career pivots [6, p. 10]. Additionally, even when cost is not a factor, physical access to education can be limiting. Education is currently structured around

physical campuses to the extent that we have made it difficult to access for those who do not live near a university and for those whose lives are not conducive to a residential experience [6, p. 14].

Additionally, many students graduate high school unprepared for college, and this gap in preparedness inequitably impacts minority and low-income populations over others. Twenty percent of bachelor-seeking students require remedial courses, putting them at increased risk of dropping out prior to graduation [7, p. 14]. The pandemic has only exacerbated this issue, with recent reports suggesting that income-based gaps in elementary achievement widened during the pandemic by 20% [8].

Even more, new voices of education are forming at both the K-12 and Higher Education levels, particularly in the private sector. Holon IQ reports that the once niche sector of EdTech venture investment is now 40x larger than it was a little over a decade ago [9]. While it has been affected by recent economic woes, it has rebounded overall since the pandemic and is trending well above 2019 investment levels.

These market players do not have the long-standing infrastructure, regulations, and governance that public Higher Education provides learners, while at the same time their competition put strains on the those who need to operate under traditional legal, business, and policy structures.

Impacts to the State of Georgia

All of the factors described create unprecedented social, health, financial, and political stress and turmoil, and the state of Georgia is not immune.

Most workers in the labor force will need further education to stay relevant in their current jobs. It is estimated that 40% of jobs across Georgia are at risk of being automated in the next 15 years, many of which are in retail, finance, and manufacturing [10]. According to a recent report done by Accenture, approximately 92% of executives rated “availability of skilled labor” as important or very important in choosing a location for their organization [11, p. 5, 56].

The state of Georgia has positioned itself well by prioritizing economic development through corporate expansion investments in industries like electric mobility, finance, manufacturing, data science, film, and other sectors. For Georgia’s workforce to transition through this digital disruption, educational institutions will need to adapt, extending their ability to provide accessible training, beyond just degrees, in a high-quality format that is designed to meet the demands of a quickly changing landscape. A highly skilled and diverse workforce meeting a broad range of industry needs will provide Georgia with a distinct competitive advantage.

The state needs its workers to have the kind of fundamental K-12 STEM education that provides a foundation for skill acquisition later in life. The state has seen success through initiatives like Computer Science for Georgia (CS4GA) and the Georgia AI Manufacturing (GA-AIM) Coalition but there is a lot of work to do. For example, there were 119,492 teachers working in Georgia’s schools during the 2021-2022 school year, but only 417 of them were certified to teach computer science. With those numbers, only about 18% of Georgia’s 2,306 public schools can offer computer science, and those are heavily clustered in metropolitan areas, especially around Atlanta. This limited access to STEM training and preparation directly correlates to participation, as according to the Georgia Department of Education (GADOE) only 10.2 percent of Georgia’s K-12 students are enrolled in computer science.

The University System of Georgia (USG) has been able to control tuition costs, and we have been able to offer affordable, accessible degree programs like our Online Master of Science (OMS) programs. However, Georgia has experienced decades of widening inequality, and equitable access remains a significant issue [12]. As K-12 enrollments decline and fewer students enter traditional postsecondary programs, the state of Georgia will need to employ innovative strategies to train, retool, and upskill individuals of all ages.

The Role of Higher Education

During uncertain times, education has been a persistent and powerful tool for our individual and collective ability to manage change and foster growth. Although the challenges facing society are great, past evidence shows that higher education can help to create leaders with the potential to solve them.

However, future-proofing our educational system is critical, and new structures for the delivery of education, as well as new strategies for admission, financing, credentialing will be needed [10, p. 5]. A traditional undergraduate degree experience is an important foundation for future learning; however, it is not enough alone to support one through the level of change we are currently experiencing as a society. [13, p. 2]. Reframing learning at all credential levels, between both credit-based programs and professional development (non-credit) programs to support needs across the lifetime of an individual is paramount.

A History of Lifetime Learning at Georgia Tech

There is an opportunity on the national, and even global stage, to take the lead in bold educational thinking to align with the current and future needs of a modern society. It is incumbent that public universities, especially research universities, lean forward and rise to meet the described challenges by expanding their vision and working to discover new methods of providing society the quality education it needs - education that is accessible, affordable, transformational, and achievable at all stages of their life and career. An education that is focused on learning, not on teaching, will be ever more critical as the external forces of advancing technology, private sector providers, and the introduction of new knowledge intersect with the fortitude to drive one's own career and knowledge.

Georgia Tech has more than 100 years of non-degree education experience, more than 45 years of distance learning experience, more than 30 years of K-12 outreach at-scale experience. The Institute already provides a number of successful degree programs and training opportunities for the workforce, including more than nine years of online Master of Science experience. More recently, this was also the development of a fully remote instructional delivery experience during the pandemic. Georgia has tracked on-pace with the U.S. in online degree growth, both at the undergraduate and graduate levels. From 2018 to 2021, award of these credentials increased 4% and 10% respectively [10].

We also provide activities, curricula, and teacher training for the K-12 sector. CEISMC programming reached over 62,000 K-12 students, 3,300 K-12 teachers, and 99 Georgia school districts over the past 18 months. CEISMC activities include research on effective STEAM curricula and pedagogy, STEAM teacher professional development, summer camps, after school programs, Science Saturdays, STEM competitions, internships, evaluation services, and consultation.

We have the potential to further conduct innovative research that will help ensure that STEM/STEAM resources, along with many other technological advances that impact career fields, are provided to K-12 teachers, the workforce is trained in new technologies, and more diverse populations have access to educational credentials. Through our long history of investment in education outside of its traditional degree programs and by continuously seeking to leverage its experience and resources, Georgia Tech seeks to make even more of a difference for learners and employers across the state.

Strategic Alignment

Georgia Tech launched a university strategic plan in 2020, which calls for expanding access, amplifying impact, and leading by example as three of its themes. Working groups were created to bring the strategic focus areas to life. Nelson Baker, dean of Georgia Tech Professional Education (GTPE) and Charles Isbell, dean and John P. Imlay Jr. Chair of the College of Computing, co-chaired one of those groups, called "GTPE Next." This group envisioned a new learning environment made for the digital

world, a step beyond the current hybrid methods that tried to extend physical work and learning into the digital.

The group recommended, among other things, exploring the creation of a new academic unit that would:

- Expand research on evidence-based learning and teaching practices and educational systems.
- Hire faculty and develop curricula around learning technology, educational attainment, and culturally relevant pedagogy.
- Provide services and support to learners through all phases of their lives.

Georgia Tech is uniquely positioned to develop and provide the digital and human skills training needed for today's jobs in business, technology, and data sciences. Corporate entities have created unique learning opportunities filling a void that higher education has not, until now, filled.

We believe that studying learning holistically will lead to advances in technology, in policy, in services, and in pedagogy. Our goal is to create a system that can bring in Georgians at any point in their life and provide them with the resources to learn and adapt to the changing economy.

Creating a new academic unit at Georgia Tech will leverage our strengths, create synergy from existing assets, and allow us to continue to lead in the world of public higher education. The investment will pay dividends for today and tomorrow's learners across their lifetimes.

Now is the time for Georgia Tech, well known and respected for our leadership in learning innovation, to embrace bold, innovative educational thinking. This opportunity that presents itself does so at a time when we can act on our learnings and lead into the future as only Georgia Tech can do, helping maintain Georgia's reputation as the best place to do business — with the world's best talent base.

Proposed Solution

Planning for a New Academic Unit

In Summer 2022, Provost Steven McLaughlin announced initial planning to explore the creation of this envisioned new academic unit around lifetime learning. The unit would build on the expansion of Georgia Tech's considerable ecosystem for lifetime learning, which includes the Center for Education Integrating Science, Mathematics, and Computing (CEISMC), the Center for 21st Century Universities (C21U), and GTPE. The three units form the core of the proposed new academic unit. Bringing them together creates a holistic view of learning, building synergies, and speeding innovation.

This unit, as expected at a research university, should also be a catalyst for fundamental and applied research. It should explore innovative pedagogies and technologies to expand the essence, quality, and utilization of knowledge and skills for learners. It should also serve as the catalyst for positive change on educational systems and policies.

In September, three working groups were established and charged with studying the formation of a new academic unit — at the intersection of pedagogy, curricula, technology, and business models — to offer learning at all credential levels, including credit-based programs, informal learning opportunities, enrichment programs, and professional development (non-credit) programs across the lifetime of an individual. Members of the working groups are listed in Appendix A and represent a broad cross section of the Georgia Tech community.

The three working groups were focused around three critical planning areas:

1. Academic and Research Vision and Strategy

2. Business Model and Operations
3. Change Management and Communications Planning

Each was charged with engaging stakeholders and using their input and external analyses to develop recommendations around the formation of an academic unit around Lifetime Learning. The working groups were charged with planning for the beginnings of a new academic unit, not to limit the final image of this innovative academic unit. The groups were asked to guide their work with the following principles in mind:

- Reflect the Institute's values and realize its vision.
- Seek to be transformational, not incremental.
- Be transparent in planning and communications.
- Evolve the plan and its implementation.

Georgia Tech engaged consultants from Accenture to generate insights from student and competitor perspectives in the lifetime learner market. Accenture's research focused on (a) the market landscape for lifetime learning, (b)potential benchmarks against peers, and (c) competitors inside and outside of higher education, and best practices of lifetime education ventures. Their final report is included with the appendices of this report.

Envisioned Change

The new academic unit will build on the success of CEISMC, C21U, and GTPE. It will also build on the insights gleaned from the Online Master of Science in Computer Science program (OMSCS). OMSCS has revolutionized online higher education through offering remote, asynchronous courses at an affordable price.

The new unit is not simply about remote education, however. Instead, it seeks to develop hybrid remote, and in-person forms of education. We have seen some of this arise organically already, as OMSCS students create local study groups for in-person networking and peer support. There are many other options, though.

There are students who can commit to synchronous, in-person classes, but not at a particular campus. What if local sections were created wherever there were enough students to support them? What if you have students who can attend at specific class times, but not in person? There are many ways for in-person and synchronous interactions to add value to education without becoming a barrier to participation. We think this holds promise for workforce training, for collaborating with industry to construct programs that suit their needs.

These hybrid models also hold the potential to transform K-12 education, which suffers from a chronic and global shortage of qualified teachers. OMSCS and online undergraduate content is already being used to support dedicated courses at other schools and programs. The Atlanta Public School system has dramatically increased the number of computer science classes it offers by leveraging this infrastructure. The College of Computing's remote summer camps have shown that the model can extend into younger ages while giving those students the support they need.

The new unit will do more than bring together K-12 and workforce learning, however. Its aim is to find real-world solutions across the entire span of a student's lifetime, through the specific lenses of our technological expertise and our remote, distributed education experience. Combine those solutions with local support, expand it into K-12 and workforce training areas, and we start to imagine collaboration models that stretch across the entire educational enterprise. Georgia Tech has proposed the new unit to build those models, as well as the policies, pedagogies and technologies that will support them.

A new academic unit could provide accessible, affordable, and achievable education, research, and services for learners at any stage of life, providing non-credit courses, credentials, and degrees, as well as research techniques and evidenced-based practices for lifetime learning. The proposed academic unit could serve:

- K-12 students in Atlanta, around Georgia, and across the nation.
- Leaders of K-12 educational systems and their constituents who want to improve and innovate teaching.
- Working professionals, including Georgia Tech employees, who need additional skill development and learning options to navigate their careers.
- Organizations that need to upskill their workers.
- New or growing companies seeking to build their workforce.
- Executives and corporate leaders seeking professional development.
- Georgia Tech alumni.
- Underserved, underrepresented, marginalized, and rural populations who currently have limited access to educational opportunities.
- Independent learners, such as junior specialists, mid-career climbers, evolving professionals, trajectory transformers, retirees looking to stay sharp, etc.
- Future organizational learning leaders who need to enable, retain, reskill, and upskill their workforce, locally as well as globally.

Georgia Tech already has strengths in these markets, including online degree programs and certificates. New programs should address areas developed to respond to market demands, such as shorter-form programs on emerging topics in STEM, as well as new types of services to provide guidance to people and organizations. These offerings could be available on the Georgia Tech campus in Atlanta, across the state and world, in K-12 schools around the state and the nation, in corporate training facilities, and online, and could include:

- K-12 curricular and extracurricular activities.
- Professional development for K-12 teachers.
- Online degrees.
- New techniques and technologies for remote learning support.
- Evaluation of the effectiveness of learning at every level.
- Research on evidence-based teaching practices — at the intersection of teaching and technology — using research to innovate modalities of learning delivery for individuals across all life stages.
- Data-driven guidance for career mobility using current and predictive data, inclusive of field specialization insights (growing/shrinking field) and knowledge/skill levels required in the chosen field and/or needed to pivot to a new field.
- New forms of agile, just-in-time career networking that provides access to subject matter experts who would not necessarily be available to an individual in current situations.

This is the true revolutionary potential of the new academic unit: making high-quality content available to the world in a way that supports rather than overrides the formation of local groups. These groups can be formal or informal, can be tailored to specific communities and workplaces, and can spread across a learner's lifetime. Georgia Tech will be more flexible, better able to adjust its offerings to fast-moving developments in technology and the economy. Most importantly, in the long run, it will move universities out of their traditional role as gatekeepers for higher education and into place as central supports for much larger educational networks and communities. The new unit will need to constantly innovate, create, and review programming and services to meet ever-changing stakeholder needs.

Summary Recommendation

The working groups recommend the creation of a new College focused on lifetime learning. In addition to the traditional activities of research and instruction, it is further recommended that the new College include innovative learner-focused services for learners at all stages of their lifetime.

This College will be unique from anything currently offered at Georgia Tech or its peers because of its focus on lifetime learning that builds upon current strengths in "K-Gray" learning, providing a longitudinal perspective on teaching, learning, and workforce development — while leveraging Tech's strengths in science and technology.

The working groups believe that the Lifetime Learning College will complement USG initiatives in the lifetime learning space. Unlike current programs that focus on early (K-12) education or higher education, Georgia Tech will focus on the study of accessible STEM curricula and pedagogy, how science and technology relate to learning, and how technology can be used to expand access and learning across the "K-Gray" spectrum. The College will develop its programs with a focus on the specific learning needs of the current and developing workforce and employers of Georgia, including underserved areas and groups. However, it is not the intent of the Lifetime Learning College to train pre-service teachers.

A Note About Naming and Approval

Consistent with the working groups' recommendations, in this report, the recommended academic unit is referred in this report with the placeholder name of the Lifetime Learning College (or the College).

The formal creation of a College that offers a collection of related services, and the final adopted name of this entity is pending all required reviews and approvals.

Lifetime Learning College Strategy and Approach

What Is the Lifetime Learning College?

The fundamental purpose of the Lifetime Learning College is to make learning accessible, affordable, and achievable for all learners from preschool to professional education — and beyond. The college will challenge the status quo, expand access to Georgia Tech, dismantle barriers, and create and apply breakthrough technologies to those ends. It will also share this knowledge with others across the USG and in higher education.

The fundamental issues surrounding education require an interdisciplinary approach, bringing together a broad array of researchers from disciplines including science, engineering, computer science, social and behavioral sciences, work science, the liberal arts, design, and business. Georgia Tech is strong in each of these areas and is well-suited to lead the national conversation on the transformation of education.

The Lifetime Learning College will work through research, curriculum creation, and innovative delivery methods to transform the formal and informal educational ecosystem. We envision new systems that provide effective methods of education to individuals and teach others how to build innovative structures that enable learning.

Traditional institutions, degrees and curricula have served a valuable function for many learners, but they have been slow to innovate [14, p. 7], and are beyond the reach of most learners. Location, cost,

selective enrollments, and inflexible degree programs prevent many of Georgia's residents from engaging in higher education.

The College should be an established academic unit of GT. Like traditional GT Colleges, the new College should generate IP and facilitate instruction and research. Through its services, the college will deliver the content, provide related services to learners, and form partnerships to create innovative growth opportunities within the lifetime learning market. The College will also serve as an innovation hub for individualized and technology-assisted learning, breaking down these barriers to education and provide a quality and accessible education for learners of all ages.

Who Will the Lifetime Learning College Serve?

The Lifetime Learning College will build on the expansion of Georgia Tech's considerable ecosystem for lifetime learning, which includes C21U, CEISMC, and GTPE and will serve as the initial foundational assets of the newly established College while the additional operational plans are established. From within the College, all current activities continue.

Recommendations on Target Key Market Segments

1. K-12 Learners and/or Educators: The Lifetime Learning College should continue, and expand on, the innovative research, innovation, and outreach activities of CEISMC, C21U, GTPE, and college partners.
2. Traditional College-Age Learners: The College should work with Georgia Tech's other Colleges to develop online, for-credit courses that can help eliminate bottlenecks that often hinder degree completion.
3. Post-College/Continuing Education Seekers: The Lifetime Learning College should work with Georgia Tech's other Colleges to grow offerings in the non-degree and for-credit space. Non-degree offerings could include MOOCs, bootcamps, and licenses or certifications.
4. Post-Occupational/Personal Enrichment Seekers: The Lifetime Learning College should work with Georgia Tech's other Colleges to grow offerings in the open enrollment space to reach the personal enrichment seekers portion of the market.
5. Georgia Tech Employees: Offerings should be available and easily accessible to Georgia Tech employees for the purposes of professional development and continuing education.

New College Mission and Vision Statements

Although this document is focused on the development of a Lifetime Learning College, we have discovered that we cannot support lifetime learning without an organizational structure that allows for moving research and innovation in lifetime learning into practice. **To that end, the working groups recommend the creation of a College focused on lifetime learning education and research which will also offer a robust collection of translational services.**

Mission

The Lifetime Learning College will seek to use education, research, and service to address challenges in educational and learning access, effectiveness, and relevance.

The college will inform the next generation of researchers and enable quality education that is accessible, affordable, transformational, and achievable for learners at all stages of life.

Vision

Every individual learner will have access to quality learning delivered at scale at any place, any time, and any stage of life.

The College's Academic Programs and Credentials

The working groups recommend that the Lifetime Learning College should offer credentials at all levels, such as degrees, certificates, and non-degree offerings to reflect the research areas of the College. The new College should also offer enrichment and professional development opportunities such as camps, competitions, conferences, and other informal learning opportunities that can better serve K-12, post-college professional education, post-occupation personal enrichment, and Georgia Tech employee audiences.

The new College intends to address the multidisciplinary study of lifetime learning, particularly through the lens of our world-class technological expertise. In particular, the new College can leverage Georgia Tech's existing strengths to focus on addressing the arc of learning that happens across a lifetime.

The Accenture report notes that the lifetime learner market is "large, varied, and growing" [11, p. 14, 35-44]. Therefore, it is important for the new College to have flexibility in degree and non-degree course offerings, in order to respond to changing market conditions.

Given the research focus of the College, some possibilities for degrees are given in Table 1. This is not an exhaustive list of degrees but a representative sample of types of degrees currently being offered at peer institutions outside of Georgia. More market research, including customer discovery, needs to be completed to determine the viability of specific degree offerings.

Table 1. For-Credit Degree Examples

Institution	**Degree Name**	**Website:**
Northwestern	Ph.D. in Learning Sciences	https://tinyurl.com/bdtyyt32
Drexel	M.S. in Learning Technologies	https://tinyurl.com/rwx2x7u5
Stanford	M.S. in Learning Design and Technology	https://ed.stanford.edu/ldt
Boston College	M.A. in Learning Engineering	https://tinyurl.com/4nyuunup
Columbia	M.S. in Education Policy	https://tinyurl.com/yc75fz3u
Northwestern	B.S. in Learning Sciences	https://tinyurl.com/bdhvvhen

Many existing programs on learning technology focus on only one learner segment (e.g., K-12). The unique aspect of the Lifetime Learning College is a focus on lifetime learning and engagement of learners from "K-Gray," providing a longitudinal perspective on teaching, learning, and workforce development.

In addition to for-credit degrees and certificates, there appears to be a robust opportunity in the non-degree space — both online and in-person. Some representative certificates and opportunities are listed in Table 2.

Table 2. Non-Degree Examples

Institution	**Certificate Name**	**Website:**
Drexel	Online Graduate Certificate in Mind, Brain, and Learning	https://tinyurl.com/wvmpry47

Indiana University	Online certificate in learning science, media, technology	https://tinyurl.com/3hfbf73y
EdX	MicroMasters in Instructional Design and Technology	https://tinyurl.com/4b6ru5sx
Harvard Extension School	Learning Design and Technology Certificate	https://extension.harvard.edu/academics/programs/learning-design-and-technology-graduate-certificate/

Relation to Other USG Institutions

Several USG institutions have well-established Colleges of Education that are charged with preparing new teachers to enter the workforce. GT does not intend to prepare pre-service teachers but will focus on professional development and advancement of in-service teachers. Among the research-focused institutions, Augusta University has the College of Education and Human Development; Georgia State University has the College of Education and Human Development; and University of Georgia has the Mary Frances Early College of Education. Additionally, Kennesaw State University has the Bagwell College of Education. None of these programs seeks to address the arc of lifetime learning, none has our expertise on STEM education, and none has our experience in technology-assisted learning, especially at scale.

There are some programs or centers focused on lifetime learning within the colleges mentioned above. For example, Augusta University offers an Ed.D. in educational innovation. Georgia State University has the Center for Excellence in Teaching, Learning, and Online Education. University of Georgia has the Louise McBee Institute for Higher Education. Finally, Kennesaw State University has the School of Instructional Technology and Innovation.

The working groups believe that the Lifetime Learning College will complement existing USG initiatives in the lifetime learning space. Unlike current programs that focus on early (K-12) education or higher education, Georgia Tech will focus on the study of how science and technology relate to learning and how technology can be used to expand access and learning across the "K-Gray" spectrum.

The College's Research

The Lifetime Learning College will have research as a core part of its mission, and should broadly focus on the science, engineering, and human aspects (social-emotional foundations) of education; accessible and effective education at scale; the business of the educational enterprise enabling individuals to afford education; and the organization of learning across an individual's lifetime. The College will conduct research on topics including pedagogy, andragogy, and K-12 and higher education policy and curriculum. Georgia Tech is already engaged in some of this type of research in pockets across the Institute. Fast-advancing technology has increased the pace at which new research is needed, and the interdisciplinary research focus of the College will open new research areas and speed innovation. Groups that are now separate will coalesce to create a more vibrant and integrated focus on next generation teaching and learning strategies, environments, and models.

According to data gathered by Accenture, higher education research expenditures are growing and, as of 2020, exceeded $1.4 billion [15]. The recent CHIPS and Science Act commits an additional $1.2 billion to educational programming [11, p. 47, 93-94], [16].

Overview of Current Research at Georgia Tech on Lifetime Learning

Georgia Tech is already engaged in multiple research initiatives involving the science and engineering of learning, and our researchers have a long track record of securing funding in this space. Several longstanding initiatives are worth mentioning:

- The Center for Education Integrating Science, Mathematics, and Computing (CEISMC) advocates for and leads systemic changes to increase STEM interest and achievement for all students, especially those underrepresented in STEM. Key examples of CEISMC work include:
  - Development and validation of a coding platform called EarSketch with the School of Music that integrates music and computer science [17]. The platform has been highly successful in strengthening and scaling computer science education. More than 1 million learners in over 100 countries have learned coding skills through this free web-based platform.
  - Expansion of Georgia Tech's K-12 InVenture Prize into Georgia's more rural communities [18]. This competition promotes creativity, invention, and entrepreneurship.
  - More than a decade of continuous federal funding (e.g., NSF, NASA, DOEd) to conduct research on the design, implementation, and evaluation of innovative curricula, programs, and policies.
  - Collaboration with more than 350 Georgia Tech researchers to integrate educational research and innovative outreach activities into their funded research as a means of integrating education, service, and research; broadening participation; and amplifying the impact of Georgia Tech scholarship within the broader community.
- The Center for 21st Century Universities (C21U) is Georgia Tech's living laboratory for fundamental change in education. C21U's team of technologists and researchers support Georgia Tech's mission of innovation by pushing the boundaries of what is already done in higher education to bring the most impactful resources and technologies to learners. Key examples of C21U research include the following:
  - C21U researchers actively conduct research that leverages various learning analytics and machine learning techniques. For example, C21U researchers are working to predict the success of applicants for the Online Master of Science in Analytics (OMSA) program [19].
  - In conjunction with a Vertically Integrated Projects team and with the support of C21U graduate research assistants, C21U researchers analyze large-scale data sets, including clickstream and event-type data, on the millions of learners enrolled in Georgia Tech's online courses to determine behavioral patterns that are used to improve the instructional design of the courses [20].
  - The C21U research team often collaborates with faculty on experimental research projects. For example, C21U researchers are engaged with professors and researchers in the School of Psychology to measure human brain activity while students are exposed to online instructional material to understand how and when learning occurs.
- Georgia Tech Professional Education (GTPE) believes that lifetime learning is the vehicle of individual progress. As an academic unit of Georgia Tech, GTPE works with professionals — and the organizations they help power— to provide multiple pathways to the world-class offerings at Georgia Tech [21]. GTPE conducts research on the impact of technological advances on the workforce. It looks at drivers of change and examines how they affect the augmentation and automation of careers. It then seeks to create pathways for adult learners to upskill or reskill as needed to achieve their career goals. Additionally, GTPE studies learning delivery mechanisms, with a particular focus on scalable models. It also conducts research on new ways to document learning and skill development through digital credentials.
- Georgia Tech Professor Ashok Goel is the executive director of NSF's National AI Institute for Adult Learning and Online Education (AI-ALOE) [22]. AI-ALOE is a world leader in the development of novel AI theories and techniques for enhancing the quality of adult online education. Researchers conduct fundamental research into AI that is grounded in theories of human cognition and

learning, supported by evidence from large-scale data, evaluated on a large variety of testbeds, and derived from the scientific process of learning engineering.

As you can see from these examples, our key themes are:

- The study of how science and technology relate to learning.
- How technology can be used to scale education to reach broader populations.
- Effective teaching strategies, found from new forms of learning, for diverse learners to maximize impact.

Moreover, CEISMC, C21U, GTPE, and AI-ALOE collectively cover learning across the "K-Gray" spectrum. Their combined research efforts provide a holistic view of learning, which in turn speeds innovation. While we are making these strides in learning science, accessible education, and teaching technologies, we are missing a critical component: a cohesive strategy and structure that supports further development and the translation of research into practice. The new Lifetime Learning College provides this strategy and structure, including a community of scholars whose work is dedicated to these themes.

The College's Services

This new College will need a way to translate its work and research and should offer a robust collection of services. The College will work in partnership with Georgia Tech's Colleges and units, when appropriate, to offer programs such as online, for-credit courses; non-degree course offerings; alternative credentials; and lifetime career guidance. It is critical that the Lifetime Learning College serve as a laboratory to test new instructional technologies and methods, while also delivering valuable learning experiences that build high-demand skills. Data gathered from these activities can then be used by faculty in the College to generate new and innovative research. The College will:

- Create an intellectual community between academic units fostering research, education, and service in ways that the current structure does not allow.
- Create lifetime learning strategies and metrics across the K-Gray spectrum, and systems that support these efforts.
- Deepen relationships and operations with all Colleges, GTRI, and the Enterprise Innovation Institute.

Type and Composition of the Faculty and Staff

The working groups recommend that the Lifetime Learning College should operate like Georgia Tech's other six Colleges. The Lifetime Learning College should have the flexibility to hire a mix of faculty and staff to reflect the activities of the College, including affiliated positions across the campus. The College should also have the flexibility to organize into subunits as appropriate. The College should provide basic teaching, administrative, and research support for faculty members.

Given the interdisciplinary nature of the new College, joint and courtesy appointments with Georgia Tech's other Colleges will likely be important. All faculty and staff in the Lifetime Learning College will work within the established Georgia Tech and USG governance framework.

1. GT faculty should be utilized for all credit-bearing instruction and should have the option to provide additional services on a contract basis as is done with GTPE and CEISMC activities.
2. The College will expand both faculty and staff to support the mission of the College. There will be new positions established, plus possible movement of faculty from other GT Colleges as desired.
3. The College should engage short-term instructors, beyond those in GT's employment.

Business Model and Operations

In the summer of 2022, the Provost aligned three current organizational units – CEISMC, C21U, and GTPE – together to create the foundation for the new college. As we prepare to establish the new college, these three units will fully unite as a single division and will function in a cohesive operational structure. The current programs and activities of these three units are anticipated to continue as they function now, but from within the structure of the college. Through the leveraging of existing resources, the need for new operational resources is minimized. Institute strategic allocations will seed activities expanding into new markets that both increase access to learners in the state but also create new revenue streams.

A variety of structures were discussed by the working groups and by Accenture [11, p. 16, 19, 60-63]. Those combinations included variations on creating a new College within the existing Institute academic structure, but also supporting the ability to provide services that support the lifetime learning mission. A practical application and translation of the work and research done by the College is vital to its mission. Once established, one of the first items to address will be determining an effective business model that will support this need.

In preparation we have identified several key objectives to guide the development process:

- Georgia Tech will lead public higher education in a lifetime-learning mindset, acting as an exemplar for others.
- The operation of the existing academic, research, and outreach activities must continue while the legal structure of the organization is being considered and later established.
- The structure should allow for a nimble organization that can compete in meeting the needs of the state of Georgia, the employers, and their organizations within the state, as well as employees/students of its programs and services.
- The College and its services need to continuously innovate, foster entrepreneurship, and streamline their support processes.
- The College's model should allow for the award of federal, state, and local grant funds, as well as gifts and other types of private and corporate support.
- The flow of learner data should be accessible and optimized so that GT provides educational programming and learning/career services for all learners, including traditional GT students.

If the guiding objectives are realized, the new unit will gain the potential for flexible business operations that allow for the creation of optimal procurement and contracting capabilities. Multiyear agreements, as well as risk and reward-sharing agreements with third parties to foster novel ideas for programs/services, would be possible. Meeting these objectives positions GT to expand access and reach its aspirations for lifetime learning.

A poor structure could complicate use of Institute-provided services like collaboration tools, learning management systems, and student information systems. Furthermore, if not structured properly with a clear purpose for delivering services that directly benefit the College and GT, services could take on their own mission separate from GT rather than being innovative, supportive activities for the Institute.

Potential Revenue Streams for the New College

- Direct tuition payments and registration fees from learners, when appropriate.
- Fees from services provided to learners, when appropriate.

- Revenues from development of new programs and credentials relevant to employer/learner needs, including more contract opportunities with corporate/government organizations. This includes working with all of Georgia Tech and the new College.
- Funding from grants, contracts.
- Funding from financial assistance for learners' tuition.
- Shared rewards with third party educational partners.
- Potential licensing revenue from created services and programs.
- Philanthropy from individuals and organizations.
- Potential funds and fees for services provided to and from other GT units.
- State appropriations as provided by appropriation formulas.

Considerations for Moving Forward

Overall, it has been determined that more due diligence is needed to identify the ideal future structure. So, it is recommended that the next phase of planning incorporate legal counsel well versed in working with the USG and its colleges. This will help Georgia Tech ascertain the various structures, fund flows, and bylaws to affect the best possible outcome for the configuration and legal designation for the College's services. Further, a financial and business case analysis should be undertaken to evaluate existing non-credit enrollments and learner desires for the courses; business models that enable more streamlining; coverage for overhead; and the overall risk/reward to units and instructors. Lastly, the need to trademark the name of the College or programmatic services should be evaluated for potential patents on the operating model and processes and enabling potential future licensing revenue.

As the Institute moves into the implementation phase of the creation of a new College, we should revisit these considerations throughout the process:

- Evaluating of new processes and structures so that the funding and operational activities of our current programs continue, and current learners and employees are not negatively affected. Also funding expansion through investments made either internally (GT and the new College) and/or externally via corporate and government entities.
- Assessing the target scale and scope of programing and activities to determine if they need to be refined, focused, and/or expanded from the current targets of C21U, CEISMC, and GTPE.
- Identifying opportunities in the "Services" space. What are the goals to be achieved in offering services? How will the target markets be defined and served? How will the services support or leverage the existing activities of the new College and GT? How will the lifetime of learning be connected for the individual learners?
- Identifying which segments of the employer-funded learning market GT is positioned to address and how this strategy will affect the intended business structure.
- Identifying markets and programs to leverage and expand programming to serve K-12 learners.
- Identifying the target audiences in the credit and non-credit learner market and the effects these market segments will have on the intended operating model.
- Identifying sustainable research funding sources and the related implications for the intended operating model.

As Georgia Tech moves forward with a lifetime learning approach, there are many systems, policies, and processes that have their roots in the residential and traditional student experiences. A variety of systems will be vital in fulfilling the lifetime learning vision within the Institute's ethos:

- ERP systems such as the student information systems (Banner) and data warehousing.
- A more robust utilization of the customer relations management (Salesforce CRM) system to engage K-12 learners to across their career and incorporate non-credit learners and programming.

All will be important to fulfill the lifetime learning vision within the Institute's ethos, all will evolve.

Change Management and Communications

The working group developed a change management plan to set the culture of the new College and execute a plan that achieves the following three goals:

1. Ensures the affected stakeholders understand the concept of Lifetime Learning and the goals, values, and changes needed to create a Lifetime Learning unit.
2. Builds enthusiasm, confidence, and positive energy in advancing toward the goal.
3. Engages all stakeholders who can influence the success of this endeavor, and those who are impacted, through three intersecting and reinforcing workstreams.
    a. Communications – Develop and deliver clear, consistent, customized messaging to stakeholders. Use multiple methods including push (emails, articles), pull (website, FAQs), large group (town halls), small group (team meetings), and individual (1:1 discussions) approaches.
    b. Stakeholder Engagement – Enlist champions for change across stakeholder groups (change agent network). Empower them with knowledge, tools, and readiness to represent the project within their circles of influence. Periodically assess stakeholder understanding, sentiment, and questions through a Change Impact Risk and Readiness Assessment (CIRRA).
    c. Organizational Culture and Structure Alignment – Partner with leaders and members of organizational units in which culture, structure, and operating norms are expected to change the most. Establish and facilitate a series of interactive discussions, with opportunities for two-way and anonymous feedback. Engage affected stakeholders in design sessions to co-create the organization (within established parameters).

The working group has planned and approached the work in three phases, detailed below.

Phase 1: Ideation – Defining the New Academic Unit

The objective of Phase 1 of this project was to perform an analysis and develop a set of recommendations regarding the establishment of a potential new academic unit. These recommendations are based on discovery and research conducted independently and with an external consultant (Accenture) on the national landscape and are a synthesis of engagement activities with both internal and external stakeholders. To conclude Phase 1, Institute leadership reviewed the recommendations and made the following decisions: 1) this new academic unit should be a new college at Georgia Tech, and 2) this college should focus on the delivery of curriculum, research, and learner-focused services to support all stages of the learner's lifetime.

Phase 1 resulted in this report — a comprehensive Initiative Report that includes recommendations from the working groups and an approach for establishing a new college. The recommendations and decision

points from Phase 1 prepares the university to move forward, using guidance from USG leadership, into the next phase of work, that is the detailed planning and implementation of the new college.

Phase 2a and 2b: Decision Review and Implementation Planning – Preparing for the New College

Phase 2a, USG leadership review and decision will run in parallel with Phase 2b, which will focus on detailed implementation planning for the new college.

The objectives of Phase 2a are:

- To discuss and review recommendations and decisions points on the new academic unit with the University System of Georgia and campus leadership.
- Communicate the results of Phase 1 to campus stakeholders and external partners.

The objectives of Phase 2b are:

- To develop a detailed operations and transition plan for implementing Institute leadership decisions about the function and structure of the new college.
- To establish a new organizational structure and culture for the College.
- To cultivate and secure buy-in and support for the new College from campus stakeholders.

During Phase 2b, new working groups will be formed, comprised of experts with experience in the areas needed to establish the new College (e.g., infrastructure operations, academic/faculty affairs, student services, research administration, technology) to develop an operations and transition plan for the new college. Subject-matter experts will be identified from administrative and academic units from across the Institute, including the three units that will form the core of the Lifetime Learning College. Faculty and staff from the core units will also be engaged in a series of activities to merge individual unit cultures into one organization. Phase 2 will conclude with Institute leadership reviewing the proposed operations and transition plan and deciding which elements of the plan will be adopted for the implementation and launch of the new college.

Phase 3: Launch – Establishing the New College

The objective of Phase 3 is to execute the final operations and transition plan to establish, launch, and begin operations for the new College. Phase 3 will result in the formation of the new organizational structure, mobilization of core units, and initialization of budget allocations.

Next Steps

The launch of a new college requires considerable planning and discussion. Throughout summer and fall 2023, Phases 2a and 2b will continue with decision review and implementation planning, to include the development of the proposed college operating infrastructure.

Planning for and in anticipation of the formal approval of the college during Academic Year 2023-24, interim college leadership will be installed to see the launch and initial implementation phase of college operations.

References

[1] Institute for the Future for Dell Technologies. (2017). *The Next Era of Human-Machine Partnerships.* https://legacy.iftf.org/fileadmin/user_upload/downloads/th/SR1940_IFTFforDellTechnologies_Human-Machine_070717_readerhigh-res.pdf

[2] Boston Consulting Group. (2022, May 23). *Shifting Skills, Moving Targets, and Remaking the Workforce*. https://www.bcg.com/publications/2022/shifting-skills-moving-targets-remaking-workforce

[3] U.S. Bureau of Labor Statistics. (2021, August 31). *Number of Jobs, Labor Market Experience, Marital Status, and Health.* https://www.bls.gov/news.release/pdf/nlsoy.pdf

[4] U.S. Bureau of Labor Statistics. (2021, November 4). *Number of people 75 and older in the labor force is expected to grow 96.5 percent by 2030*. https://www.bls.gov/opub/ted/2021/number-of-people-75-and-older-in-the-labor-force-is-expected-to-grow-96-5-percent-by-2030.htm

[5] United Nations Department of Economic and Social Affairs. (2022). *World Population Prospects 2022.* https://population.un.org/wpp/Download/Standard/Population/

[6] EAB. (2021). *Understanding Your Future Learner: Adult Learner Recruitment*

[7] Lumina Foundation. (2011, September). *Time is the Enemy.* https://www.luminafoundation.org/wp-content/uploads/2017/08/time-is-the-enemy.pdf

[8] The Center on Reinventing Public Education. (2022). *The State of the American Student: Fall 2022.* https://crpe.org/the-state-of-the-american-student/

[9] Holon IQ. (2022, January 2). *Global EdTech Venture Capital Report - Full Year 2021.* https://www.holoniq.com/notes/global-edtech-venture-capital-report-full-year-2021

[10] Faethm by Pearson. (2022, August). *Insights Report*

[11] Accenture. (2022, November 4). *Georgia Tech Lifetime Learning Final Report*

[12] Center on Budget and Policy Priorities. (2012, November 15). *Pulling Apart Income Inequality in Georgia.* https://www.cbpp.org/sites/default/files/atoms/files/Georgia.pdf

[13] The Evolllution. (2012). *Lifelong Education and Labor Market Needs*

[14] The Burning Glass Institute. (2022, June 23). *The State of Skills: Tracking the Emerging Skills That are Transforming the Market*

[15] National Science Foundation. (2021, December 27). *Higher Education Research and Development: Fiscal Year 2020.* https://ncses.nsf.gov/pubs/nsf22311

[16] Association of Science and Technology Centers. (2022, August 9). *CHIPS and Science Act authorizes significant investment in STEM.* https://www.astc.org/issues-policy-and-advocacy/chips-and-science-act-authorizes-significant-investment-in-stem/

[17] Georgia Tech School of Music. (2011). *EarSketch.* https://earsketch.gatech.edu/

[18] Georgia Tech Center for Education Integrating Science, Mathematics, and Computing (CEISMC). (2023). *K-12 InVenture Prize.* https://k12inventure.gatech.edu/

[19] Georgia Tech Center for 21st Century Universities. (2020, August). *Predicting Applicant Admission Status for Georgia Tech's Online Master's in Analytics Program.*

https://www.c21u.gatech.edu/papers/predicting-applicant-admission-status-georgia-techs-online-masters-analytics-program

[20] Georgia Tech Center for 21st Century Universities. (2021). *Data Driven Education.* https://mediaspace.gatech.edu/media/2021+Innovation+Competition-Data+Driven+Education+/1_iq9vdzu1

[21] Georgia Tech Professional Education. (2023). *Program Offerings.* https://pe.gatech.edu/programs

[22] Georgia Institute of Technology. (2021). *National AI Institute for Adult Learning and Online Education (AI-ALOE).* https://aialoe.org/

[23] Inside Higher Ed. (2022, January 6). *Fewer High School Graduates Go Straight to College. https://www.insidehighered.com/news/2022/01/07/fewer-high-school-graduates-enroll-college*

Appendix A: Working Group Members

Executive Sponsors:

- Chaouki Abdallah | Executive Vice President for Research
- Jim Fortner | VP for Finance and Planning & Interim CFO
- Steve McLaughlin | Provost & Exec VP for Academic Affairs
- Mike Shannon | Interim Exec VP for A&F, Interim Chief Business Officer

Project Champions:

- Nelson Baker | Dean, GT Professional Education
- Charles Isbell | Dean, College of Computing

Executive Steering Committee:

The ESC includes the above-named Executive Sponsors and Project Champions, and

- Jonathan Clarke | Associate Dean, Scheller College of Business
- Lizanne DeStefano | Executive Director, CEISMC
- Michael Hagearty | Institute Communications
- Steven Harmon | Associate Dean, GTPE
- Jennifer Herazy | Associate Vice President, Administration & Strategy (Provost & EVPR)
- Daren Hubbard | VP IT & CIO
- Laurence Jacobs | Senior Vice Provost for Education and Learning
- Stephen Ruffin | Associate Dean, GTPE

Working Group Members:

Academic Vision, Research, Faculty Governance & Strategic Planning

- Charles Isbell | Dean, College of Computing
- Jonathan Clarke | Associate Dean, Scheller College of Business
- Stephen Ruffin | Associate Dean, GTPE/CoE
- Steven Harmon | Professor, School of Industrial Design
- Lizanne Destefano | Professor, CEISMC/CoS
- Ashok Goel | Professor, School of Interactive Computing
- David Joyner | Senior Research Associate, College of Computing
- Mark Nolan | Associate VP of Corporate Engagement, Corporate Engagement
- Greg King | Senior Extension Professional, Institute Relations
- Bradley Hastings | Executive Director of Development, College of Engineering and Interim Director of Development, College of Computing
- Rhett Mayor | Associate Professor, School of Mechanical Engineering
- Richard Barke | Associate Professor, School of Public Policy
- Julia Kubanek | VP of Interdisciplinary Research
- Charlie Domercant | Senior Research Engineer, GTRI
- Sonia Alverez-Robinson | Executive Director of Strategic Consulting
- Juana Cunningham | Senior Director of Strategic Consulting, Office of Strategic Consulting
- Rohan Sohani | Undergraduate Student Body President

Business Model & Operations

- Nelson Baker | Dean, GTPE--Administration
- Daren Hubbard | VP IT & CIO, OIT- Office of the CIO
- Kathleen Gosden | General CounselOffice of the General Counsel
- Tanesha Steward | Director of Affiliated Orgs, Office of the General Counsel
- Cynthia Martin | Director of Institute Financial Support Research, Institute Finance Support
- Cindy Hope | Senior Research Associate, Research Administration
- Mary Albertson | Research Associate II, Commercialization
- Patrice Miles | RBW-Administrator Professional, GTPE-Business Admin & Finance
- Jeff Fischer | Director Information Technology II, GTPE--Information Technology
- Brandon Mitchell | Director Financial Admin II, CEISMC
- Sonia Alverez-Robinson | Executive Director of Strategic Consulting
- Juana Cunningham | Senior Director of Strategic Consulting, Office of Strategic Consulting
- Reta Pikowsky | Associate Vice Provost & Registrar Registrar's Office
- Gloria Kobus | Bursar, Bursar's Office
- Kellye Terrell | AVP Human Resources, GTHR
- Pam Buffington | Director of Research Cyberinfrastructure & Computing, OIT-PACE
- Emily Howell | Senior Director of Finance, Provost & Executive VP for AA
- Brandi Foley-Rodgers | Director of HR II, Provost & Executive VP for AA
- Laura Hessler | Senior Director of HR Support Services, Administrative Service Center
- Glenn Hopkins | Principal Research Engineer, GTRI-Sensors Elec (GTRI-SEAL)

Change Management & Communications Planning

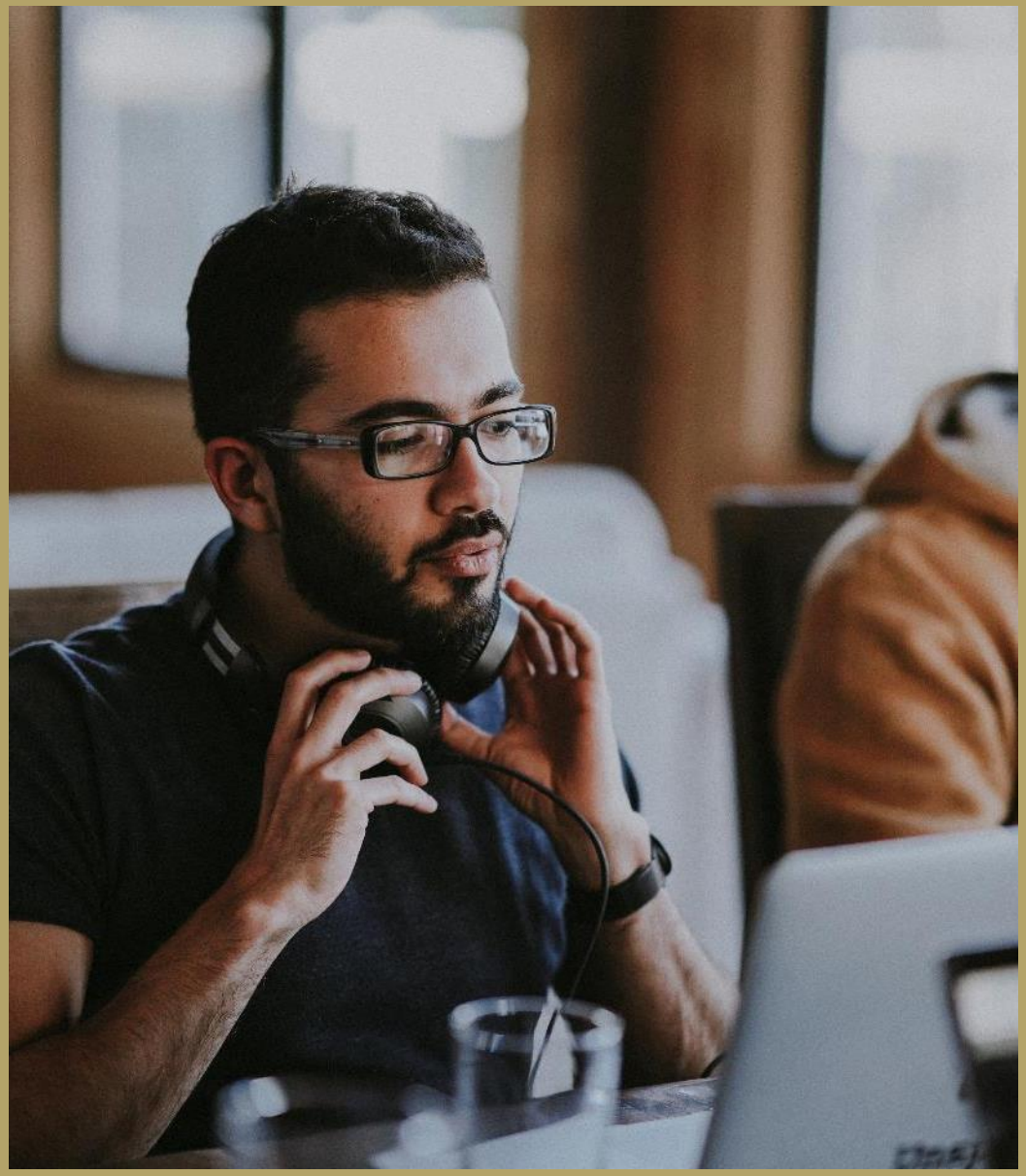
- Renee Kopkowski | VP Institute Communications, Institute Communications
- Jennifer Herazy | AVP Strategy & Administration, Academics & Research
- Michael Hagearty | AVP Campus News & Events, Institute Communications
- Alex Orso | Associate Dean, College of Computing
- Susan Burns | Associate Chair-Finance & Admin, Civil & Environmental Engineering
- Sonia Alverez-Robinson | Executive Director of Strategic Consulting
- Juana Cunningham | Senior Director of Strategic Consulting, Office of Strategic Consulting
- Shannon Helton-Amos | Director of Marketing and Digital Strategy, GTPE--Marketing
- Brittany Aiello | Communications Program Manager, C21U
- Joelle Walls | Communications Manager, CEISMIC
- Morgan McCombs | Institute Relations, Institute Relations
- Ann Claycombe | Director of Communications, College of Computing
- Susie Ivy | Director, Academic & Research Communication, Institute Communications
- Rachael Pocklington | Strategic Communications & Initiatives Prog Dir, Institute Communications
- Laura Pusateri | Employee Engagement Manager, GTHR
- Sara Warner | Senior Director of Communications, Student Engagement

Appendix B: Accenture Report

Georgia Tech Lifetime Learning

Final Report

11.4.2022



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Lifetime Learner Market Research

In support of the forward-looking and transformative lifetime learning initiative, Georgia Tech (GT) partnered with Accenture to better understand and benchmark the lifetime learner market, innovative operating models, and sustainable funding sources.

To help achieve this goal, Accenture engaged in a two-part research effort:

- **Primary research**: conducting 25+ interviews comprised of internal with Georgia Tech employees and external with **top ranked Universities and employers** and
- Extensive **secondary research** across multiple sources.

The lifetime learner market (LTL) is **large, varied, growing, and attractive**

Opportunities for **innovation in this market are ripe** and the key conditions for success are known

Georgia Tech is **well positioned to contribute to the skill/talent needs of the State** through programs for lifetime learners

Georgia Tech can better meet its objectives for lifetime learning by **establishing a new lifetime learning college**, in combination with a related lifetime learning **affiliate**

Sources throughout noted in full document

Lifetime learning market segmentation

The lifetime learning market can be broken down into three unique areas of focus: teaching, research/innovation, and services. Each with unique attributes and involvements in the market

TEACHING

Primary/secondary

Common higher education interventions within **K-12 landscape**

- Camp programs
- For-credit programs
- Extra-curricular programs
- Charter and lab schools
- Advocacy
- Teacher development

Credit bearing degrees and credentials

Non-credit learning

Independent learning ("B2C"): Self financed individuals who are seeking non-credit learning options for personal fulfillment or to gain a specific skill

Employer-sponsored learning ("B2B"): Employers sponsor both professionals and general employees to participate in non-credit and credit learning to reskill and upskill in their roles

RESEARCH/ INNOVATION

- Federal funded
- Non-federal funded

SERVICE

- Community and corporate engagement

Note:
a). The three areas of focus: teaching, research/innovation, and services, were inspired by an early understanding of Georgia Tech's interests in the lifetime learning market
b). Each vertical contains unique attributes and ways to view how the market operates, who is present and participating in each area, and how engagement is measured
c). There are six defined learner mindsets, but only four are applicable to this research based on the definition of lifetime learning

The lifetime learner market is large, varied, growing, and attractive

Non-credit learning – fastest growing

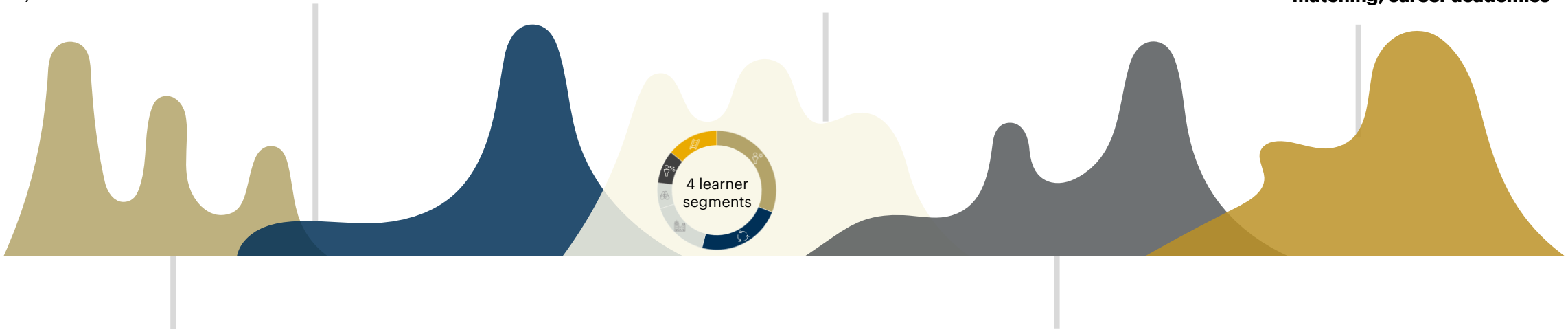
- Bootcamps, non-credit courses, and MOOCs segments have been growing at **35-50%**.
- Education as a benefit market is now **$28B**
- Professional education market is **$34.3B** with an **11.2%** growth rate
- Serving these markets requires responsive, agile program development. The most important criteria is the ability to customize to the employer's needs. Multi-year contracts are common.

Credit-bearing degrees and credentials – largest market

- **19.4M students** in the four segments considered 'lifetime learners' are annually enrolled in higher ed
- Learners return to higher ed periodically through their life, but switch segments as their needs and mindsets change
- Attracting and serving these students requires differentiated offerings and services to meet their current needs

Services

- Example services in the lifelong learning market include **pro-bono community services, data services, clinical education network, career advising and matching, career academies**



K-12 Programming—distinctively scaled

- While all top 50 universities run k-12 programming, **GT is differentiated** due to the fact it not reliant on tuition funding, allowing the programs to be **more accessible and scaled**
- Maintaining, extending, and fortifying these programs **requires GT to identify recurring, sustainable sources of funding**, such as state funding or endowed funds

Research – growing, but high competition

- There are **$1.6B in research expenditures** going to higher ed for education research; growth rate is 4.4% CAGR since 2016
- Though ~half are federal or state funded, **~¾ of the growth has come from non-government sources** like foundations
- Most universities **do not combine LTL programming and education research** under the same umbrella; GT doing so could open up opportunities for synergies and innovation

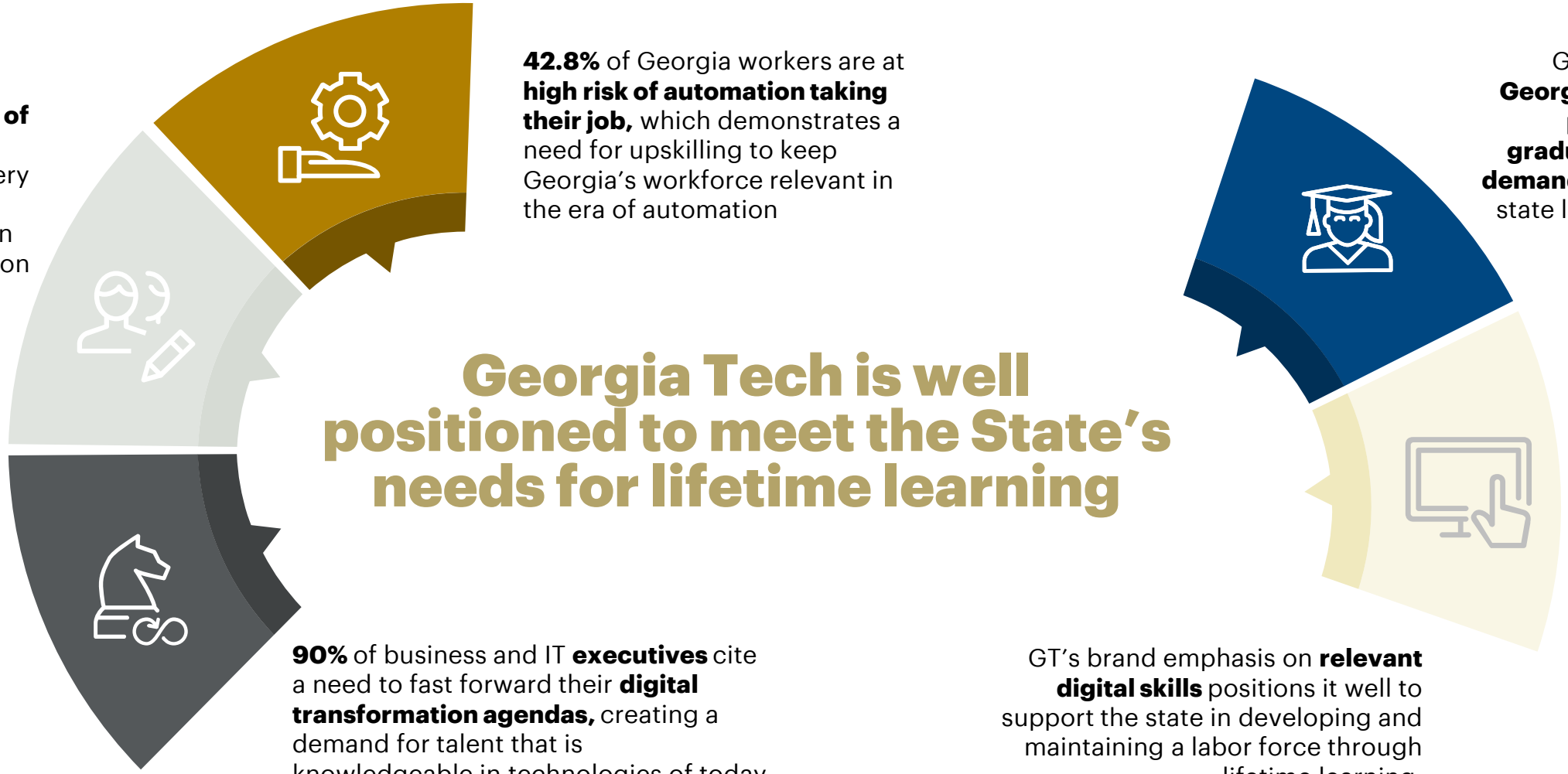
Sources throughout noted in full document

Lifetime learning can support the state in remaining competitive with employers and employees alike

GT is well positioned to contribute to the skill/talent needs of the state through programs for lifetime learners

92% of executives rated **"availability of skilled labor"** as **"important"** or "very Important" in choosing a location for their organization

42.8% of Georgia workers are at **high risk of automation taking their job,** which demonstrates a need for upskilling to keep Georgia's workforce relevant in the era of automation



Georgia Tech is well positioned to meet the State's needs for lifetime learning

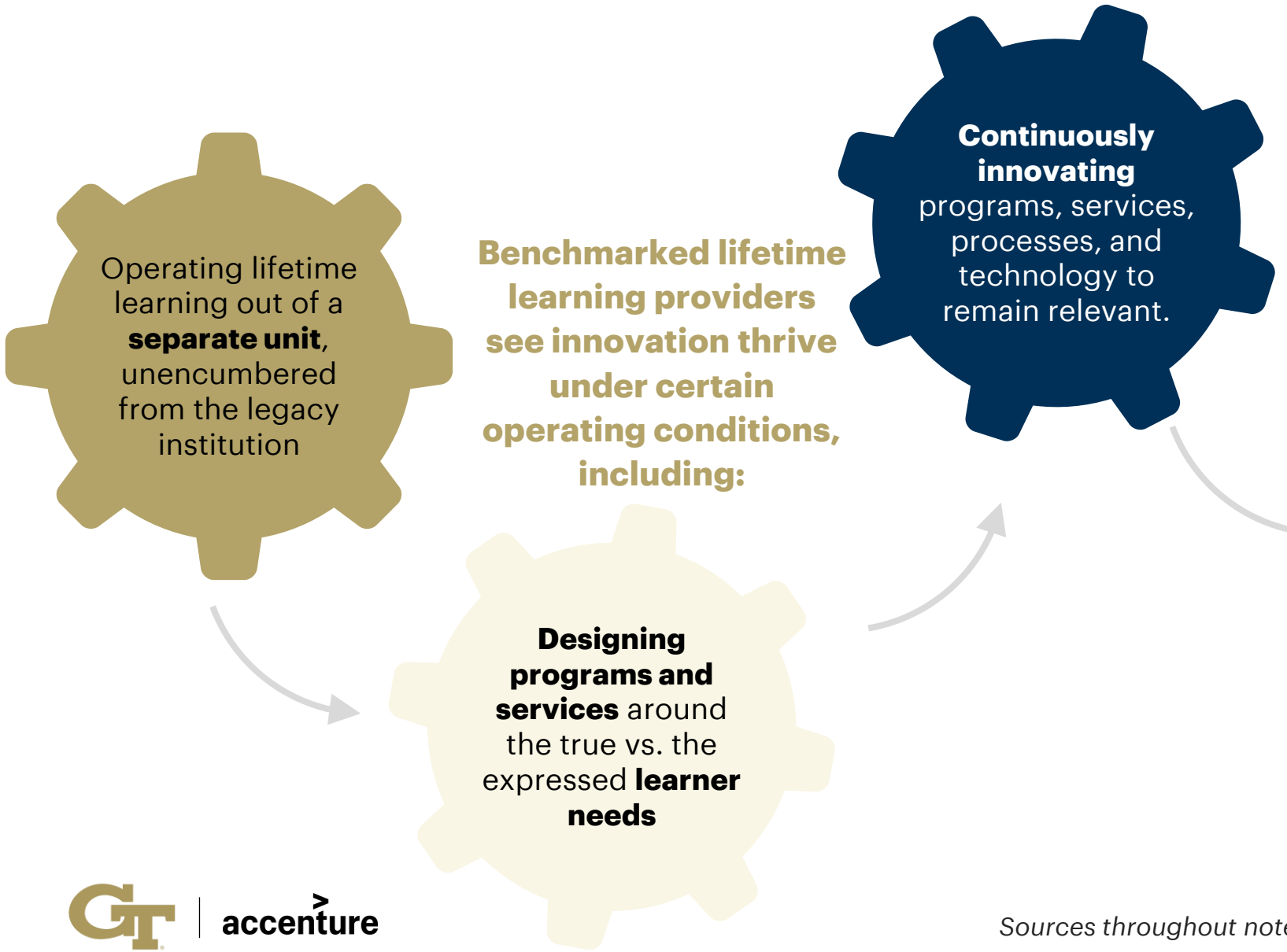
GT is **already Georgia's largest producer of graduates for in-demand jobs** in the state labor market

90% of business and IT **executives** cite a need to fast forward their **digital transformation agendas,** creating a demand for talent that is knowledgeable in technologies of today

GT's brand emphasis on **relevant digital skills** positions it well to support the state in developing and maintaining a labor force through lifetime learning.

Sources throughout noted in full document

Innovation in lifetime learning thrives under certain conditions



Most frequently mentioned innovation opportunities include:

Learning: Cohort-centric and immersive

Predictive analytics

Dynamic and evolving curriculums

Competency based progressions

Personalized and localized guidance

Measurability of post program success

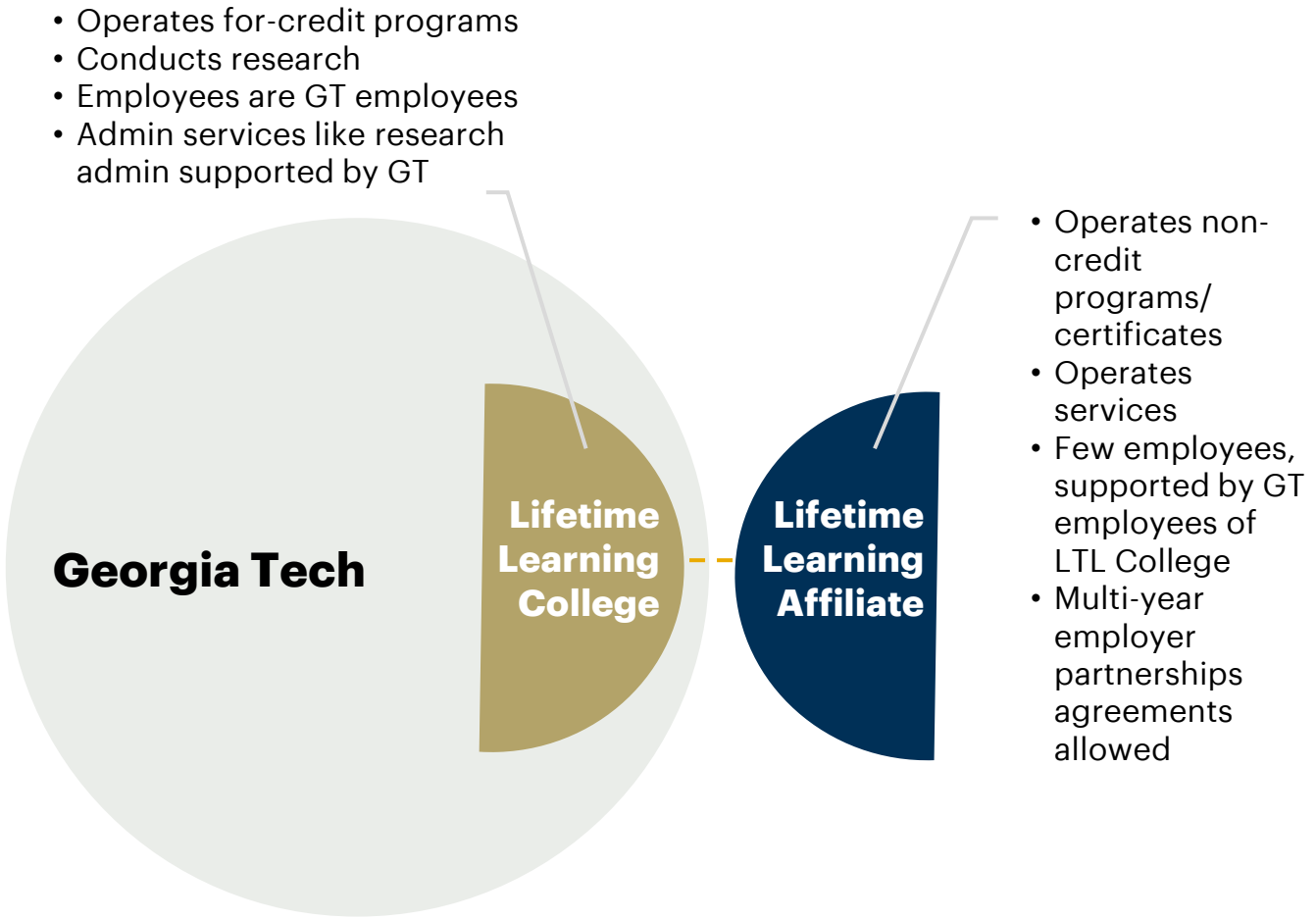
Sources throughout noted in full document

GT's objectives of…

- Being able to offer accredited credentials
- Conducting federally funded research
- Being agile and responsive to needs of employers funding education
- Innovating with multi-year investments and agreements
- Enabling Georgia Tech faculty and staff to serve across the LTL programs

…would be effectively served by **establishing a new lifetime learning college, in combination with a related lifetime learning affiliate – otherwise known as a "dual operating model."**

Conceptual Dual Operating Model for LTL



Sources throughout noted in full document

Consideration for Next Steps

As the working groups continue their research and work over the course of next few months to lay the foundation for lifetime learning and the new college, below are some key steps to consider:

00

Create a nimble, transformative organization

- In order to play in an evolving space, GT can create an organization that is innately structured to adapt and meet changing needs – unencumbered from the legacy organization, which is a critical component for innovation success

01

Defining the areas of innovation for GT for lifetime learning

- Given the direction the market is headed, GT can define where and how it wants to leverage its strengths to innovate in the lifetime learner market
- Prioritize the categories of innovation that GT wants to play in

02

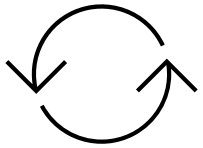
Defining the target market / audience for GT for near-term vs. long-term

- Contemplate target scale and outcomes for K-12 programing considering benchmarks
- Identify which segment of the employer-funded market GT is positioned to address
- Define target audience for the non-credit market
- Define areas of focus for research and types of services to provide

03

Establishing and prioritizing the focus areas for GT

- Consider key areas in which Georgia Tech can help continually close labor market gaps
- Critically evaluate the consequences of competing for open market share



Iterate steps 1-5 as needed

04

Narrowing in on the operating model levers that are relevant and critical for GT

- Understand where Georgia Tech would like to sit on each lever
- Conduct additional research and/or follow up interviews as needed
- Synthesize findings and create an operating model that meets those criteria

05

Defining the ROI and sustainable funding model for GT

- Consider the funding sources you want to target
- Follow up with organizations that have a similar funding model to your goal
- Create an action plan to identify and navigate around barriers

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Executive summary

Project overview

The Situation

The lifetime learning (LTL) strategy

- Is core to delivering GT's mission
- Is 1 of 20 priority institute initiatives with intersections across initiatives and with dedicated working groups
- Goal is to be data-informed, sustainable, scalable, transformative and disruptive

GT engaged accenture to provide relevant information for the working groups on:

- Lifetime learner market
- Establishing and structuring a new college

This information aims to help the working groups to make data-informed decisions as they establish the right model for GT.

The Approach

Over an 8-week period, Accenture and developed a market research report:

- ❑ To provide a landscape view of the lifetime learner market activities understood outside of Georgia Tech,
- ❑ The prevailing innovations (in operating models and delivery), and
- ❑ Identify opportunities for GT to grow and scale in the market.

The team conducted secondary and primary research (interviews):

- **Share key data points / observations relevant to the research**
- **Derive insights for ongoing use and conversations**
- **Develop a set of recommended next steps for the working groups**

The Outcomes

The Market Research report driven by a hypothesis framework includes:

- ☑ Areas of opportunity in LTL innovation
- ☑ Key trends in the LTL market
- ☑ Identification of skills gaps vs. degrees pursued to demonstrate a mismatch
- ☑ A view of the business models to address the LTL market
- ☑ Sustainable funding model options

The opportunities for innovation are ripe

There's a lot of innovation happening in the lifetime learning market, yet there are some clear gaps

Principles of successful innovation

1. Ambitiously forward-thinking — ASU
2. Unencumbered by existing business models — Purdue Global
3. Deeply understand the true – not expressed - customer needs — snhu
4. Incubated through addressing a need, but scaled through prestige branding
5. Strong innovation processes — M

The essential conditions that drive radical/disruptive innovation

LTL innovation categories

- Enrollment type
- Age group
- Learner mindset
- Credential type
- Demographics
- Modality

Innovation happens across one or more dimensions in LTL

Evolution of innovation in lifetime learning

Note: Illustrative, not in chronological order

1977

- Georgia tech becomes pioneer in distance education
- POIs focus on students as customers – huge success
- Breakdown in the perceived value of college degrees
- Employers partnering with universities to upskill workforce
- Universities buying online education platforms
- Universities partnering with platforms to co-build content
- Digitization of employer trainings
- Reduce the "some college" percentage
- AI and ML to predict job and skill requirements
- Bringing alumni to continuing education programs
- IBM badges
- Investing in shared infrastructure
- Acquiring universities with online presence
- Platforms providing subscription model for learning
- Universities creating digital twin campuses

Present

Analysis of the market shows continuous innovation in lifetime learning making higher-ed nimbler and quicker in their response

Where the market may be headed

- Predictive analytics
- Learning: Cohort-centric and immersive
- Dynamic and evolving curriculums
- Competency based progressions
- Measurability of post program success
- Personalized and localized guidance

However, ongoing growth and innovation are needed to stay relevant and address the growing lifetime learner market

Note: *Data sources will be provided throughout the deck on each corresponding slide*

Lifetime learning market segmentation

The lifetime learning market can be broken down into three unique areas of focus: teaching, research/innovation, and services. Each with unique attributes and involvements in the market

TEACHING

Primary/secondary

Common higher education interventions within **K-12 landscape**

- Camp programs
- For-credit programs
- Extra-curricular programs
- Charter and lab schools
- Advocacy
- Teacher development

Credit bearing degrees and credentials

Non-credit learning

Independent learning ("B2C"): Self financed individuals who are seeking non-credit learning options for personal fulfillment or to gain a specific skill

Employer-sponsored learning ("B2B"): Employers sponsor both professionals and general employees to participate in non-credit and credit learning to reskill and upskill in their roles

RESEARCH/ INNOVATION

- Federal funded
- Non-federal funded

SERVICE

- Community and corporate engagement

Note:
a). The three areas of focus: teaching, research/innovation, and services, were inspired by an early understanding of Georgia Tech's interests in the lifetime learning market
b). Each vertical contains unique attributes and ways to view how the market operates, who is present and participating in each area, and how engagement is measured
c). There are six defined learner mindsets, but only four are applicable to this research based on the definition of lifetime learning

There is a large and growing market for lifetime learning

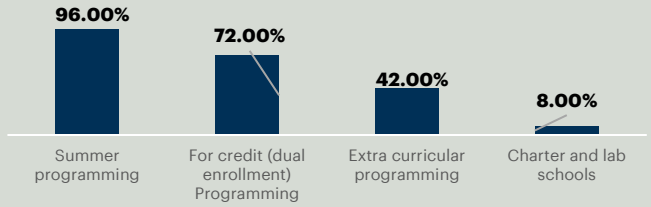
Lifetime learning spans across "K to gray" and - now more than ever - learners are inspired and motivated to pursue learning

TEACHING

Primary/secondary

Nearly all top 50 universities have localized, small scale engagements with K-12, but GT is unique with the scale and reach of it's K-12 interventions

K-12 interventions utilized by US world news top 50 universities



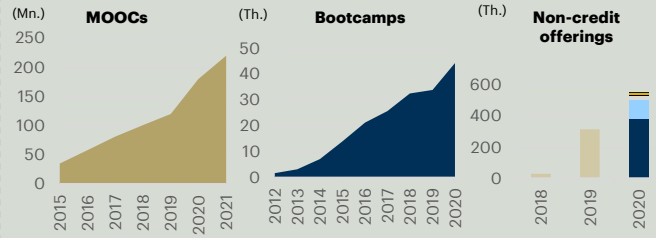
Credit bearing credential market

Four mindset-based segments comprising 77% of the 25 million for-credit degree and certificate seeking market can be considered LTL

- Junior Specialists (31%)
- Mid-Career Climbers (14%)
- Evolving Professionals (23%)
- Trajectory Transformers (9%)

Non-credit market

The market is growing rapidly, has a multitude of non-university providers, and the market relevancy of many of these credentials is still to be determined



Employer-sponsored education market

Professional-education

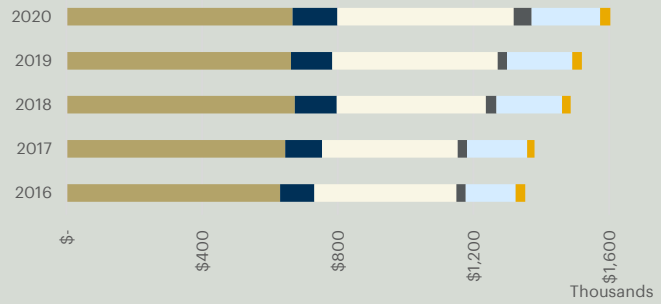
Hyper customized, expensive, learning programs for **executive and high skilled workers,** where employees are sponsored to learn specific skills for their roles

Education as a benefit

Credit and non-credit programming that is offered **to many and large employee types**, for **upskilling**, **obtaining and retaining talent**, as well as building a foundation for organic **growth of employees**

RESEARCH

Higher education research R&D expenditures



The burden of funding for education research is primarily being borne by universities

SERVICES

Services are offerings other than educational programs that an institution can **sell or provide pro bono** that serve society

Types of services can include community career education, data services, clinical education work, and others that can be sold or provided pro-bono

Example / case study:

WORKSOURCE ATL

Worksource Atlanta provides resume reviews, mock interviews, and job placement support for qualifying Atlanta residents for free

Key Takeaways: Lifetime learning is a large market and is increasing. Opportunities exist for GT to tap each of these segments - teaching, research/innovation, and service - within the market through innovations.

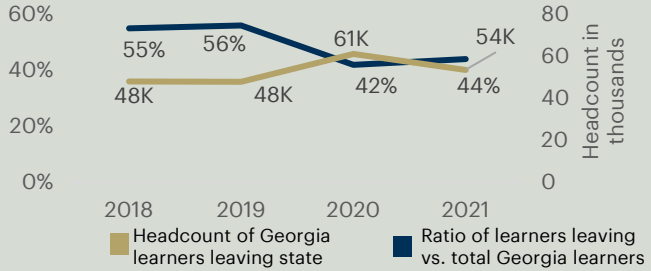
Note: Data sources will be provided throughout the deck on each corresponding slide
Note: 25M is representative of those who are obtaining a for-credit degree or certificate at any given time. Learners can move across these segments throughout their lifetime.

Engaging in this market is beneficial for GT and GA…

There's an unmet market need for skills with the opportunity to boost Georgia's economy

1

Georgia is losing a significant amount of degree seeking learners, who would prefer to be in state, year over year to out-of-state institutions



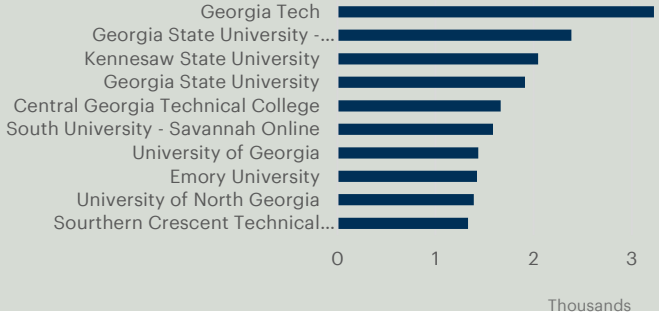
The institutions drawing most Georgia learners out-of-state are mostly open access POIs

	Institution	% Leaving GA
1	Southern New Hampshire University	**7%**
2	Strayer University	**7%**
3	Liberty University	**7%**
4	Western Governors University	**7%**
5	University of Phoenix	**6%**

2

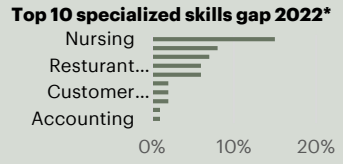
As one the largest providers of quality online learning, GT can consider how best it can serve GA learners – whether through direct intervention or efforts to improve the GA education market overall

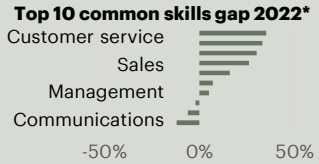
Georgia Tech, as the leading provider of in-demand degrees and credentials, can help other GA universities provide better quality and relevant education



3

Doing so can help to fill GA specialized and common skill gaps, and retain and attract employers to the state





An upskilled workforce would be advantageous to attract employers, particularly in high-tech fields.

Executives consider **availability of skilled labor** in choosing organization's location as **"important"** or "very important"

Executives agree that their organizations **business and technology strategies are becoming inseparable**

Key Takeaways: There is an opportunity for Georgia Tech to initiate lifetime learning programs to help learners directly, positively impact the GA education market overall, and, in doing so, help close skill gaps within the GA labor market.

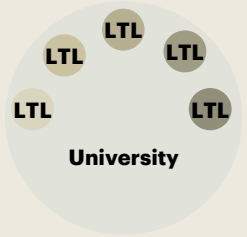
Note: *Data sources will be provided throughout the deck on each corresponding slide*
Note: *The institutions referenced are not GT peers – but there is opportunity to train and upskill their educators to improve the education market for Georgians overall*

...And an innovative operating model structure can drive success

In order to access and address this market, one must be transformative and flexible in their operating model design

In general, 4 lifetime learning (LTL) conceptual models exist, each with varying core tenant characteristics

Distributed



Various colleges within a University are **each conducting lifetime learning** on their own.

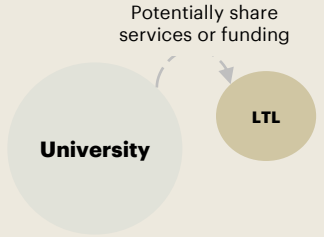
Case Western Reserve University

Integrated

Lifetime learning is **done centrally / with a Center of Excellence (COE).**

Harvard Extension School

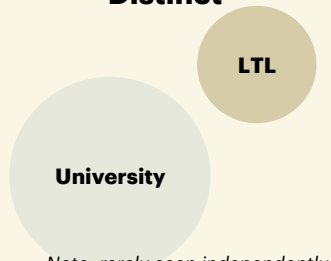
Affiliate



Lifetime learning is conducted through **affiliate and is a separate 501c3.**

Purdue University Global

Distinct



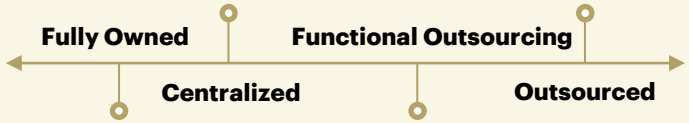
Note: rarely seen independently

University doesn't provide, facilitate or manage lifetime learning and just **add brand to an outside product.**

E.g., Smaller institutions

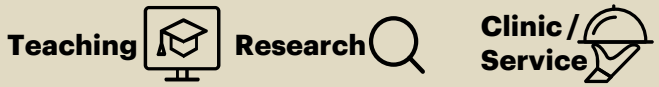
Sourcing Strategy Spectrum

How services are delivered ranges from fully owned by the Univ. to fully outsourced to vendors



Breadth of Services

The limitations you're willing to accept and funding you need for service affects which model you can choose

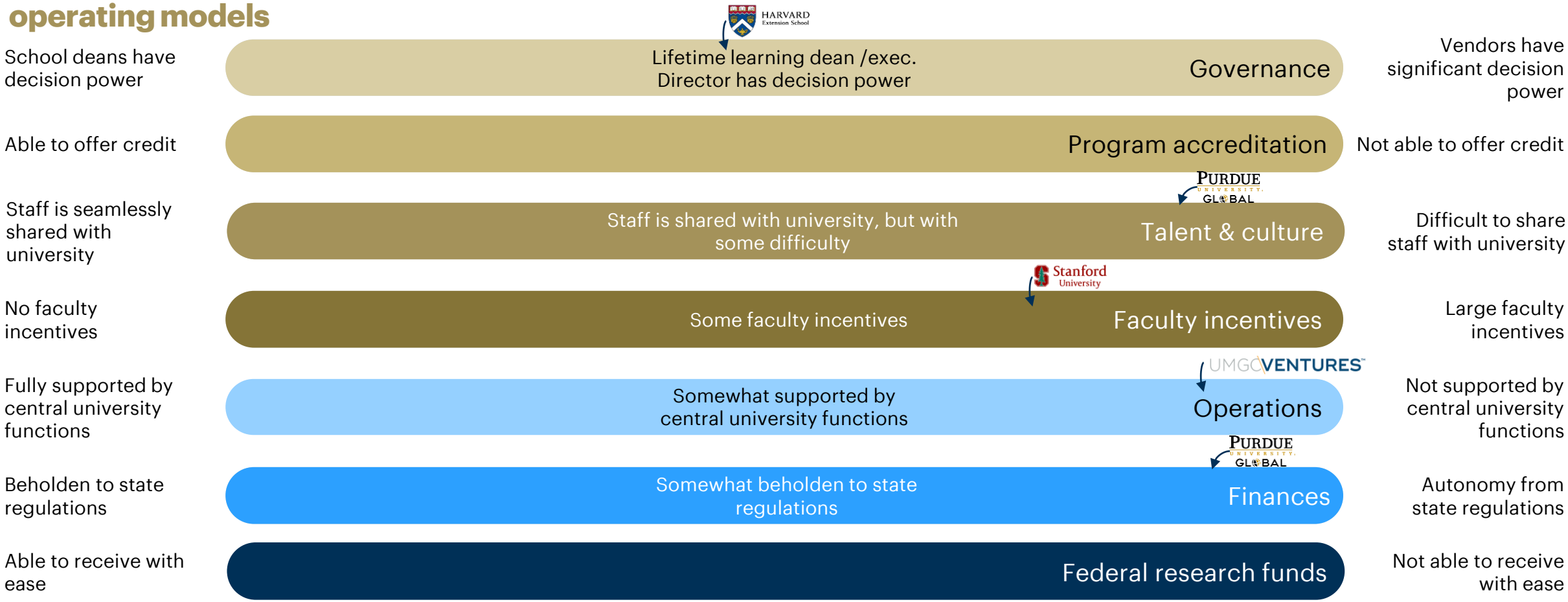


Key Takeaways: Georgia Tech can leverage bits and pieces from different innovative models and apply the GT context to create a bespoke model that works for GT and is transformative, flexible, and scalable.

Note: *Data sources will be provided throughout the deck on each corresponding slide*

Key operating model levers

These 7 levers are the key differentiators in operating models across the market. Accenture's mapping in this area looks at how different luminary organizations combine these factors to create sustainable operating models

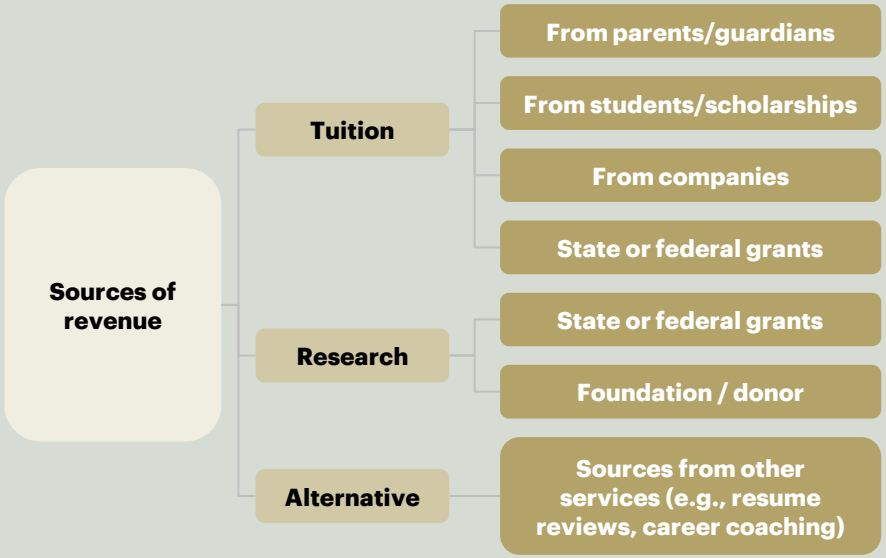


Source: based on secondary research and primary benchmarking interviews

Funding model can be sustainable

Innovative and sustainable funding are key to enabling success

There are multiple sources of funding



Funding varies by market segmentation

	Teaching			Research/ innovation	Service
	Bootcamps, summer programs **Parent-funded tuition, state and federal grants, grants from foundations or other non-profits[1]**	*Junior specialists* | **financial aid supported[3]**	*Personal development learners* **Self-funded tuition**	*Federal* **Federal grants**	*Federal* **Federal grants**
	Dual enrollment **State funded[2], tuition[1]**	*Evolving professionals* | **self-financed[3]**	*Try before buy learners* **Self-funded tuition (if not free)**		*Non-federal* **Foundation grants, state grants, employers, high-net-worth individuals**
	Charter schools **State funded**	*Mid-career climbers* | **employer- or self-financed[3]**	*non-credit corporate & executive learners* **Employer funded tuition**	*Non-federal* **Foundation grants, state grants, employers, high-net-worth individuals**	*Alternative* **Other income from other provided services**
		Trajectory transformers | **self-financed and employer influenced[3]**			
	Primary & secondary school	Post-secondary degrees	Alternative credential learning		

Examples of ROI metrics

University of Washington - Continuum College

Arizona State University

Harvard Extension School

Examples of innovative financial model

University of Maryland Global Campus Ventures

ROI-based approach
Goal: ability to attribute profit and revenue growth to a business activity or decision
Examples: Coursera, Grand Canyon University, primarily online institutions

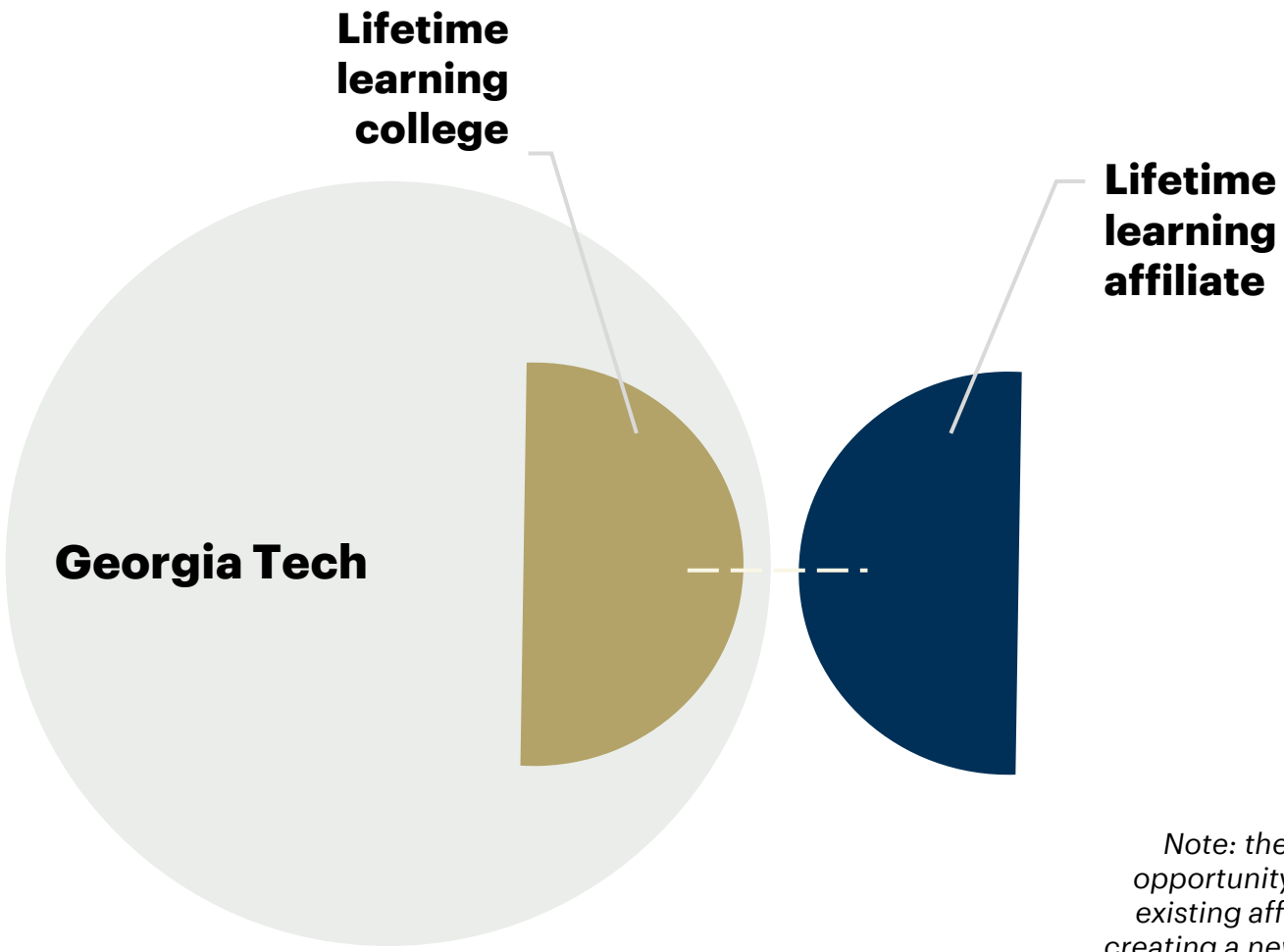
Impact-based approach
Goal: fueled by activism where you are by proxy serving the global community
Examples: Harvard Extension School, The University of Washington Continuum College, ASU, well-funded institutions

Key Takeaways: There are multiple sources of funding, and they vary based on the segment of the market. ROI can be both revenue based vs. impact based and maybe realized over a period. It is important for an organization to think about ROI outcomes as they create their financial model as well and consider what barriers may be in place and revenue streams they hope to accomplish.

Note: *Data sources will be provided throughout the deck on each corresponding slide*

Operating model recommendations

A dual operating model structure would enable GT to better meet its objectives for lifetime learning



Note: there may be an opportunity to leverage an existing affiliate instead of creating a new one, potentially reducing start up costs (min. $250K)

Establish a lifetime learning college

- For-credit programs
- Research

Employees are employees of the University	Works within USG and GT governance structures	Able to apply for and receive federal funds, supported by GT research admin capabilities	Possible attributes; non-exhaustive

Establish a lifetime learning affiliate

- Non-credit programs and certificates
- Services

Employees hired independently or funded by affiliate revenue	Provides nimbleness and agility to accept terms that may not be acceptable otherwise	Employer partnerships such as multi-year education agreements allowed for	

Funding Sources

	LTL college	LTL Affiliate
State appropriations	☑	☒
Tuition (paid by learner)	☑	☑
Tuition (paid by employer)	☑	☑
Fees from services rendered	☑	☑
Federal Funding	☑	☒
Other funding (e.g., foundation)	☑	☑
Alumni/donor gifts	☑	☑

accenture

Consideration for Next Steps

As the working groups continue their research and work over the course of next few months to lay the foundation for lifetime learning and the new college, below are some key steps to consider:

00

Create a nimble, transformative organization

- In order to play in an evolving space, GT can create an organization that is innately structured to adapt and meet changing needs – unencumbered from the legacy organization, which is a critical component for innovation success

01

Defining the areas of innovation for GT for lifetime learning

- Given the direction the market is headed, GT can define where and how it wants to leverage its strengths to innovate in the lifetime learner market
- Prioritize the categories of innovation that GT wants to play in

02

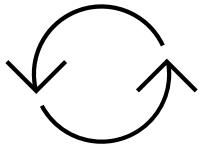
Defining the target market / audience for GT for near-term vs. long-term

- Contemplate target scale and outcomes for K-12 programing considering benchmarks
- Identify which segment of the employer-funded market GT is positioned to address
- Define target audience for the non-credit market
- Define areas of focus for research and types of services to provide

03

Establishing and prioritizing the focus areas for GT

- Consider key areas in which Georgia Tech can help continually close labor market gaps
- Critically evaluate the consequences of competing for open market share



Iterate steps 1-5 as needed

04

Narrowing in on the operating model levers that are relevant and critical for GT

- Understand where Georgia Tech would like to sit on each lever
- Conduct additional research and/or follow up interviews as needed
- Synthesize findings and create an operating model that meets those criteria

05

Defining the ROI and sustainable funding model for GT

- Consider the funding sources you want to target
- Follow up with organizations that have a similar funding model to your goal
- Create an action plan to identify and navigate around barriers

Key internal interview takeaways

AREAS OF CONSENSUS

Agreement across 8+ resources out of 11 interviews

Aligned goals for LTL:

- Become an innovative leader in LTL
- Emphasize collaboration outside of GT and serve citizens of GA
- Incorporate accessibility and affordability
- Drive flexibility and agility of the LTL program, while navigating policies and procedures of USG

"This will become the rallying cry of the system … Our smaller institutions [in GA] are hurting. We need to be thinking about how we can make GA the most exciting, most innovative public university system in the country relative to how we're thinking about education – because society is changing, the economy is changing, and the ways that people are working is changing. This should be the response to that "

AREAS OF MISALIGNMENT

- **Timing** for the lifetime learning initiative: want to ensure that there is enough time and resources to properly stand up and scale the program
- **Navigating the K-12 space** balancing desire to expand K12 outreach with regulatory limitations
- **Intended purpose of the new college**: two interviewees said that GT working groups would benefit from having a vision alignment workshop

"6 months is a very quick and ambitious turnaround time. GT will need a definitive strategy to get everyone on board regardless of timing. This should define clear milestones, what the anticipated timing for these would be, and resources needed."

HIGH CHANGE IMPACT AREAS

- Change: both resistant to and championing of change is expected in both the faculty and the administration. Hesitancy may occur if there is lack of alignment of compensation, advancement, staff levels, and capabilities to match new demands and workloads
- Change impact concerns:
  - **Resourcing**: especially impacts on tenure / bandwidth of current staff
  - **Brand**: anticipate pushback from traditionalist alumni / faculty over concerns for Georgia Tech's brand
  - **Power distribution:** USG / Board of Regents concerns of ensuring sister institutions are helped by GT rather than harmed by its growth

"There's a lot of pride around GT but we need to shift our focus to sharing the knowledge. We're not giving away the farm, we are making the farm better . . . Our challenge will be getting people to understand that"

STRENGTHS TO LEVERAGE

- GT has an **internal culture** of creativity, entrepreneurship, enthusiasm, and willingness to jump into a new idea at scale
- **Existing infrastructure** of GTRI to incorporate research components and expand upon publications in the learning sciences space
- **Existing experience and frameworks** in the lifetime learning space:
  - The ability to deliver online programs exceptionally as evidenced by OMS
  - Large and well-functioning research capabilities with C21U and CEISMC

"Georgia Tech Time and again has proven to the world that we can do this . . . We are a bunch of people who don't take no for an answer, we work hard - It's a part of this place and the people here."

Key external interview takeaways

METRICS OF SUCCESS

Over half of the organizations, we spoke to are focusing on **societal impact** and **job placement** as a more comprehensive **measures of success**.

"E-Learning typically look at engagement as metrics of success, but this metric is not helpful for gaining true insight into learning progress and impact. New focus is on skills – both assessment and value created."
– Benchmarking Institution

CLEAR IMPACT

Participants in education courses / programs are looking for **clear value gained and impact**. This includes credential and non-credit opportunities. Others have referenced their mission of creating and making a sustainable and scalable impact.

"We have done listening sessions with staff, to ensure their voices are heard. . . Our focus is on getting them to acknowledge the value they see in their work, and that it is changing the world." – Benchmarking Institution

K12 SCALABILITY

Scalable K-12 efforts can be difficult to stand up due to regulatory hurdles. Half of interviewed institutions have learning offerings geared towards learners under 18 (with two programs utilizing charter schools). Primary market for majority are self-learners.

"When trying to create products that would succeed in the market we were initially limited by bandwidth of the Academic Director at our institution – and typically, weren't interested. We instead looked to market for indicators on content that would be beneficial, then looped in faculty to see who was interested."
– Benchmarking Institution

ARTIFICIAL INTELLIGENCE

Focusing on AI, machine learning and other analytics is critical – **predicting the future of the labor market** is the best way to prepare for it.

"We need to start thinking of our curriculums as ways to prepare people for jobs that don't yet exist. We can do this by utilizing continuously evolving content and predictive analytics." – Benchmarking Institution

MARKETING

It's important to utilize strong marketing to enable the success of new programs. **Innovative marketing strategies** can include search engine optimization, marketing efforts to build brand presence, leveraging partner institutions / companies that accept or value credentials gained, and incorporating narratives that create the vision for LTT.

"A core capability of any program in this space should be branding and marketing. Organizations should not only market what their programs is doing, but also associate value of learning with the brand."
– Benchmarking Institution

Detailed sections

2a. Opportunities for innovation are ripe

Key principles of successful innovation

2a

1 Ambitiously forward-thinking

In the world | Grand innovations do not seek to fix “potholes”, they seek to upend business models with a future 10 years+ from now in mind

In education | Dreamscape Learn will partner with ASU to add avatar-driven VR experiences to both campus-based and online courses. They will start with introductory biology and eventually expand throughout the sciences to deliver immersive STEM experiences.

2 Unencumbered by existing business models

In the world | Could hotels have invented Airbnb? Could taxi companies have invented Uber?

In education | Online has been able to scale when disentangled from the rest of the university (Purdue Global, SNHU, Penn State, etc.)

3 Deeply understand the true—not expressed—customer needs

In the world | “If I would have asked my customers what they wanted they would have said a faster horse” – Henry Ford

"A remarkable customer experience starts with heart, intuition, curiosity, play, guts, taste. You won’t find any of it in a survey." Jeff Bezos

In education | SNHU grew 1,362% in 2019—that growth is coming from a true understanding of their learner and what they are striving to achieve. They also understand how to reach those learners.

4 Incubated through addressing a need, but scaled through prestige branding

In the world | Electric cars were originally meeting a niche need targeted at those trying to save money and/or the environment; Tesla positioned them as luxury and skyrocketed demand

In education | Originally incubated by for-profits; the modality of "online" was able to drive growth by disentangling itself from a "low quality" stigma in the wake of high-quality entrants like GT (Comp Sci) and Harvard EdX.

5 Strong innovation processes

In the world | Being innovative doesn’t mean being planless. Need the right funding, a pilot to prove out the model, clear processes to scale the success, avoid shiny object syndrome etc.

In education | University of Michigan has developed multiple automated platforms as learning enhancement tools. The platform ECoach provides personalized homework support for students in larger introductory STEM courses

Key dimensions of innovation

2a

Across the lifetime learner market, organizations are targeting innovation across one or more dimensions

Dimensions for innovation in lifetime learning

Enrollment type	Age group	Learner mindset	Credential type	Demographics	Modality
Credit-seeking (independent)	3-18 (k-12)	Wayfinding intellectual	Credit: K-12	Race	In person
Continued learning (independent)	18-21 (traditional)	Campus enthusiast	Credit: post-secondary degrees	Gender	Online synchronous
Affiliated student	21-64 (adult learners)	Junior specialist	Certificates	Socio-economic status	Online asynchronous
Free services	65+ (seniors)	Evolving professional	non-credit: personal development	Sexuality	VR/AR
		Mid-career climber	non-credit: executive education	Religious beliefs	Hybrid
		Trajectory transformer	non-credit: try before you buy	Disability	

Examples of innovation

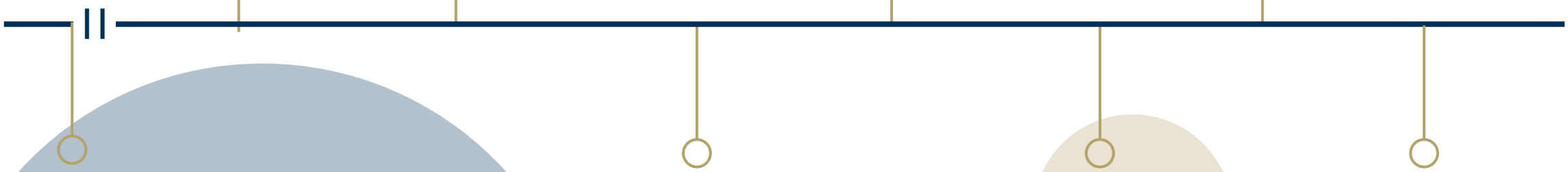
2a

Georgia Tech becomes a **pioneer in online education by producing a high-quality affordable degree**

Employers like **Boeing** work with higher ed institutions e.g., **Univ. of Washington to upskill their current workforce**

Universities, including top 5 ones, partner with ed **platforms like Coursera to co-build content leveraging content factories**

Startups like **Eightfold.AI** begin **using AI and machine learning to predict jobs** people will have in the future and the **skills** they will need to succeed



Large for-profit institutions **identify a gap in the market and leverage innovative business models** to treat students with a customer service mindset (e.g., University of Phoenix)

Systemic issues related to relevance and equity in higher education have created a **breakdown in the perceived value of college degrees** - Evolllution

Digital education becomes so prevalent that well-known universities like **Purdue begin buying online learning platforms**

UNC and Duke partner to **bring 50 alumni to Oxford University** for a two-week continuing education program

Note: *demonstrative, not in chronological order. Non-sourced notes were extrapolated from interviews*

Examples of innovation

2a

University of Washington aims to **reduce the "some college" percentage** in WA **by 50%** in the next 10 years

IBM badges focus on **proving knowledge vs. teaching**. Though study materials are made available, for most courses students can take the test without doing the prep

The University of Arizona Global Campus acquired a university with a strong online presence (Ashford) to offer online courses at scale

Schools like **Morehouse and Alabama A&M** are working with companies like **Victory XR to create digital twin campuses** where students, and prospective students, can gather to tour campus and learn in the metaverse

One Global Walmart Academy is a digitization of their specialized retail training course. In the next few months, **2.3M Walmart employees** will have the ability to build specific skills and advance their careers

Missouri Online coordinates online offerings **across 4 system institutions** and has **invested in shared infrastructure** vs. working with an OPM for their 260+ degree or certificate programs

LinkedIn Learning works with individuals and employers to offer a **subscription model** so learners can engage with different courses simultaneously

Note: *demonstrative, not in chronological order. Non-sourced notes were extrapolated from interviews*

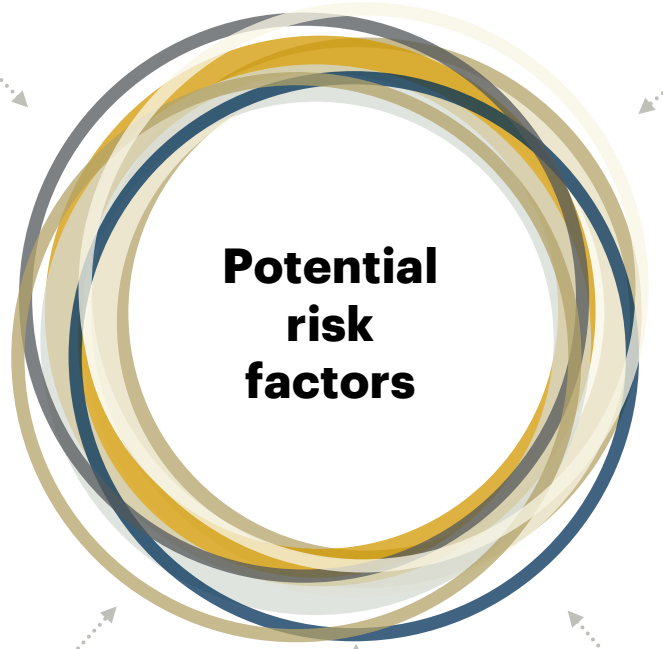
Areas to navigate

Lessons learned from other institutions have shaped the path for areas to understand and sidestep

Lack of investment in marketing –
Marketing is a key enabler for lifetime learning programs. Organizations can utilize full marketing capabilities not only to attract learners, but also to help learners understand the purpose and value behind lifetime learning.
University of Washington invested approx. $3 million in marketing with Google.

Not understanding customer needs –
It is important to develop an understanding of true customer needs, and not what an institution thinks they *should* be. Customer needs must be grounded in data. **LinkedIn Learning is trying to refine a clearer ROI for their program because its program is broad and loosely tied to customer needs.**

Not leveraging faculty skillsets –
When deciding on curriculum offerings, it is critical to ensure faculty skillsets are considered and utilized. This allows the program to leverage strengths of faculty and support faculty interests. **Stanford discontinued one of its programs after there was a lack of interest from faculty to teach their courses.**



Inherent Partner Brand Risk –
When partnering there are inherent risks associated with the selected partner's brand. **The University of Arizona faced faculty backlash when they purchased the for-profit Ashford University. The University has now terminated its contract with Zovio, the former owner of Ashford that had been acting as an OPM partner.**

Vendor non-performance –
Selected vendors' size, scalability, and performance are all key determinants for long term success. **SNHU received pushback from faculty and staff on a few of their vendors and recommends being intentional about vendor selection up front.**

Conflating LTL definitions –
There are a variety of different definitions of lifetime learning, which leads to learners and faculty to misunderstand the intended purpose. For example, **Northeastern University utilizes LTL to focus primarily on alumni engagement.**

Not knowing the market –
Institutions should use key market indicators when developing curriculum topics or program offerings to ensure they are relevant and unique. **Stanford's Systems Engineering lifetime learning program attributes their lack of success to poor market research.**

Source: External Interviews, Northeastern University

Indicators of the future

This is an emerging market, not a saturated market, and driven by market needs and trends, the room for innovation is vast and continuously expanding

Trends and gaps in industry

What do interviewees think?

6 out of 9 institutions reference the **scalability of online curriculums** over in person options. They note in person programs are confined to location and is harder to quickly adjust resources / operations

4 out of 9 institutions referenced **utilizing AI / predictive analytics** to identify skills needed for the future - the largest market here is self learners in the workforce

2 out of 9 institutions **envision credentials** (degrees, badges) **phasing out** as pathways to careers iterate and expand

Competency-based progressions: combining individual progress with effective use of cohorts and teams (and what that means for scheduling students and staff)[1]

Nimble formats: how to enable the benefits of comprehensive systems in small safe secure and personalized environments[1]

Broader aims: articulating a shared purpose of education that moves beyond narrow skill definitions/metrics to success skills, wellbeing and contribution[1]

Equitable foundation: supporting equitable access to education with weighted and portable funding, thoughtful talent distribution, and intentional locations and enrollment policies [1]

Accountability 2.0: new ways of measuring success including making use of cumulative validity across broad learning goals and comprehensive records [1]

Personalized and localized guidance: relationship-based advising informed by personal and local data [1]

Framing for potential opportunities

*"**The big gaps aren't just accelerated product features; they are new ways of provisioning public education**—new agreements around new experiences and tools. Many likely require public-private partnerships where communities, schools, and tools work together in new ways."* [2]

*"The sustainability of lifetime learning is less about institutional brand (e.g., the well-regarded research-intensive universities) as it has been in the past and much more about **ease of access, flexibility, process and price of learning** so that emerging generations of learners can manage their life's transitions to address their learning needs."* [3]

*"A willingness to encourage **learning, improvement, and receptiveness to discovering alternative solutions** is critical for lifetime learning as the needs of a generation of learners and the external demands change. A dialogue of constructive criticism and informed challenge within a participative community of learning will encourage understanding and improvement."* [3]

Sources: External Interviews; 1.Forbes, 2. The Atlantic, 3. Unbound
Note: Potential opportunities are non-exhaustive

2b. There is a large and growing market for lifetime learning

Lifetime learning market segmentation

2b

The lifetime learning market can be broken down into three unique areas of focus: teaching, research/innovation, and services. Each with unique attributes and involvements in the market

TEACHING

Primary/secondary

Common higher education interventions within **K-12 landscape**

- Camp programs
- For-credit programs
- Extra-curricular programs
- Charter and lab schools
- Advocacy
- Teacher development

Credit bearing credentials

Non-credit learning

Independent learning ("B2C"): Self financed individuals who are seeking non-credit learning options for personal fulfillment or to gain a specific skill

Employer-sponsored learning ("B2B"): Employers sponsor both executives and general employees to participate in non-credit and credit learning to upskill in their roles

RESEARCH/ INNOVATION

- Federal funded
- Non-federal funded

SERVICE

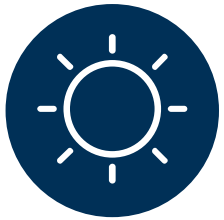
- Community and corporate engagement

Note:
a). The three areas of focus: teaching, research/innovation, and services, were inspired by an early understanding of Georgia Tech's interests in the lifetime learning market
b). Each vertical contains unique attributes and ways to view how the market operates, who is present and participating in each area, and how engagement is measured
c). There are six defined learner mindsets, but only four are applicable to this research based on the definition of lifetime learning

Five primary K-12 interventions are offered

2b

There are four primary K-12 program interventions offered in the lifetime learner market, of which Georgia Tech is involved in three

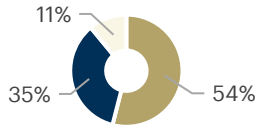
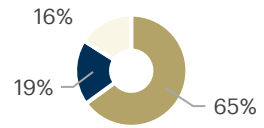
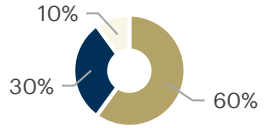
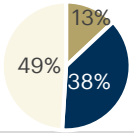
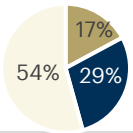
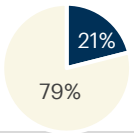
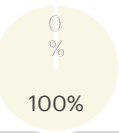
	K-12 program operations (further analysis on next slide)				Other interventions	
	 Camp programming	 For-credit programming (dual enrollment)	 Extra-curricular programming	 Charter and lab schools	 Advocacy	 Teacher development
Programming description:	• K-12 learning experiences including summer camps, and learning experiences focused in depth on one subject • Academic focus • Non-credit	• Programs offered to primarily 9-12 audiences • Offering courses to take for college transcript credit • Programs such as dual enrollment and other credit bearing classes	• K-12 programs in addition to course work • After school programs, academic challenges, night school, weekend programs, classroom visits, college prep	• Owned and operated by the university • A separate entity for K-12 education • Charter schools and related programs	• Advocacy is defined as activities that are intended to raise state and federal awareness for K-12 interventions and promote equity in access to educational resources • This includes efforts to raise direct funding, or drive policy to fund higher education institutions for K-12 interventions • This also includes advocating for funding and policy for K-12 schools to be used for interventions	• Teacher development is investing in educators to keep them up to date on the latest curriculum and teaching methodology in their field • This includes programming that is designed for K-12 teachers' development to better master evolving topics • These are intervention programs designed for educators
At Georgia Tech:	• College of engineering, summer engineering institute • CEISMC summer P.E.A.K.S	• GT distance dual enrollment courses	• CEISMIC K.I.D.S club • CEISMIC explore STEAM workshops	• Not offered		
Examples in the market:	• UVA Summer Enrichment Program 5th – 11th grades	• Georgetown University Hoya Summer High School sessions	• University of Chicago School Partnerships Program	• UCLA Lab School for K-6th grade learners		

Source: Multiple university website pages and programming about pages, Western Governors University, "What is professional development in education" Study.com, "Education Advocacy Groups & Organizations"

Georgia tech's top 50 peers all engage with K-12, though most engagement is in-person, local, and smaller scale

2b

Georgia Tech uniquely engages more than 60k learners and 3,500 teachers across its interventions. This can be primarily be attributed to the tuition-free model that GT offers - compared to its peers who rely primarily on tuition funding, and operate at lower scales, which further impacts the accessibility and diversity of their programming

	Camp programming	For-credit programming (dual enrollment)	Extra-curricular programming	Charter and lab schools
% Participation (among top 50)				
# of programs	Range: 1-25 Avg.: 5	Range: 1- 200 Avg.: 17 (courses)	Range: 1- 10 Avg.: 3	N/A
Who in the university provides? (Administrative unit / Academic unit / Continuing education department)				
Primary funding source	Tuition/ enrollment fees	Tuition/ enrollment fees	Tuition/ enrollment fees	Charter (state funded) and private (tuition funded)
Mode of offering (In-Person / Hybrid / Online)				
Example cases	• Harvard Pre-College Summer Programs • John Hopkins CTY's Summer Programs	• Penn Arts & Sciences Pre College credit • Duke University Summer Credits	• Stanford Splash • NYU Courant Institute of Mathematical Sciences	• University of Chicago Laboratory Schools • UCLA Lab School

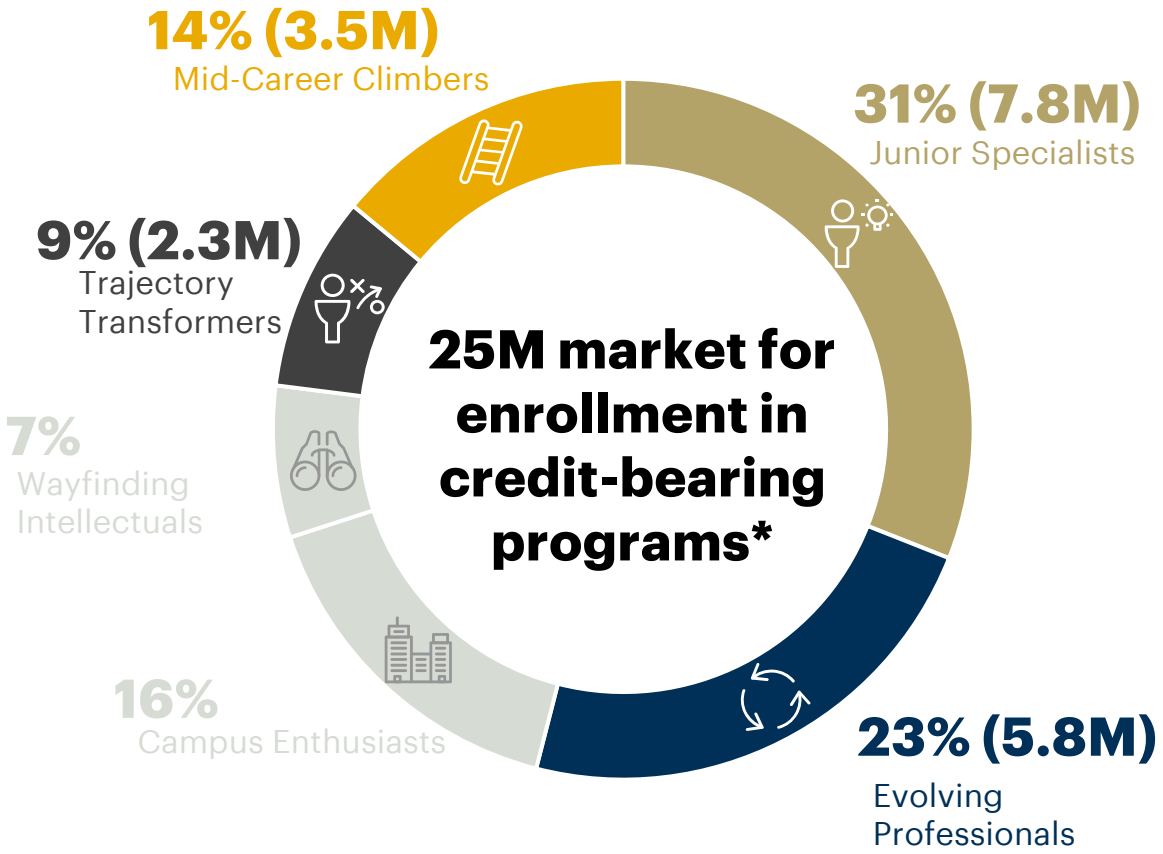
The challenge for Georgia Tech is identifying sustainable sources of funding for these interventions at scale, which could be provided through a recurring source of state revenues

Note: # of programs is non-exhaustive, and representative of what was found through secondary research
Source: US News Top 50 National Universities Ranking, Multiple university website pages and programming about pages

The market for credit-bearing post-secondary credentials is large

2b

There are six mindset-based segments of learners; four of the six can be considered "lifetime learners"



Junior Specialists

Who:
- First degree seekers with little job experience

Programs seeking and goals:
- Mostly degrees, in person preference with flexibility of online/hybrid
- Goal of attaining job specific skills to start a career

Evolving Professionals

Who:
- Full time workers holding Bachelors/Masters Degree

Programs seeking and goals:
- Mix of flexible, quality certificates and degrees, in person preference with flexibility for online/hybrid
- Seeking career advancement

Mid-Career Climbers

Who:
- Full time employees, who are self-financing their credential

Programs seeking and goals:
- Mix of certificate/degree Programs, with hybrid and online modalities
- Advance in career by attaining specific job skills

Trajectory Transformers

Who:
- Mostly full-time employees with college degree or first gen. college, some employer funded

Programs seeking and goals:
- Online certificate/degree programs
- Career advancement through a pivot

Note: There is a large population in the United States that can be learning, but it is neither realistic nor optimal for all to be learning at once. This figure represents the 2020-21 12-month unduplicated enrollment from IPEDS

Source: Accenture Learner Mindsets Study, IPEDS Unduplicated Headcount Enrollment 2020-21

25M learners are currently enrolled in for-credit degrees and credential programs (1 of 2)

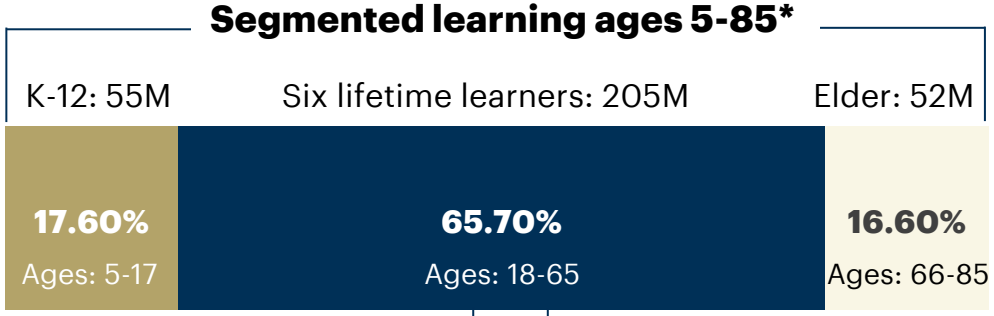
2b

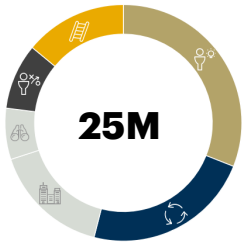
Of the 25M that are currently enrolled in for-credit degrees and credentials, 19.4M can be identified as lifetime learners

The overall population of the United States is 330M and falls into a distribution of learner ages:

330M individuals in the US:

Segmented learning ages 5-85*





25M (12% of ages 18-65) at any given time are enrolled in for-credit post-secondary degree or credential programs

While people return to learning periodically during the ages of 18-65, it would be neither feasible nor optimal for them to be enrolled unceasingly

25M Pursuing for-credit post-secondary degree

X

77% Students identified in relevant lifetime learner segments

19.4M LTLs in for-credit degree programs

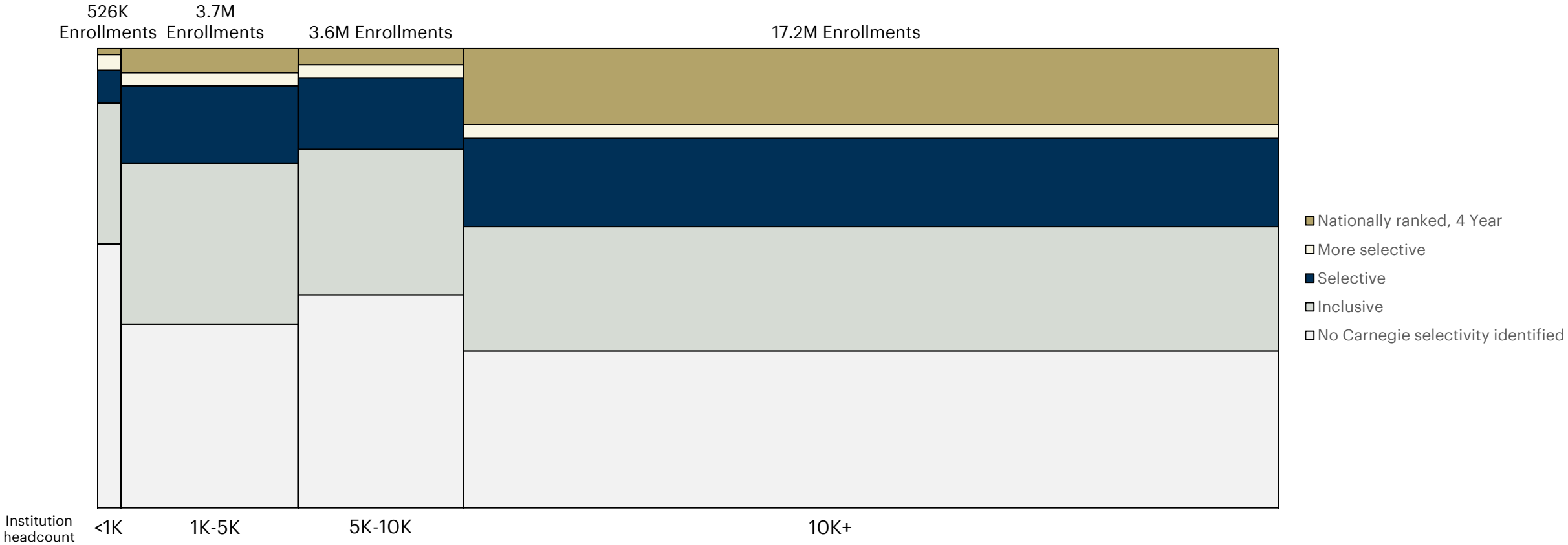
*Note: the US Census data use only tracks populations to ages 85
Source: US Census Population Count 2021, IPEDS Data 2021-20

25M learners are currently enrolled in for-credit degrees and credential programs (2 of 2)

2b

Of the 25M that are currently enrolled in for-credit degrees and credentials; the largest enrollment segment large, inclusive institutions*

2021 unduplicated 12-month enrollment by institution size and Carnegie selectivity classification where classification is available*

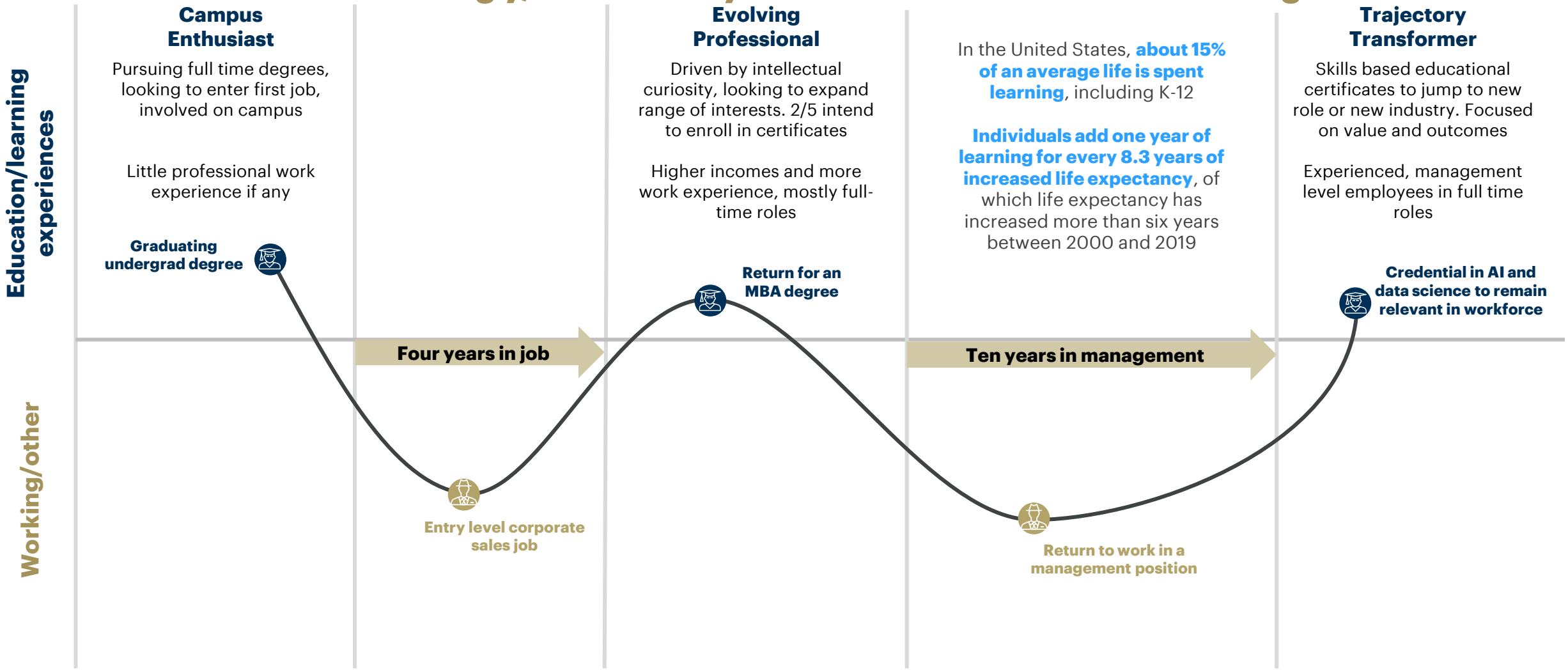


*Note: of 4,060 institutions observed, only 2,110 hold some form of Carnegie ranking. The total observed enrollment is appx. 15.7M enrolled for this data
Note: Nationally ranked universities are the top 100 US World News National Institutions and top 100 Liberal Arts Institutions
Source: IPEDS Data 2020-21, Carnegie Classification of Institutions of Higher Education 2021 Data, US World News Best National University Rankings, US World News National Liberal Arts Colleges Rankings

Example post-secondary credit bearing degree & credential journey

2b

Individuals do not learn unceasingly, but can fluidly move in and out of learner mindset segments



Source: Accenture Learner Mindsets Study, Reference.com "What Percentage of the Average Life of an American is Spent at School?", World Bank Group "Life Expectancy at Birth and Lifetime Education and Earnings", World Health Organization, "GHE: Life expectancy and healthy life expectancy"

For certain areas, learner segments diverge in desired delivery method of services

Universities must excel at in-person and online provisions of almost all services to avoid frictions for learner segments they serve

	Average in person	Wayfinding Intellectuals	Campus Enthusiasts	Junior Specialists	Evolving Professionals	Mid-Career Climbers	Trajectory Transformers
Internships	51%	48%	47%	55%	46%	53%	58%
Independent study materials	31%	39%	38%	30%	29%	26%	27%
Graduation	57%	52%	53%	60%	52%	60%	66%
Researching programs	27%	33%	34%	25%	28%	21%	20%
Application process	24%	32%	30%	23%	22%	20%	17%
Registering	25%	32%	32%	24%	23%	20%	19%
Obtaining/viewing/modifying records	27%	33%	34%	26%	25%	24%	20%
Resolving account holds	30%	39%	36%	30%	26%	26%	26%
Checking institutional policy	26%	32%	32%	25%	25%	25%	17%

"For each of these activites, please rate your preferred method of engagement."

Comparably more in-person Comparably more online

Note: More data on learner mindset preferences can be found in the full Accenture Learner Mindsets Study
Source: Accenture Learner Mindsets Study

Non-credit programs

Credentials pursued by individuals who are seeking knowledge or career growth in time efficient programing

MOOC

Typically, one-off courses delivered for free/minimal cost, delivered asynchronously, self-paced online format. Courses range from 1 to 16 weeks, and students can enroll at anytime

Bootcamps

Accelerated and immersive learning experience, medium cost, delivered over a set period, lasting an average of 12 to 15 weeks, enroll at multiple points in calendar year either part-time or full time, with in-person and online options

License/certifications

Specialized verification of certain skills. Typically, paid for by employers. Highly variable in both timeline and time-intensiveness, some certificate programs have calendar-bound enrollment

Motivators for pursuing non-credits

Gain general knowledge

Increase salary potential

Qualify for a job

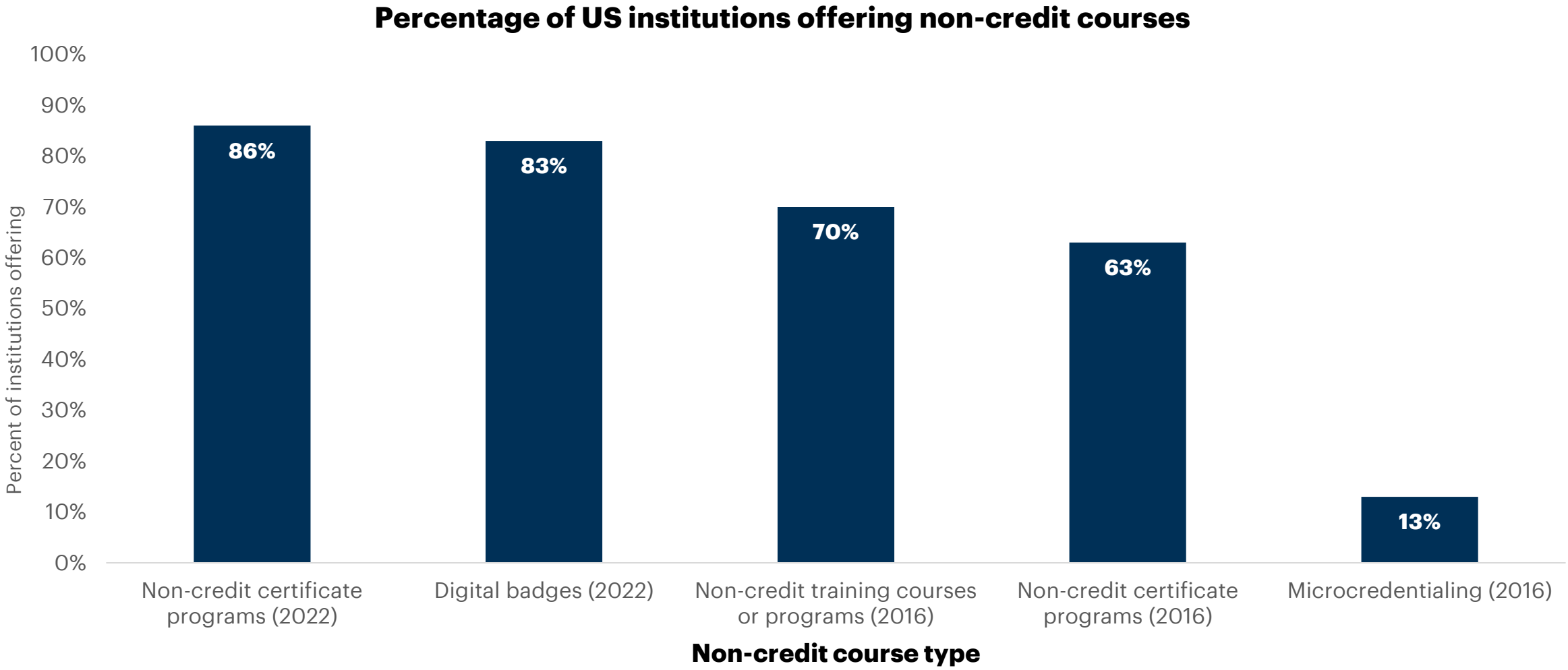
Increase career mobility

Create long term marketability

Note: There is a multitude of non-credit programming in the market. This analysis focuses on primary non-credit credentials.
Source: Class Central, Getting Smart

Institutions pervasively offer non-credit courses

2b



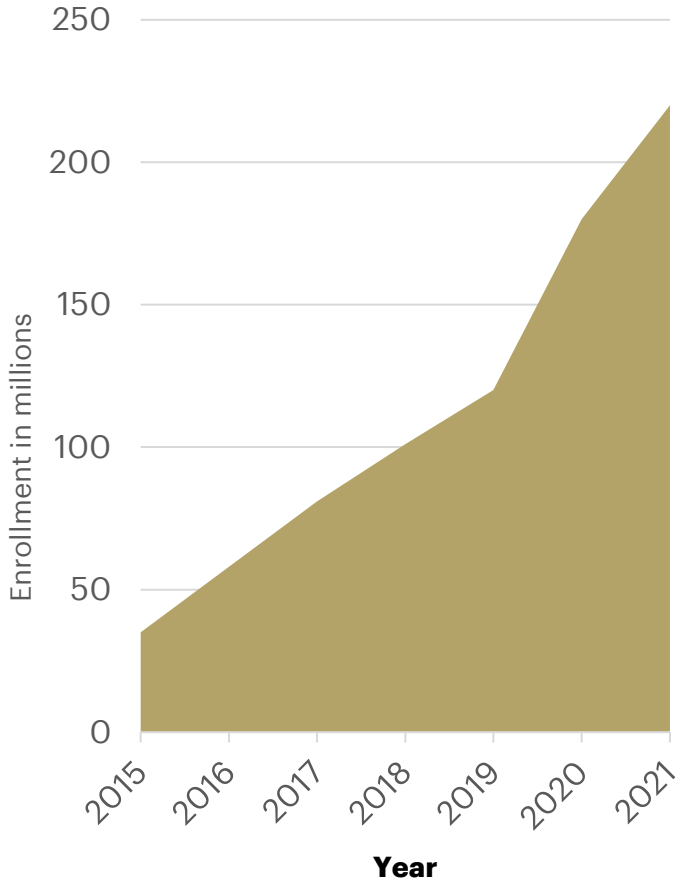
Source: Demographic Shifts in Educational Demand and the Rise of non-credits (Pearson, UPCEA 2016), State of Continuing Education (UPCEA, EvoLLLution, Modern Campus)

There is consistent double-digit growth in the non-credit market

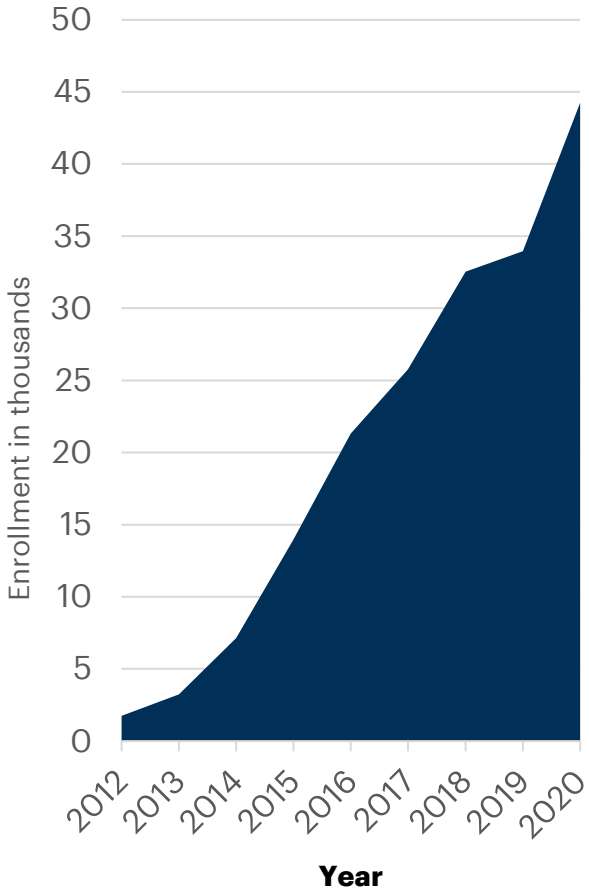
2b

The market for MOOCs, bootcamps, and other non-credit offerings is growing rapidly across the board

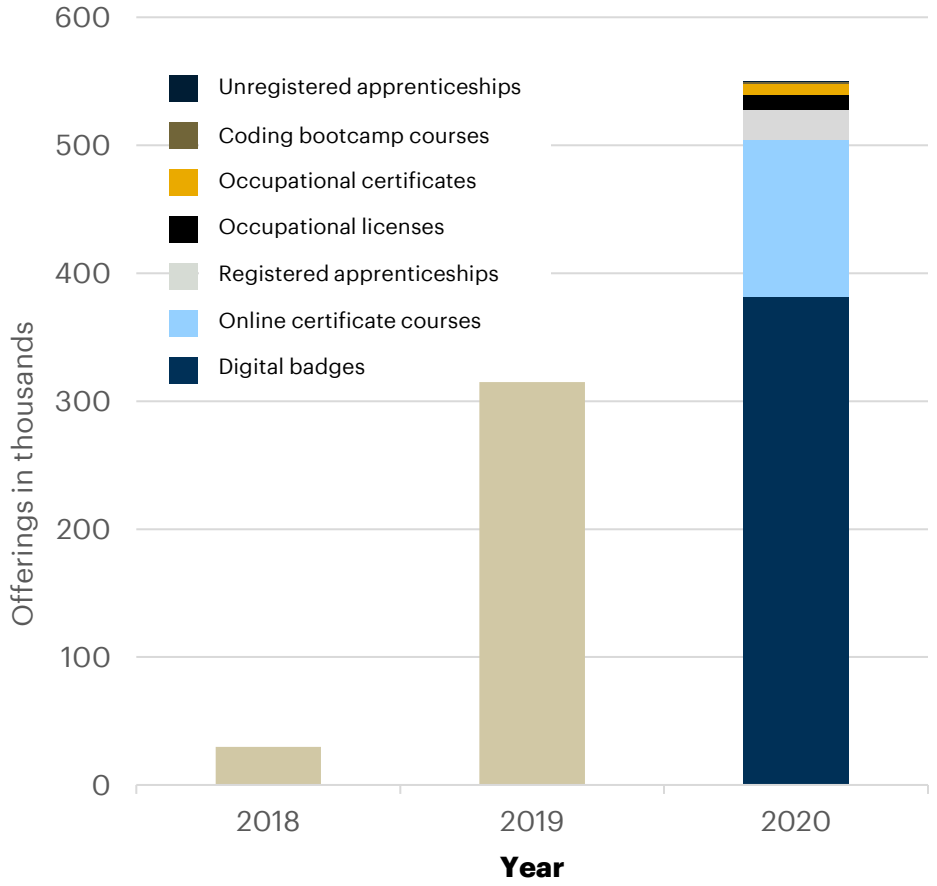
Global MOOC enrollment has increased since 2015



Bootcamp enrollment in the U.S. has increased since 2012



Non-credit offerings are mostly digital badges and online learning courses – the market relevancy of which has yet to be determined

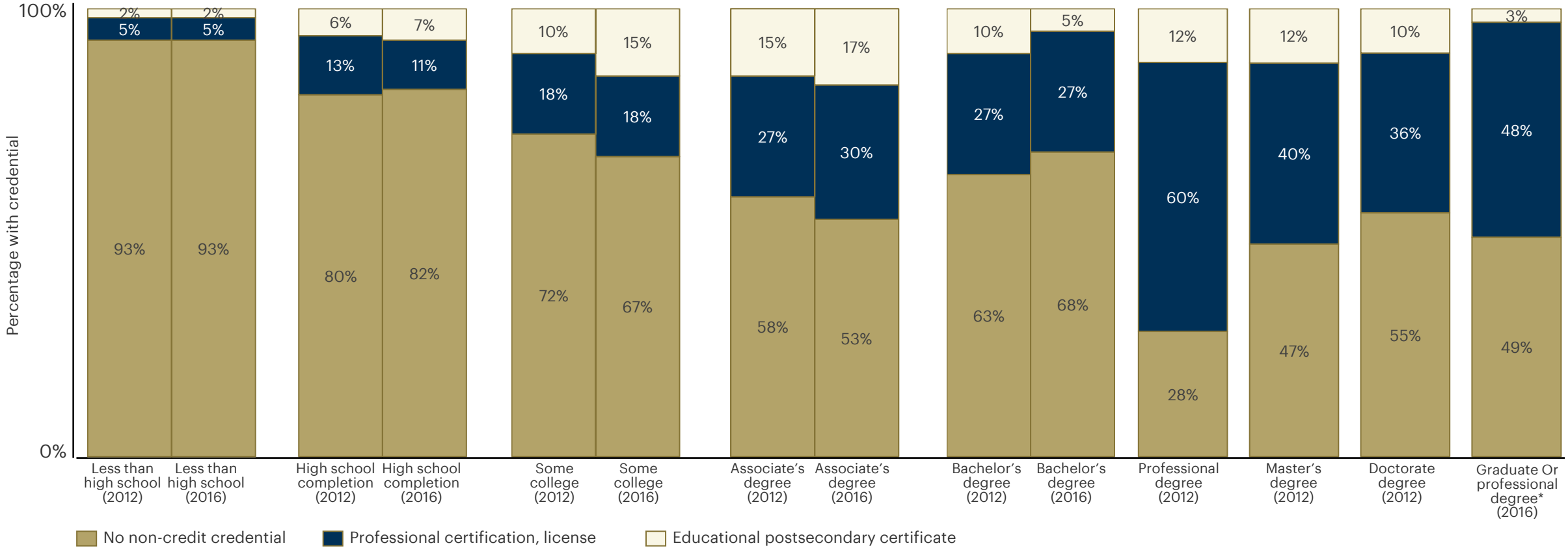


Source: Class Central "By The Numbers: MOOCs in 2021", Career Karma "State of the Bootcamp Market 2021", Credential Engine "Counting U.S Postsecondary and Secondary Credentials" 2021, 2019, 2018

Though non-credit programs are growing in prevalence, they are still predominantly being used by existing degree-holders to further increase qualifications

2b

Percentage of population holding non-credit credentials by regular education level for population aged 16-65 in 2016, and for the population aged 18 and older in 2012

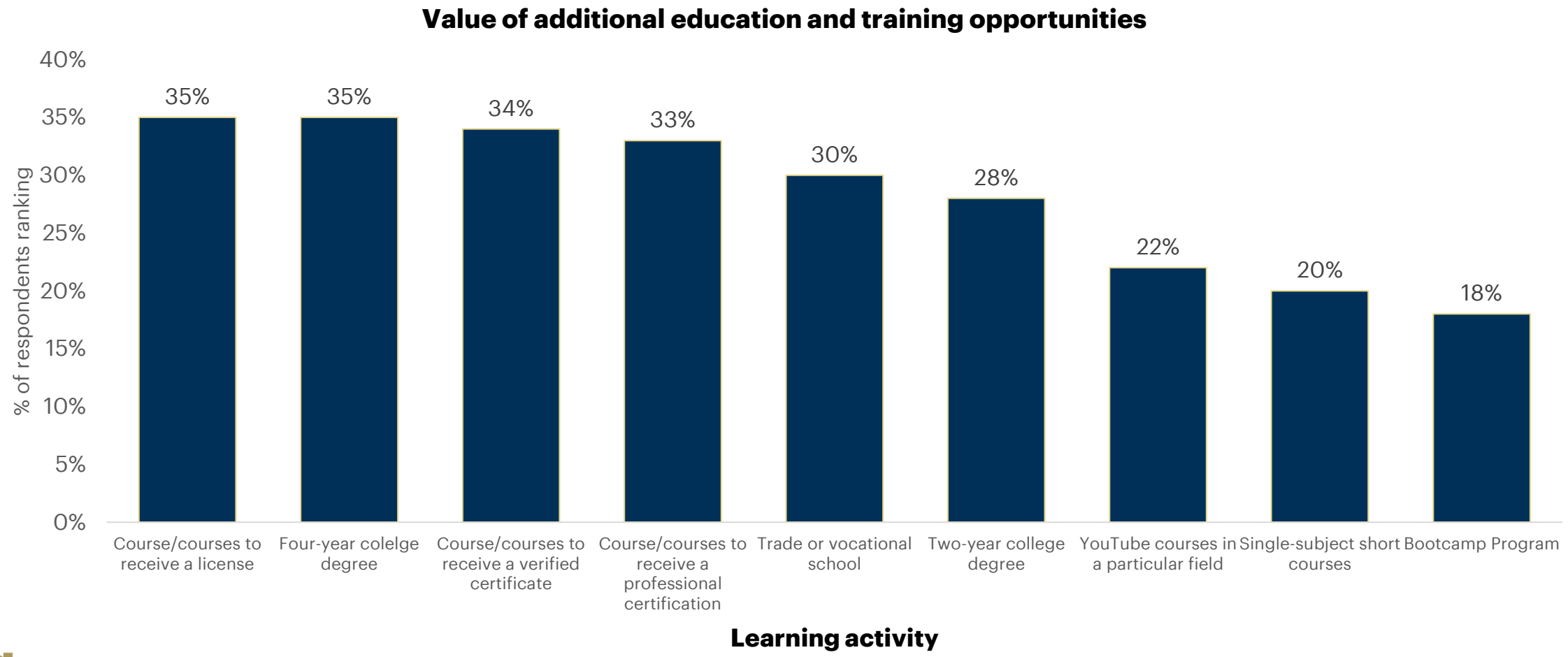


*Note: Graduate and professional degrees are combined in the 2016 survey, and doctorate degrees were not surveyed
Source: US Census 2012, Measuring non-credits; Adult Training and Education: Results from the National Household Education Surveys Program of 2016

Those who do not attend college still value non-credit programs and degrees

2b

Individuals not pursuing post-secondary degrees or certifications still place high value in obtaining those certifications and degrees, but place YouTube learning higher than short courses or bootcamps



Source: Edge Research & HCM Strategies "Exploring the Exodus from Higher Education"

There are two primary forms of employer-sponsored learning

2b

Employers involve higher education in supplying learning for two primary employee audiences

Employer-sponsored professional education*

$34.3B
in 2020

Approximate market size

The market is expected to grow significantly and be valued at **109.6B** by 2031 with a **CAGR of 11.2%**

Description:

Hyper-customized, expensive, learning programs for executive and high-skilled workers that are sponsored to learn specific skills to better perform in their designated roles

Offerings in this training category typically include (but are not limited to) business-centric, and are favored towards elite institution programming with a prominent brand name

Level of employee served:

- Executive level employees
- Upper middle management
- High skilled employees looking for niche growth

Objective of offering:

- Specific upskilling for key employees
- Learn targeted skills needed that are selected by the company

Keys to success:

- Customized programing that is unique and designed to the exact needs of the employer
- Strong brand reputation of institution offering programming

*Note: this is typically referred to as executive education, but in this context, we are referring to any training that is offered to predominantly high ranking, skilled employees

Education as a benefit

$28B
in 2022**

Approximate market size

Since the pandemic, **demand has increased** and is **projected to continue growing** as more employees reskill or upskill and have opportunities to learn

-Accenture interview with industry expert

Description:

Programming that is offered to multiple types of large employee groups, for upskilling or reskilling, with the intent of obtaining and retaining talent, as well as building a foundation for organic growth of employees in the company.

High ranking institutions offer programming in this space, but the uptake of this population is lower due to the relevancy of programing, associated costs, regional biases, and admission to programming

Level of employee served:

- General employee populations

Objective of offering:

- Recruit future talent to the organization through offered benefits
- Upskill/reskill and retain existing talent within the business
- Accelerate employee growth and promotion cycles

Keys to success:

- Offering cost effective training programs at scale
- Curate large, diverse content for a company wide audience
- Providing content through a primarily online modality

A mix of credit and non-credit programming:

U.S. tax code allows spending of up to **$5,250 per employee** on education programs, with those benefits' deductible to the employer and not taxable to the employee. **This benefit is available for-credit and non-credit bearing courses.**

**Note: Tuition reimbursement is not limited to non-credit programming, but also includes for-credit degree-based programming

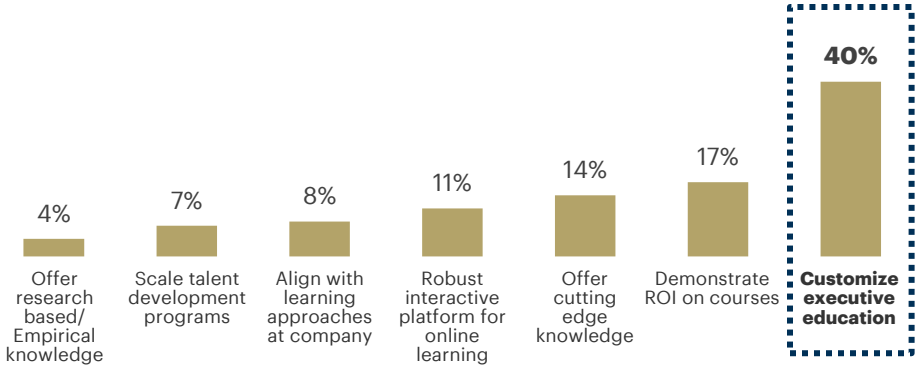
Source: Future Market Insights, "Executive Education Program Market," InStride "10 tuition reimbursement statistics you need to know in 2022", TEL education "the value of education-as-a-benefit programs for SMBS," , Accenture Interviews

Higher education provides value to professional education

2b

Employer-sponsored professional education is driven by employer financed, customized, typically business centric learning experiences

Employers find the ability to customize the most important aspect of professional education programs



There are four key elements to success in building a professional education program

Strategic positioning	Business development	Innovation & delivery	Support & infrastructure
✓ Drive exec. ed. from university board level ✓ Culture focused on client relationship management ✓ Identify signs of change across industries to develop future strategy	✓ Coordinate BD team with strategy targets ✓ Embed academic staff as program directors for expert direction ✓ Ensure transition from BD teams to directors once clients are on board	✓ Develop academic capability to work with clients to create products ✓ Provide reward structures to facilitate product innovation ✓ Place senior exec. ed. on academic contracts	✓ Provide high quality facilities and hospitality (corporate experience) ✓ Setup professional services for admissions & marketing ✓ Core operations and legal teams

Higher ed institutions making a large share of their revenue from professional education (examples)

Name of institution (examples)	Total revenue (in million $)	Revenue from professional education	
		In millions $	As a % of total revenues
MIT Sloan Business School	$270M	$70M	26%
Berkely Business School	$170M	$21M	12%
Wharton Business School	$300M	$36M	12%

There are four predominant program types to meet varied needs of executives and high skilled learners

Short courses	Modular programs	Full time programs	Certificate programs
1-5 days, part-time	**1-3 months, 1 full day bi-weekly**	**1-2 weeks, full time**	**Flexible learning, self paced**
• Working in or aspiring to new exec. Roles • Deliver training in fast paced practice-oriented fashion • Acquire immediate skills	• Execs. With less time to engage training during weekdays • Flexible learning including weekends • Action based learning projects	• Upskilling on emerging trends from experts/industry leads • Single capsule programs • Intensive in-depth delivery	• Seeking certification or specific skill set • Combination of all three formats • Group of courses/topics integrated into one program

Source: Accenture Executive Education Market Overview, CLO Learning Survey by Financial Times and UNICON Executive Education Survey 2021, University websites and brochures

Education as a benefit derives content from higher education

2b

Employers are paying higher education institutions directly for customized curriculums to upskill employees through certifications and degree programming, and these programs have demonstrated value

The evolution of education as a benefit:

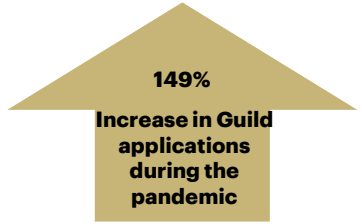
Education as a benefit is shifting from reimbursement programs to **employers providing direct payment** to education providers on behalf of students.

Employers are **partnering** with organizations such as Guild, InStride, and Person Accelerated Pathways to connect with higher ed institutions, who **provide customized curriculum** serving the employer's needs.

GUILD InStride Pearson | Accelerated Pathways

A resilient and valuable market:

Education as a benefit and the need to reskill and upskill workforces has become more important during and after the COVID-19 pandemic:



Since the pandemic education as a benefit providers have seen trends towards:

- Stackable credentials
- Certificate programs
- Overall increase in demand

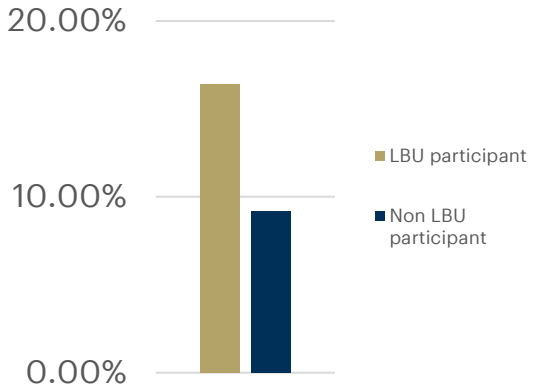
Outcomes and value provided - LiveBetterU:

LiveBetterU™

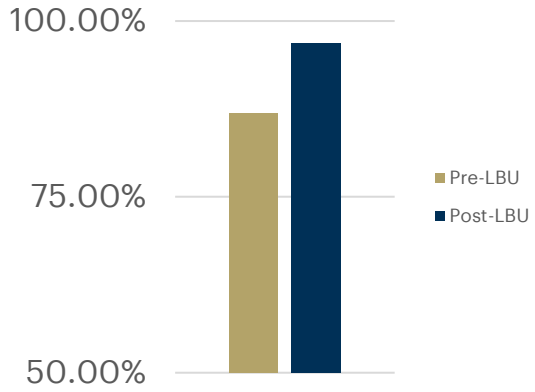
In 2018, Walmart announced an online initiative, **LiveBetterU** (LBU), to **provide certifications, degrees, high-school completion** and **language programs.**

Walmart partnered with **Guild Education** to provide Walmart Associates with programs at many institutions including – **Southern New Hampshire University**, **Bellevue University** and **Purdue Global.**

Average promotion rate LBU vs. non LBU



Average performance ratings pre-LBU vs. post-LBU



Walmart and Walmart Associates have greatly benefited **in cost savings and performance outcomes** due to LBU. Additionally, their **higher ed partners** have benefited by creating a **pipeline of adult learners who receive financial and academic support.**

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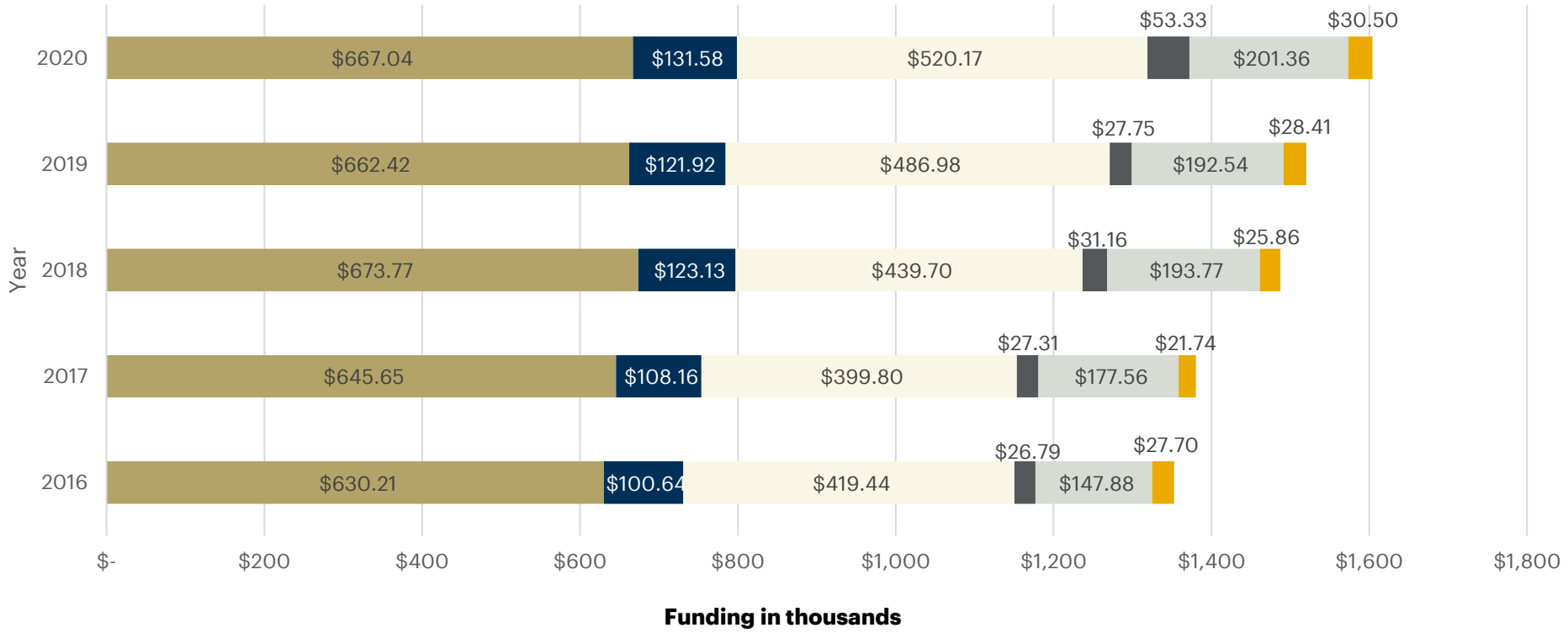
Source: Lumina Foundation "Study Shows the Benefits of Walmart Education Effort; Retail Giant's Live Better U Program is Providing its Value", Guild "UPCEA 2022 Key Takeaways: Lessons From a Pandemic and How PCO Remains Relevant", Accenture Interviews

Research and innovation in the lifetime learner market

2b

Higher education research expenditures on education topics has grown 18.6% since 2016, but nearly ¾ of that growth has been funded by sources other than state/federal funds

Higher education R&D expenditures by source of funding for education research 2016-2020 per NSF HERD data



$1.6B in total education research funds in 2020

The top 10 educational research universities **consume appx. 25% of total R&D funding**

The CHIPs and Science Act of 2022 provides **additional funding for STEM education and research** – a potential indicator for increased emphasis in this space*

- Federal funding
- State and local funding
- Institution funds
- Business
- Non-profit organizations
- All other sources

Note: All data is compiled from NSF HERD survey which is self reported data from universities. It is possible that education related research is classified under other research categories in addition to this data, but it is not possible to accurately comment on how much or how frequently funding is allocated to other categories due to reporting nature

*Note: See appendix for more information on CHIPS and Science Act

Source: National Science Foundation, "Higher Education Research and Development Survey" 2016-20

Lifetime learning services and possible offerings

2b

Providing services enables Georgia Tech to further engage the lifetime learning market

Services are offerings outside of core education programs that can be sold or provided pro-bono that allow an institution to serve the society and enable broader impact

Potential services	Example	
Pro-bono community services: Opening the doors to the Georgia and Atlanta communities for pro-bono community career counseling and services	WORKSOURCEATL	Provides resume reviews, mock interviews, job placement support to qualifying Atlanta residents for free
Data services: Providing labor market insights to companies to let them know who to hire and when as the commercial land scape continually evolves	SkyHive Unleashing Human Potential	Uses machine learning and data analytics to provide job and role matching insights for companies and their labor forces
Clinical education work: Providing services such as special education services, tutoring for non-GT students, or childcare for a fee or pro-bono	UCSF Campus Life Services	The University Child Care Center at Uni. California San Francisco provides advanced learning and care for a tuition fee ages inf.-K
Career advising and matching: Selling services to individuals to find open roles, identify skill gaps, and offer the appropriate credentials to upskill for specific jobs	MONSTER	Provides job searching, salary insights, and career advice forums to users that are looking for career pivots
Career academies Combining classroom guidance and real-world experiences to underprivileged youth to provide tangible guidance on career paths, class credit, and work experiences	United Way Greater Twin Cities United Way	Programming for students in grades 9-14 that provides college credit and partners with businesses for work experiences for career growth

Source: Multiple Career Programming Websites

Consideration for next steps

2b

Georgia Tech may consider the following in addition to this report when approaching the lifetime learner market:

01 Contemplate target scale and outcomes for K-12 programing considering benchmarks

- Look at program outcomes and how to measure success of the programming
- Consider the logistics and planning needed to implement K-12 interventions where Georgia Tech is currently not involved

02 Ideate opportunities and refine goals for the "services" space

- What is the goal of Georgia Tech in selling services?
- What services are going to be offered and to whom?
- How will services be priced/funded and offered to different segmentations of the local and national population?

03 Identify which segment of the employer-funded market GT is positioned to address

- What role can Georgia Tech play in the corporate learning landscape? How will GT differentiate itself?
- Can Georgia Tech compete and provide hyper customized professional education programing?
- Can Georgia Tech provide at scale training for employers through education partner organizations?

04 Determine target audiences in the non-credit market

- Primary consumers in the market are those who are college educated continuing to learn on a lifelong basis, not first-time learners
- With the rapid expansion and growth of non-credential market, how will Georgia Tech stand out against established players to garner market share?

05 Thinking about sustainable research funding sources

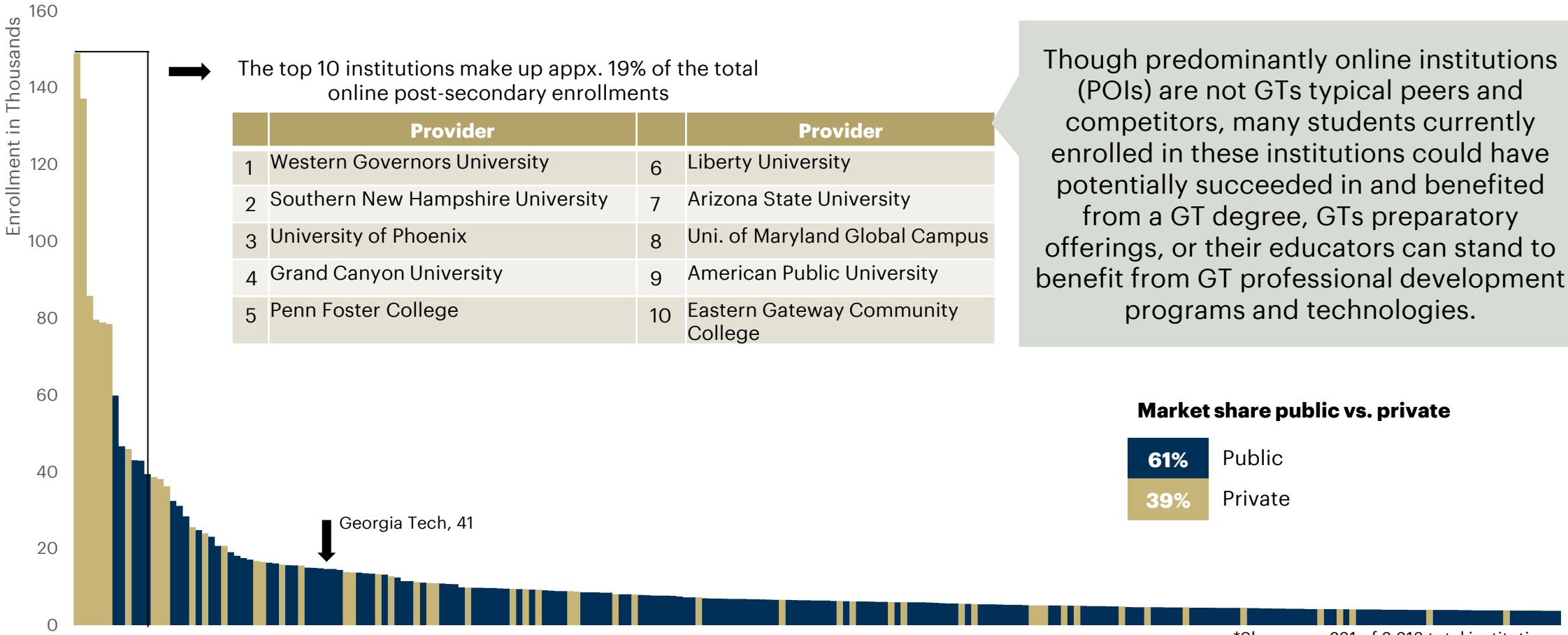
- Identify sustainable funding sources in education research both internal and external

2c. Engaging in the market is beneficial for GT and GA

Total online enrollment by institution 2021

The online learning market is dominated by large, primarily online, open access players in the market – Georgia Tech still has an opportunity to help these learners through its offerings

2021 total post-secondary degree seeking online enrollments*



The top 10 institutions make up appx. 19% of the total online post-secondary enrollments

	Provider		Provider
1	Western Governors University	6	Liberty University
2	Southern New Hampshire University	7	Arizona State University
3	University of Phoenix	8	Uni. of Maryland Global Campus
4	Grand Canyon University	9	American Public University
5	Penn Foster College	10	Eastern Gateway Community College

Though predominantly online institutions (POIs) are not GTs typical peers and competitors, many students currently enrolled in these institutions could have potentially succeeded in and benefited from a GT degree, GTs preparatory offerings, or their educators can stand to benefit from GT professional development programs and technologies.

Market share public vs. private

61%	Public
39%	Private

*Shown are 231 of 2,313 total institutions

Note: Accenture acknowledges that the institutions listed here are not within Georgia Tech's peer group of institutions, but it is important to acknowledge the market saturation these universities hold to better understand how Georgia Tech can define its role in the market.
Source: NC SARA "Fall 2021 Institutions by Total Exclusively Distance Education Enrollment"

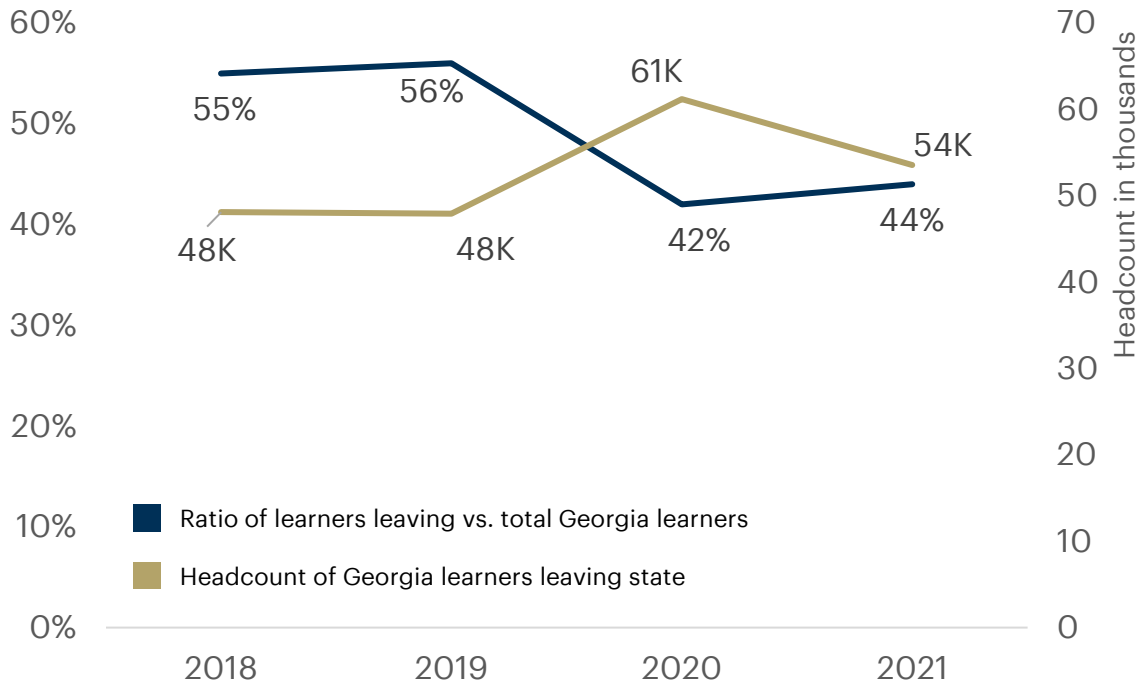
Georgia is losing learners to open access institutions

The ratio of students leaving Georgia for out-of-state online learning is increasing, and learners are leaving for large, open access, primarily online institutions out-of-state

Of all students leaving Georgia, ~3% are attending top 50 university programs

Students are increasingly **likely to study at an institution within 100 miles of their home**, but **students will still leave if their needs are not met**. Georgia Tech has an **opportunity to help the USG recapture** students by offering itself, and **upskilling USG sister institutions** to be a high-quality educational experience for Georgia learners

Degree seeking students leaving Georgia by headcount, and as a ratio to total Georgia learners in the state



Degree seeking students leaving Georgia for online education are primarily attending open-access POIs, many of them for-profit

	Institution	Number of Georgia students	Percent of all students leaving Georgia
1	Southern New Hampshire University	5,593	**7%**
2	Strayer University	5,579	**7%**
3	Liberty University	5,461	**7%**
4	Western Governors University	5,346	**7%**
5	University of Phoenix	4,834	**6%**
6	Penn Foster College	3,630	**5%**
7	Grand Canyon University	2,750	**4%**
8	American Public University System	2,503	**3%**
9	Capella University	2,167	**3%**
10	Purdue University Global	1,965	**3%**

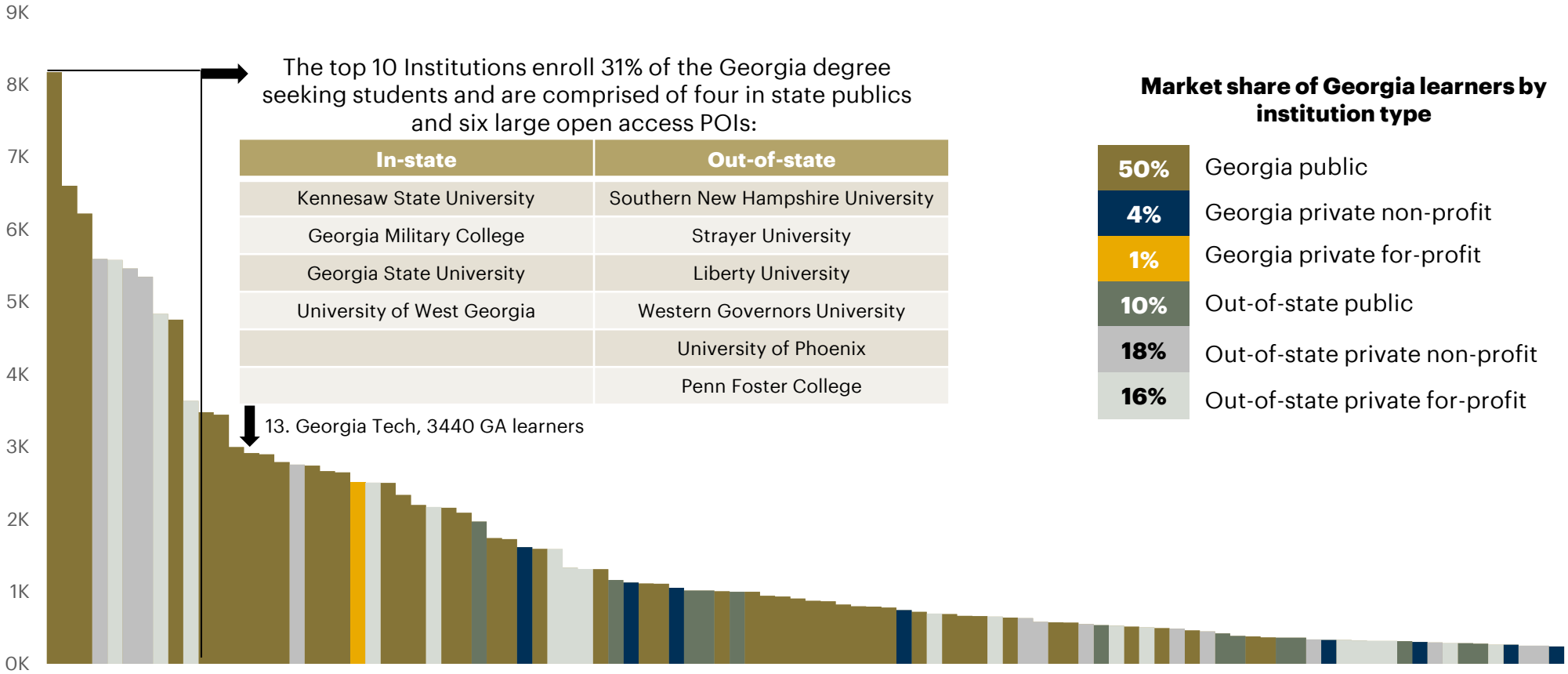
*Note: total online enrollments increased by 93% from 2019 to 2020 of which 63% of learners nationally in 2020 stayed in-state for education. This can be a possible data skew towards in-state learning because of the pandemic limiting in-person education modalities

Source: NC SARA "Where are My State's Institutions Enrolling Students", Wiley University Services "Voice of the Online Learner 2022"

Capturing Georgia online learners

Georgia Tech will have to consider how best to serve Georgia learners that are attending both instate and out-of-state online degree universities

2021 Georgia resident online degree seeking enrollments by institution*



The top 10 Institutions enroll 31% of the Georgia degree seeking students and are comprised of four in state publics and six large open access POIs:

In-state	Out-of-state
Kennesaw State University	Southern New Hampshire University
Georgia Military College	Strayer University
Georgia State University	Liberty University
University of West Georgia	Western Governors University
	University of Phoenix
	Penn Foster College

Market share of Georgia learners by institution type

50%	Georgia public
4%	Georgia private non-profit
1%	Georgia private for-profit
10%	Out-of-state public
18%	Out-of-state private non-profit
16%	Out-of-state private for-profit

*Shown are the top 100 online destinations for GA students of 498 total institutions

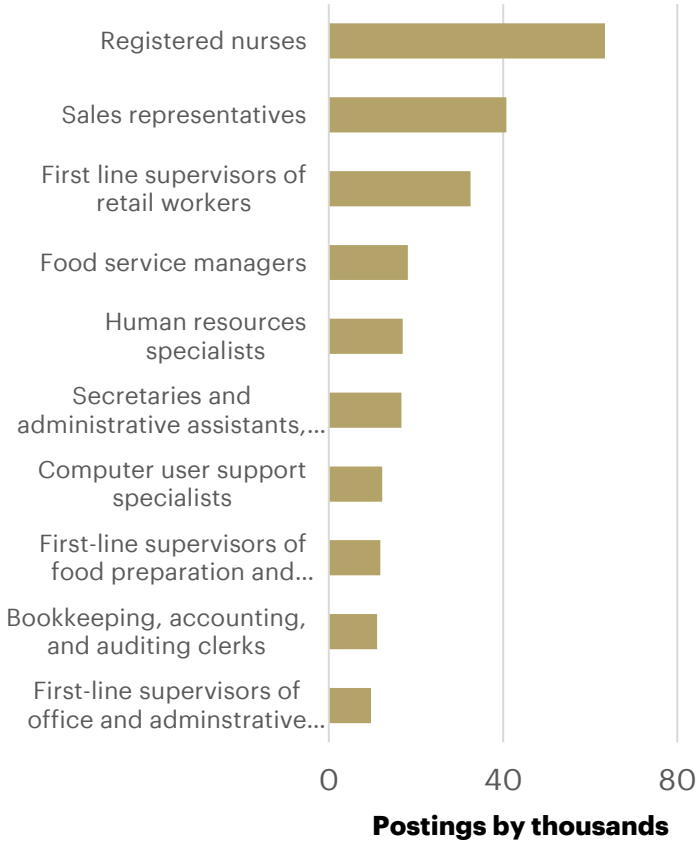
Note: Accenture acknowledges that the institutions listed here are not within Georgia Tech's peer group of institutions, but it is important to acknowledge the market saturation these universities hold to better understand how Georgia Tech can define its role in the market.
Source: NC SARA "Fall 2021 Institutions by Total Exclusively Distance Education Enrollment"

Georgia labor market: skills and jobs in demand

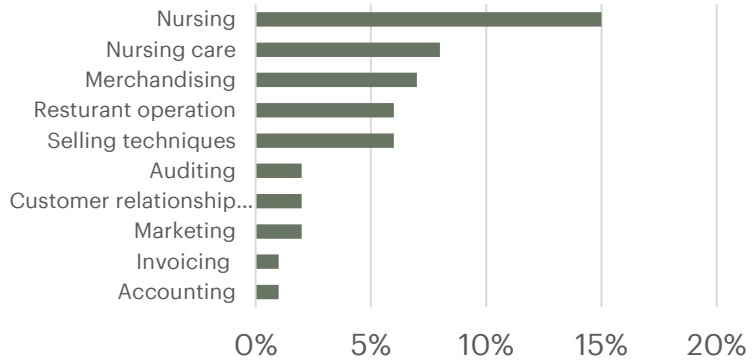
2c

Georgia tech is the top producer of graduates with skills relevant to and needed in the Georgia labor market

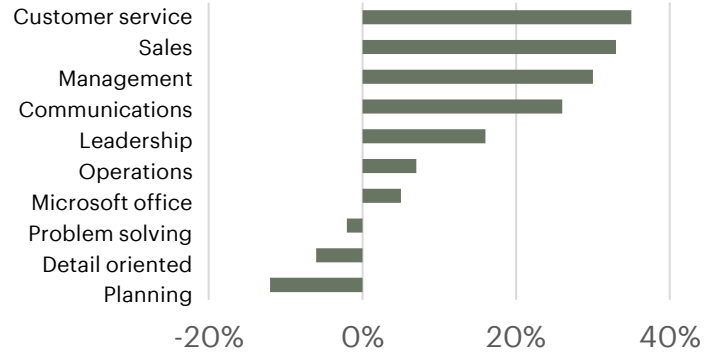
Top 10 in-demand jobs requiring a certification or above in Georgia 2022



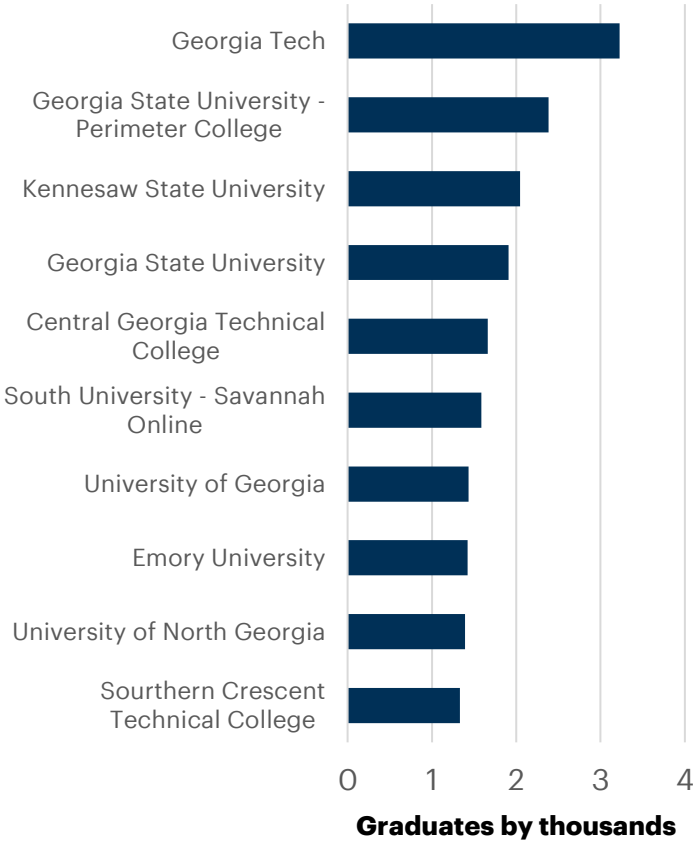
Top 10 specialized skills gap between % of total postings vs % of total profiles for certification and above 2022*



Top 10 common skills gap between % of total postings vs % of total profiles for certification and above 2022*



Top 10 Georgia universities producing graduates of associates degree or above for in demand jobs 2022



*Note: The delta in percentages are respective of the ratio for total postings and total profiles listed, which varies significantly
Source: EMSI labor market insights 2022

Georgia Tech can help Georgia attract and retain talent

2c

GT's historical emphasis on relevant digital skills positions it well to support the state in developing and maintaining a labor force that will attract and retain business in the state

92% of executives rated **"availability of skilled labor"** as **"important"** or "very Important" in choosing a location for their organization

90% of business and IT **executives** cite a need to fast forward their **digital transformation agendas,** creating a demand for talent that is knowledgeable in technologies of today

42.8% of Georgia workers are at **high risk of automation taking their job,** which demonstrates a need for upskilling to keep Georgia's workforce relevant in the era of automation

83% of execs agree that their organizations' **business and technology strategies are becoming inseparable** - states who upskill their workforces will **gain an advantage in attracting employers**, particularly in growing high-tech fields.

63% of executives report that the pace of their company's **digital transformation** for the organization **is accelerating** due to COVID-19 – pushing **digital literacy** and **technology skills** to the forefront

Source: Accenture Insights, Athens CEO "42.8% of Georgia Workers Are at High Risk of Automation"

Consideration for next steps

Georgia Tech may consider the following in addition to this report when approaching the lifetime learner market:

01

Prioritize the strategic area of focus for GT for near-term vs. long-term

- Conduct additional research to understand the skills and degree mismatch in GA and what areas GT can help address through lifetime learning
- Prioritize the key areas of focus for Georgia Tech

02

Consider key areas in which Georgia Tech can help continually close labor market gaps

- There are core skill gaps in the Georgia labor market where Georgia Tech can explore expansion into
- Consider other core offerings and strengths of existing Georgia Tech curriculum and how they can be curated to industry needs of the Georgia labor market

03

Critically evaluate the consequences of competing for open market share

- Scale in the online learning market currently comes in the wake of less selectivity. Given the tradeoffs, what is the right balance of scale and quality that GT will target?
- What role and who will Georgia Tech target within the lifetime learner market?

2d. Need to design innovative operating model structure to drive success

Operating model dimensions

We outline the prevailing operating models across these three dimensions:

Where and under which structure is lifetime learning delivered?

Who is responsible for delivering which aspect of lifetime learning?

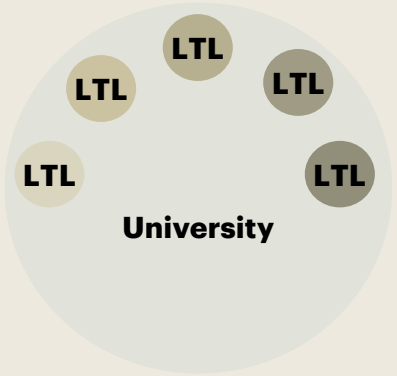
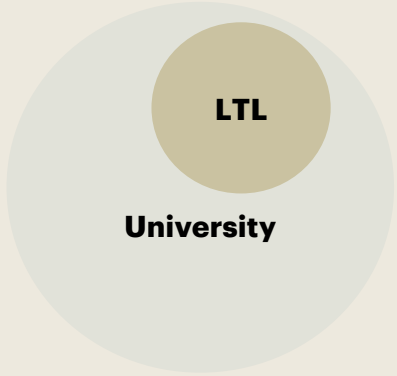
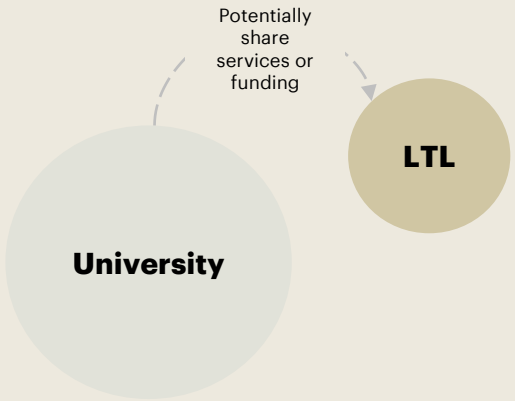
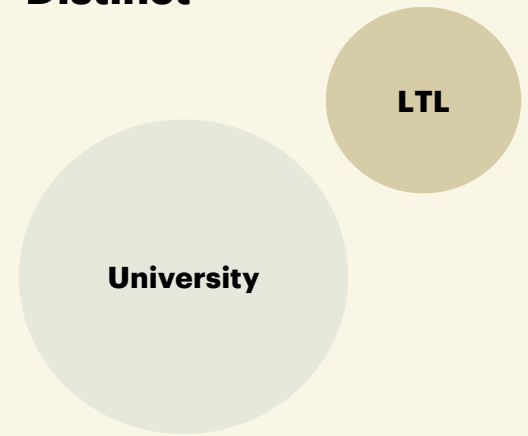
The breadth of services considered under the lifetime learning umbrella

Operating model dimensions – operational alignment

These models exist on a spectrum, with institutions rarely fitting cleanly into one.

Operational Alignment

Overview

Distributed	Integrated	Affiliate	Distinct
			
Various colleges within a University are **each conducting lifetime learning** on their own. It's like what CWRU is doing now—they have several offerings including data science bootcamps, certificates and the Siegal Lifetime Learning Institute, but those are all run by disaggregated parties—not centralized under one unit.	Lifetime learning is **done centrally / with a Center of Excellence (COE).** This would be similar to what ASU, or the Harvard Extension school do – all lifetime learning programs (including online programs, summer programs, K-12) are centralized. No school is doing online learning separately with their own OPMs etc.	Lifetime learning is conducted through **affiliate and is a separate 501c3.** This model is how we would characterize the Purdue Global model – though it is affiliated with Purdue, it has a separate board of directors, business model and operating model.	**E.g., Smaller institutions** University doesn't provide, facilitate or managing lifetime learning—they primarily **add their brand to an outside product. Note: for universities that are the caliber of GT, this is an add-on, not an independent model** An example of this would be the bootcamps with Trilogy. Trilogy is providing the content, recruiting the students and facilitating, but it's under the universities' brand.

Source: We have synthesized these operational alignments and definitions based on themes discovered through our primary and secondary research

Operating model dimensions – sourcing strategy spectrum

Organizations leverage different sourcing options to optimize their goals, resources and capabilities

Spectrum of extent of ownership versus outsourcing

Fully owned / operated
All functions and capabilities are **owned and operated by the organization itself**

Functional outsourcing
Outsource **specific function(s) of the organization to a vendor** (e.g., Marketing to an advertising agency)

Centralized functions
Some or all functions are run by a **centralized unit** (e.g., Central HR and payroll)

Outsourced
A **wider range of functions** are shared with an OPM. The OPM partner can be paid in one of two ways—**fee for service** or **revenue-share**

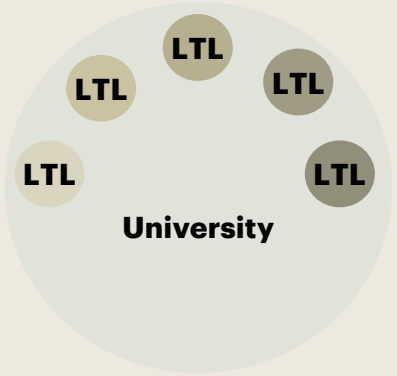
Lifetime learning (LTL) conceptual models

Looking at how various offerings are best or most frequently delivered in each LTL conceptual model

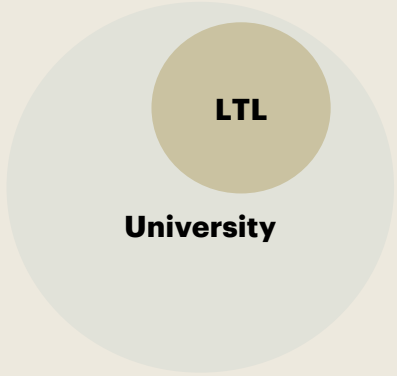
Breadth of Offerings

Breadth of Services | **Teaching** | **Research** | **Clinic / Service**

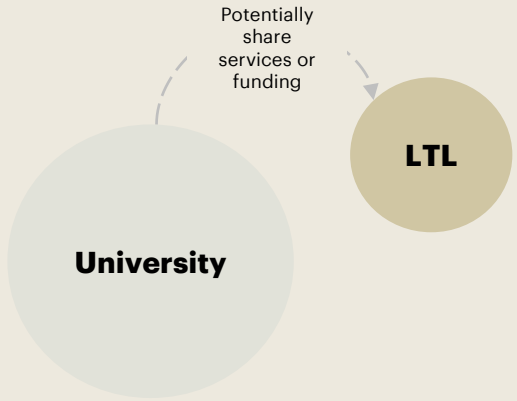
Distributed



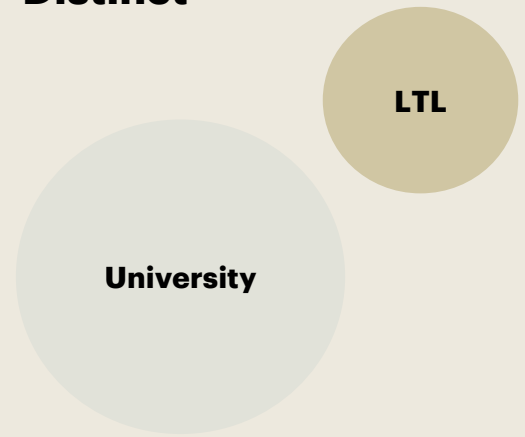
Integrated



Affiliate



Distinct



Where this function is usually found:

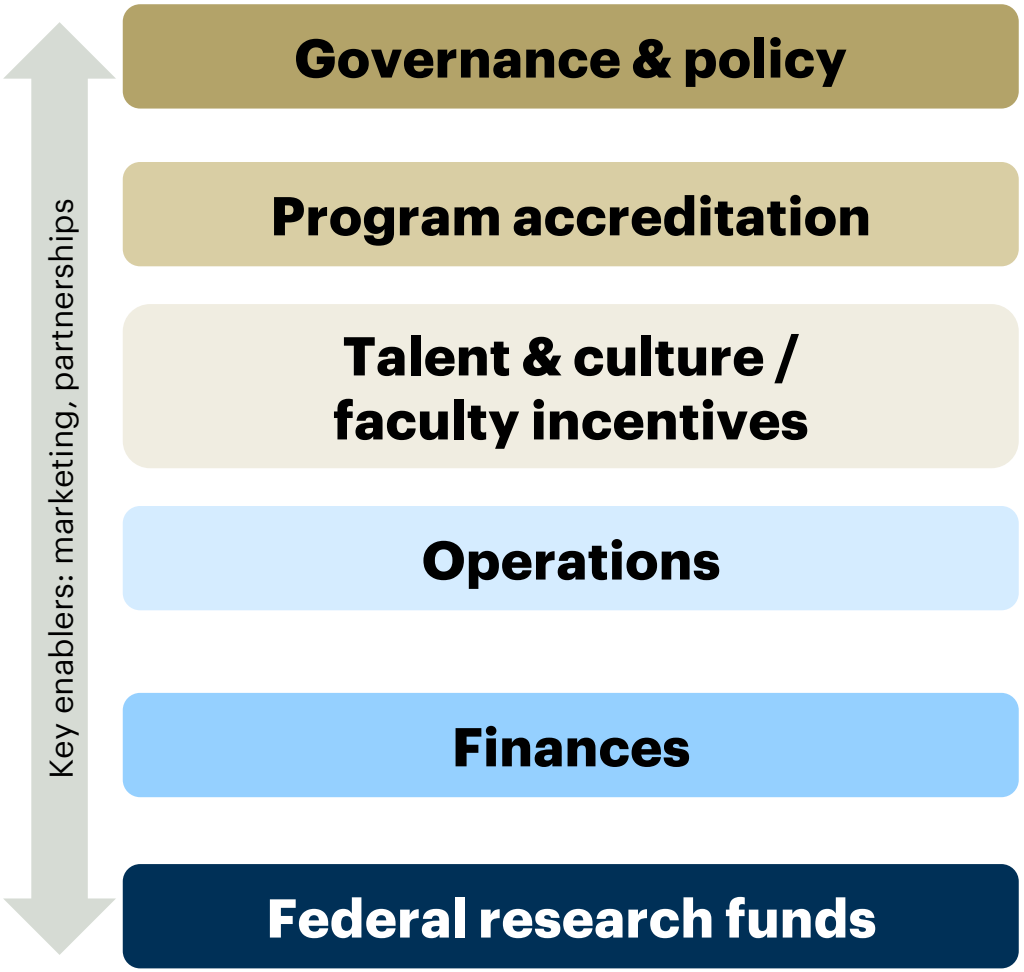
Within each college	Within LTL	Non-credit: Within LTL; Credit: Within Univ.	Non-credit: Within LTL; Credit: Within Univ.
Within each college	Usually within the University	Usually within the University	Usually within the University
Either	Either	Within LTL	Within LTL

Source: Based on our findings from external interviews

Operating model levers to push or pull based on the model

2d

Key focus areas for GT, which was the primary focus of our research



Who leads/is accountable for the lifetime learning organization?

Can a lifetime learning organization offer accredited programs?

To what extent can university staff & faculty be shared with the lifetime learning organization?

To what extent can the lifetime learning organization be supported by university central functions?

Is the lifetime learning organization beholden to state/legislature rules/regs that apply to state system universities?

Can it receive federal research funds?

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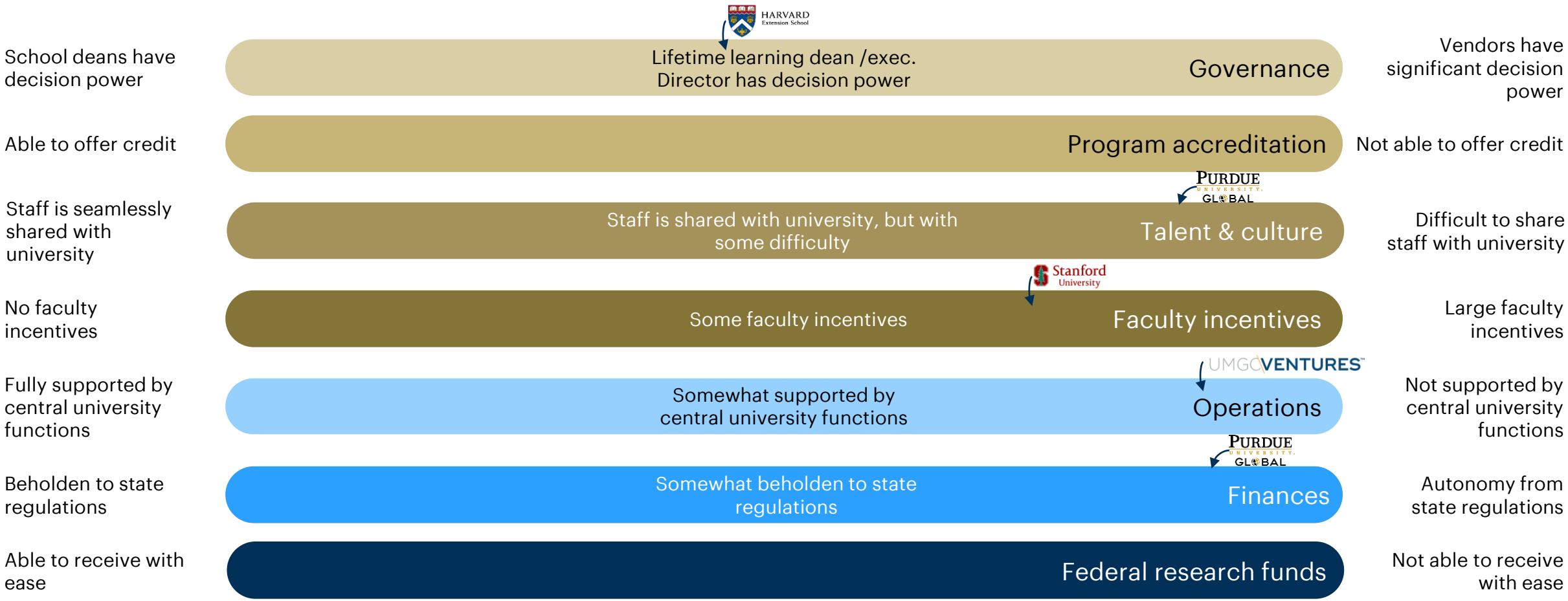
Key operating model levers

These 7 levers are the key differentiators in operating models across the market. Our mapping in this area looks at how different luminary organizations combine these factors to create sustainable operating models



Source: based on secondary research and primary benchmarking interviews

Governance

The decision-maker options for different operating models

School deans have decision power

Lifetime learning dean /exec. Director has decision power

Governance

Vendors have significant decision power

Decision maker: school deans

Decisions are made by the school Deans, giving each the maximum flexibility to make independent decisions

Examples Include

Georgia Tech
The current setup of lifetime learning at GT is decentralized. With OMS programs in the College of Computing, executive education in Scheller and K-12 in CEISMC, GT is managing lifetime learning strategies on multiple levels.
Source: Interviews

Decision maker: lifetime learning dean / executive director

Decisions are coordinated through the Lifetime Learning Dean (if part of the University) or the Lifetime Learning Executive Director (if an affiliate)

Harvard Extension School
As its own school within the University, the Dean of the HES is the decision maker across K-gray programs.
Source: Interviews

Decision maker: vendor

Decisions may include some consideration of the core institution, but are decided by independent stakeholders

Northwestern Bootcamps
By partnering with Trilogy, Northwestern is outsourcing most of their decisions on their bootcamps to Trilogy–their bootcamp partner
Sources: Trilogy, Northwestern

Program accreditation

Credit options for different operating models

Able to offer credit — Program accreditation — Not able to offer credit

Able to Offer Credit

Organization can grant degrees in addition to being able to offer non-credit courses or certificates

Not Able to Offer Credit

Organization is limited to non-credit courses or certificates

Examples Include

Purdue University Global
Since they arrived at a credit-granting ability in a roundabout way (through their acquisition of Kaplan and their purchased credit granting power), PUG is a unique example of an affiliate that has maintained it's credit granting ability because it itself is an accredited institution.
Sources: Interviews, Purdue Newsroom

Rutgers Bootcamps
Rutgers Bootcamps—which are run in partnership with Trilogy—are non-credit activities. Though Rutgers also offers online degree programs, the bootcamp portions are specifically certificate only.
Source: Rutgers Bootcamps

Talent & culture

Options for organizing faculty, instructors and staff for different operating models

Staff is seamlessly shared with university

Staff is shared with university, but with some difficulty

Talent & culture

Difficult to share staff with university

Employees are Seamlessly Shared with University

University staff and lifetime learning staff are one and the same, and University structures make the ability to share staff seamless

Examples Include

Arizona State University

At ASU, the lifetime learning function is one of three main tenants of the university structure. As such, staff are one and the same as University staff and can be shared freely.

Source: Interviews

Employees are Shared with University, but with Some Difficulty

With more federated or responsibility center management models comes less ability to freely share staff between the various schools

University of Washington Continuum College

There is a small number of shared staff, but most staff members are only affiliated with the Continuum College and are not shared with the broader university. They also rarely hire faculty to be instructors for their non-credit courses, and if they do, it's an additional payroll process.

Source: Interviews

Difficult to Share Employees with University

Decisions may include some consideration of the core institution, but are decided by independent stakeholders

Purdue University Global

As a separate entity, PUG has a separate set of staff from Purdue.

Source: Interviews

Faculty incentives

Options for different faculty incentives across different operating models

No Faculty Incentives

In models where the Clinic is more closely associated with the University, **some faculty are not paid additional salary,** because the function is more taking their existing classes and recorded lectures and digitizing them, involving minimal new content creation

Some Faculty Incentives

In models where the University is affiliated with the Clinic but not fully encompassed, **faculty are sometimes paid an incentives for their work in developing and teaching classes**—as much as 25% of revenue is divided among the instructing and overseeing faculty. Remaining proceeds are shared between the faculty's home college and the Clinic after the Clinic's operating costs have been covered.

Large Faculty Incentives

In models where the Clinic has more independence from the university, the **faculty are sometimes treated as consultants** paid as Clinic employees. Some universities (e.g., Stanford) even give faculty 1 day a week for consulting where they can earn outside income including, but not limited to, income from consulting with the Clinic. This allows for the greatest amount of incentive flexibility.

Examples Include

SNHU
Faculty that are involved in online courses are compensated the same as faculty involved in on-campus courses
Source: Interviews

Stanford University
Has a tuition sharing faculty incentive model where 25% of online tuition revenue is distributed among the faculty teaching said course and 2% of it goes to the course administrator(s).
Source: Interviews

Purdue University Global
If Purdue faculty wanted to be involved in a PUG course, it would involve separate HR processes and hiring practices
Source: Interviews

Operations

2d

Options for centralized or decentralized operations across different operating models

Fully supported by central university functions

Somewhat supported by central university functions

Operations

Not supported by central university functions

Fully Supported by Central University Functions

For fully supported operations, the University needs to be set up in a centralized manner in addition to structural decisions in the lifetime learning entity

Somewhat Supported by Central University Functions

As the most common option, partially shared functions marry flexibility from and reliance on the University

Not Supported by Central University Functions

Entirely separate entities do not rely on Central University functions

Examples Include

Stanford Center for Professional Development
In 2016, the SCPD shifted to serve as a centralized resource under provost's office. In this configuration, the SCPD was both supported fully by central university functions as well as acting as its own centralized function.
Source: Interviews

University of Washington Continuum College
Though most of the staff only operate within the Continuum College, there are a small number of functions that the College shares with UWA such as HR and payroll.
Source: Interviews

University of Maryland Global Campus Ventures
As a distinct 501c3, UMGC Ventures is not supported by the centralized functions of UMGC.
Source: UMGC Media Center

Finances

Financial regulations to consider across different operating models

Beholden to state regulations

All state regulations that apply to the University also apply to the lifetime learning function including financing and procurement

Examples Include

Arizona State University
ASU is a public university meaning that their large lifetime learning practice must meet all state regulations including procurement and funding practices.
Source: AZ BOR

Somewhat beholden to state regulations

As the most common option, partially shared functions marry flexibility from and reliance on the University

University of Maryland Global Campus
UMGC has two components—a lifetime/ online learning practice that is most of its operations, but also UMGC ventures which is a separate 501c3. With this dual faceted approach, portions of UMGC are beholden to state regulations, but others are not.
Source: UMGC Media Center

Autonomy from state regulations

Entirely separate entities do not rely on Central University functions

Purdue University Global
Though Purdue is a public university and, as such, needs to meet state regulations, PUG is accredited through what used to be Kaplan's (a private university) accreditation, meaning that PUG does not need to follow state regulations on things like spending funds and procurement.
Sources: Interviews, Purdue Newsroom

Federal research funds

Considerations for federal funding sources across the different operating models

Able to receive with ease

Federal research funds

Not able to receive with ease

Able to easily receive federal research funds

Most 501c3 organizations can apply for federal funds. However, there are some hefty considerations that need to be weighed before applying for and receiving federal funds including:

- ❑ Competitiveness of your application
- ❑ Resources (human and otherwise) to complete the work
- ❑ Accounting system that is robust enough to support government requirements
- ❑ Personnel to monitor compliance + billing
- ❑ Strong procurement processes in place
- ❑ Credibility as a sub-awardee

Source: Interviews

Not able to easily receive federal research funds

Organizations that may not pursue federal funds are ones that do not have a robust accounting system, do not have robust compliance or procurement practices, or do not have the resources to properly conduct this research.

Examples Include

University of Washington Continuum College
As a college within a public university the Continuum College is well suited to both apply for and be competitive in receiving federal funds. They have the capabilities to manage applications and ongoing grants, and the ability to share staff with the broader University as needed.
Source: Interviews

University of Maryland Global Campus Ventures
UMGC Ventures is not mainly focused on conducting research. Their structure as a distinct 501c3, though it does not preclude them from being eligible, makes the process more tedious than it could be worthwhile to pursue.
Source: UMGC Media Center

Key enablers

The critical role marketing and partnerships play in any operating model success

Marketing

For people to love your offering, they must know about your offering.

As the pandemic has brought more online learners into the market, the **need to target those learners has increased**. As has the need to **differentiate your value** from the thousands of other places people can go to learn.

We have seen **marketing teams for institutions**, even ones that are not primarily online institutions, **reaching 50+ people** (University of Washington Continuum College).

Many marketing strategies **rely on the name of the core institution. It is difficult for a college within an institution to create a brand distinct from the broader university.** That is an important consideration when deciding how distant from the University you want to be—more distance means harder to market to potential students, but also harder to market to alumni, corporate partners and other potential donors (e.g., foundations).

Another factor to consider is that when you partner with an organization, you assume the defamation risk of that brand.

Partnerships

Increasingly, success in the lifetime learner market has involved developing strategic relationships with outside partners (usually employers). The **lines between lifetime learning in higher education and employee training are increasingly blurry**. In addition to paying universities to run courses on their behalf, employers are also covering employee tuition (e.g., Starbucks and ASU).

Employers are also acting as **thought partners,** which is a critical piece in predicting the future of work – talking to the employers of the future and understanding their predicted challenges.

When thinking about corporate partners, it's helpful to focus on three things:

1) What companies are **ingrained in your community**
2) What companies have **specialties that are beneficial to your mission**
3) What companies will your **learners work at (or want to work at) in the future**

Source: based on secondary research and primary benchmarking interviews

Relevance for GT

Leveraging this research to maximize GT's benefit

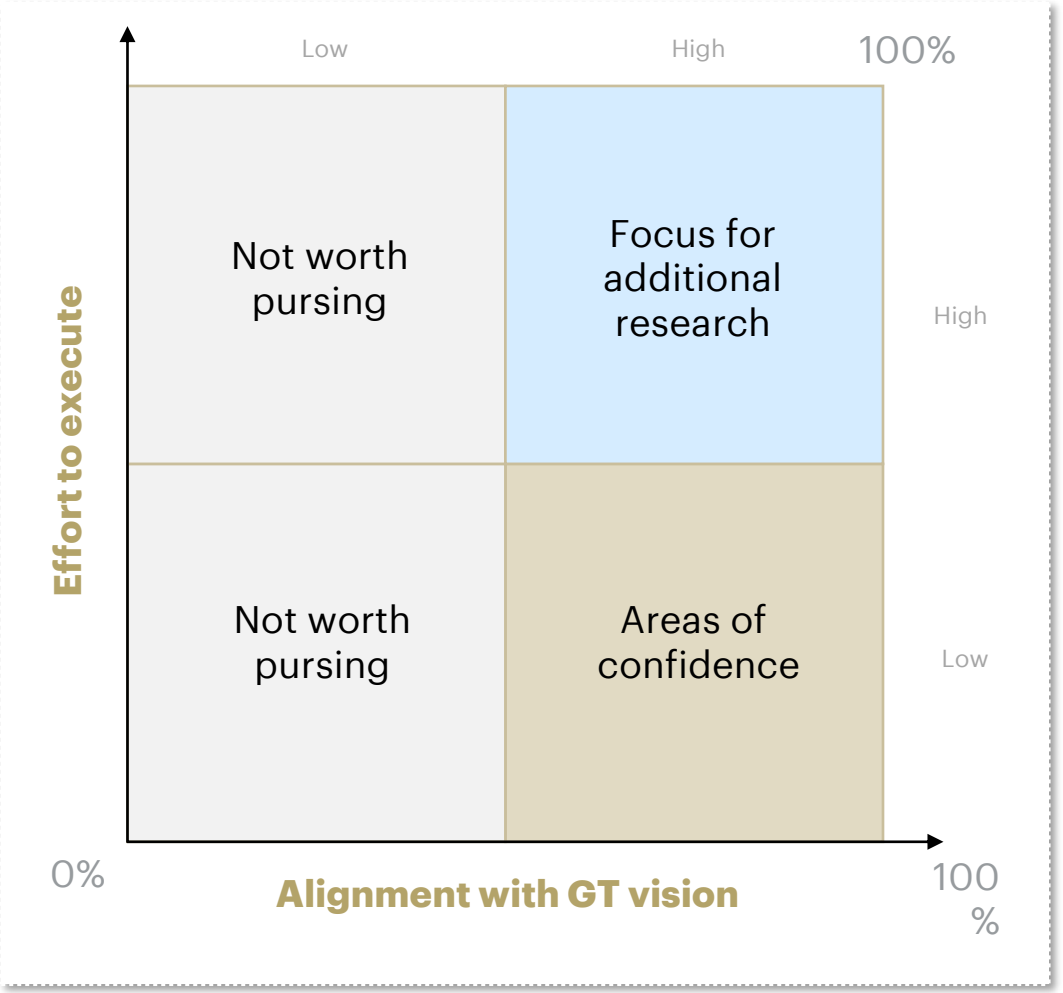
How can you apply what you've learned?

We recommend that after digesting the above information and discussing initial thoughts in your working groups, you identify which subcategories are most important to you.

Then, looking at the models, workshop some set ups that might be combined to make a few model universities that could work for GT.

After that, we recommend you map specific subcategories to the quadrant on the right to see what you feel you have a handle on and what you think would take more effort or expertise.

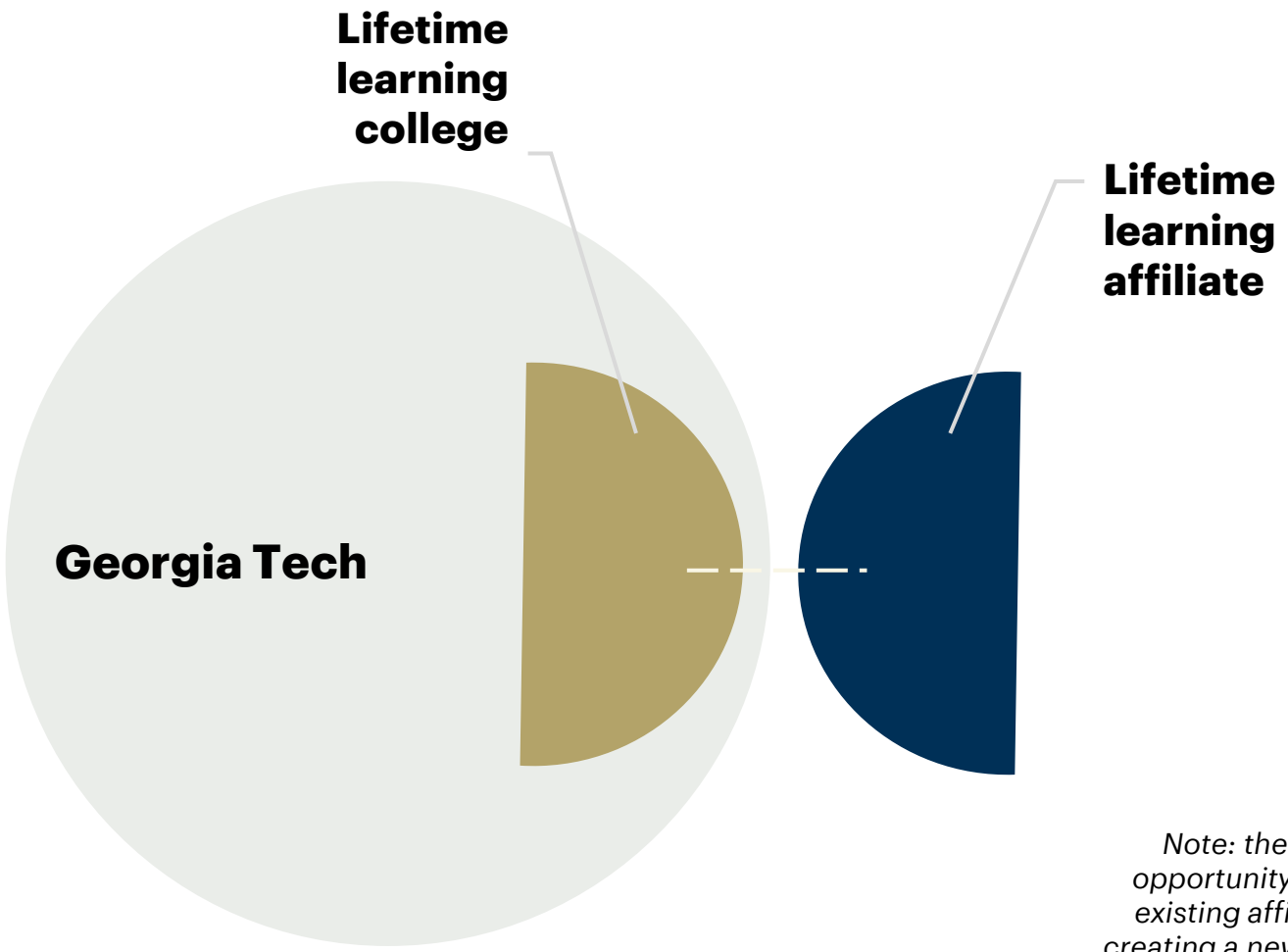
As you identify organizations that are operating closely to your end visions, we would recommend you set up additional interviews with those people to get more specific information on how they made those changes within their organization.



Source: based on secondary research and primary benchmarking interviews

Operating model recommendations

A dual operating model structure would enable GT to better meet its objectives for lifetime learning



Establish a lifetime learning college

- For-credit programs
- Research

Employees are employees of the University	Works within USG and GT governance structures	Able to apply for and receive federal funds, supported by GT research admin capabilities	Possible attributes; non-exhaustive

Establish a lifetime learning affiliate

- Non-credit programs and certificates
- Services

Employees hired independently or funded by affiliate revenue	Provides nimbleness and agility to accept terms that may not be acceptable otherwise	Employer partnerships such as multi-year education agreements allowed for	

Note: there may be an opportunity to leverage an existing affiliate instead of creating a new one, potentially reducing start up costs (min. $250K)

Consideration for next steps

Georgia Tech may consider the following in addition to this report when approaching the lifetime learner market:

01

Discuss & prioritize

- Do the activity in the slide above to understand what levers are important for GT to push or pull

02

Figure out what you'd like to understand better

- Some of the levers may land in a place similar to what GT is already doing, but some areas may be less familiar, and you may want to understand them more

03

Follow up secondary research

- Before using your time with any follow up interviews, you may want to conduct, you can first do some research on your own. It helps to see if the interview is needed, and if it is, helps you to clarify what insights you want to get out of those conversations. Not all research needs to be "fancy"—sometimes just Googling can be surprisingly insightful.

04

Follow up primary research

- Conduct follow up interviews with organizations doing something similar to what you are envisioning for GT so that you can dive deep on how that one function came to be at their university

05

Reconvene and synthesize findings

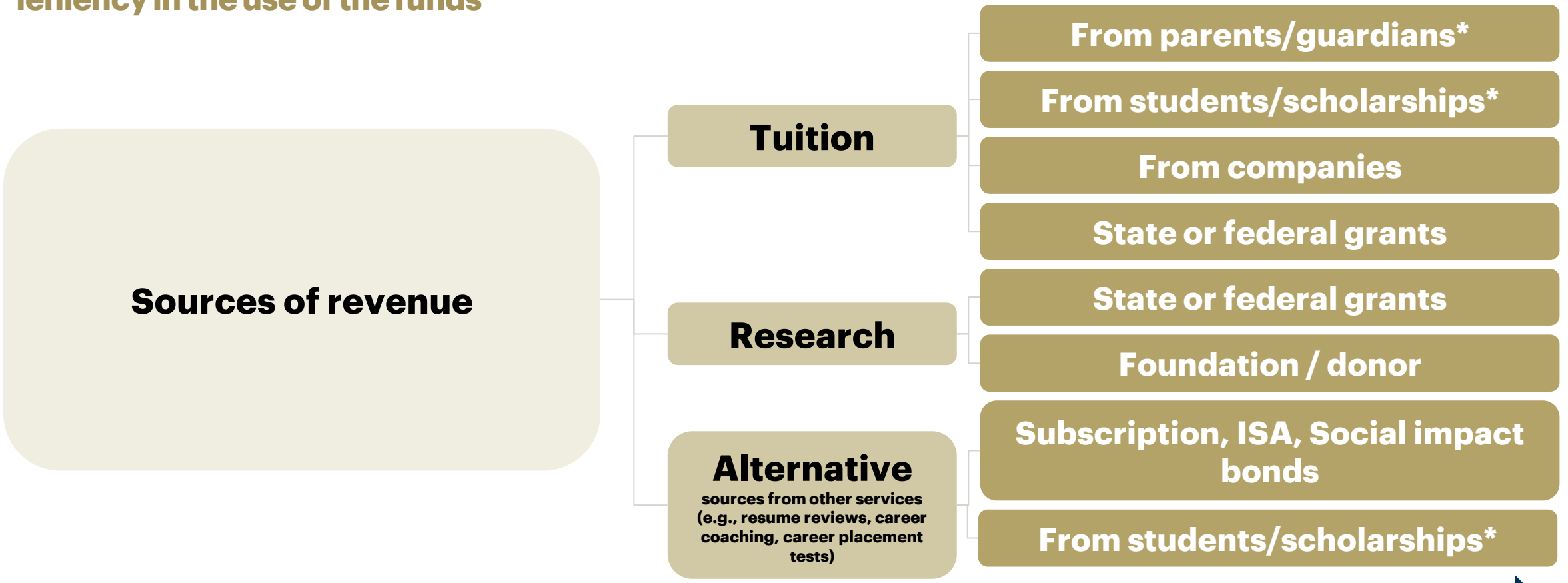
- After you have answered your questions about the implementation specifics at other universities, you can summarize your findings to share and create a new operating model that meets those criteria

2e. Funding model can be sustainable

There are sustainable funding models in the market

2e

Higher education is increasingly getting creative about how and where to source funding to allow for some leniency in the use of the funds



*Self- or parent-funded can be financed in various ways that will be included on the following slide

Source: based on secondary research and primary benchmarking interviews

Unique tuition approaches

In addition to the typical loan approach, there are evolving options for self-funded education

2e

Subscription models[2,3]

Learners pay a recurring fee to access (usually all) courses on a learning platform or at a University or a one-time fee for lifelong access

→ Pro: Can make education more accessible longterm

→ Con: could be difficult to maintain over time

Income sharing agreements[1]

*Income sharing agreements are a loan alternative where the student agrees to pay a **fixed percentage of their post-graduation salary** to the lender*

→ Pro: Can make education more accessible upfront

→ Con: Currently very unregulated (CFPB is working to regulate), requires a minimum salaray, varying re-payment caps

Social impact bonds[4,5]

"A social impact bond is a contract with the public sector or governing authority, whereby it pays for better social outcomes in certain areas and passes on part of the savings achieved to investors."

→ Pro: Can make social impacts more feasible for non-profit entities

→ Con: Risky investment for lender – social changes are hard to predict; if no outcome is achieved, no funds are repaid

Sources: 1. Nerd Wallet, 2. EdSurge,3. Chronicle, 4. Investopedia, 5. Social Innovation in Higher Ed

Primary sources of funding by lifetime learner market segment

2e

Where we are seeing funding coming from different types of lifetime learner activities

	Teaching		Research/ innovation	Service
Bootcamps, summer programs **Parent-funded tuition, state and federal grants, grants from foundations or other non-profits[1]**	*Junior specialists* | **financial aid supported[3]**	*Personal development learners* **Self-funded tuition**	*Federal* **Federal grants**	*Federal* **Federal grants**
Dual enrollment **State funded[2], tuition[1]**	*Evolving professionals* | **self-financed[3]**	*Try before buy learners* **Self-funded tuition (if not free)**	*Non-federal* **Foundation grants, state grants, employers, high-net-worth individuals**	*Non-federal* **Foundation grants, state grants, employers, high-net-worth individuals**
Charter schools **State funded**	*Mid-career climbers* | **employer- or self-financed[3]**	*non-credit corporate & executive learners* **Employer funded tuition**		*Alternative* **Other income from other provided services**
	Trajectory transformers | **self-financed and employer influenced[3]**			
Primary & secondary school	Post-secondary degrees	non-credit learning		

Source: 1. Synthesized from external interviews and/or website analysis, 2. Thirty-five states provide postsecondary institutions with the same level of funding for dual enrollment students, 3. Accenture learner mindset study

Two approaches to look at returns on investment

2e

We have heard from several of our external interviewees about a new way they are measuring success

Many public universities are experiencing increasing pressure on revenues due to cuts to state funding, caps on tuition increases, the declining number of 18- to 22-year-olds, and a decline in federal research funding. At the same time, we have seen the definition of return on investment (ROI) quickly expanding. Similarly, we have seen the time it takes to realize that return expanding in kind.

An ROI-based approach

"Right now, individuals are willing to spend a lot of money on college degrees because it's easy to see pathways or examples of individuals monetizing their learning."

An ROI based approach is one where the **ability to attribute revenue growth** (specifically as returns on investments) is the core goal.

It requires the organization to have a **very clear way to measure** how each action or group of actions **makes an impact on revenue.**

Leaders who follow this approach are **excited by the ability to see which strategies are helping their organization grow** and develop and to see a specific strategy pay dividends.

Institutions that follow this approach would include for-profit organizations like Coursera or Grand Canyon University. It also includes most primarily online institutions. Additionally, it would include a lot of organizations that historically aren't the highest funded and may need to be quickly self-sustaining for their lifetime learning facet to survive.

An impact-based approach

"Our goal is to reduce the number of individuals with some or no college experience by 50% across the state . . . We're not just serving our college; we're serving our surrounding communities"

An impact-based approach is one **fueled by activism** and underpinned by the idea that by serving your community of learners in a method that promotes empathy, ethics and equality, you are **by proxy serving the global community.**[1]

It requires the organization to **dig deeply into data that is broader than the institution itself** and have **untraditional KPIs** which can be **extremely difficult** to measure. This can also make it **more difficult to secure funding** for these ventures.

Leaders who follow this approach are excited about big dreams—they are looking across geography and time and get excited thinking about **what future learners could one day accomplish.**

Institutions that follow this approach include organizations that are **already well funded** (even if ultimately the lifetime learning portion can become self-sustaining) such as Harvard Extension School, the University of Washington Continuum College and ASU.

Source: 1. Definition adapted from linked article

Example ROI metrics

2e

CONTINUUM COLLEGE

Reduce the some / no college population in the state of Washington **by 50% in 10 years**

Enable the **United Nations Sustainable Development Goals**

ASU

Impact the Arizona community more broadly by starting a **charter school to provide high quality K-12 education.**

Focus on how many **reached and engaged learners (actively taking a course) they have in addition to completion rates**

HARVARD Extension School

Understand how students are doing after graduation, with their jobs **(e.g., salary post-HES degree),** and even personal lives

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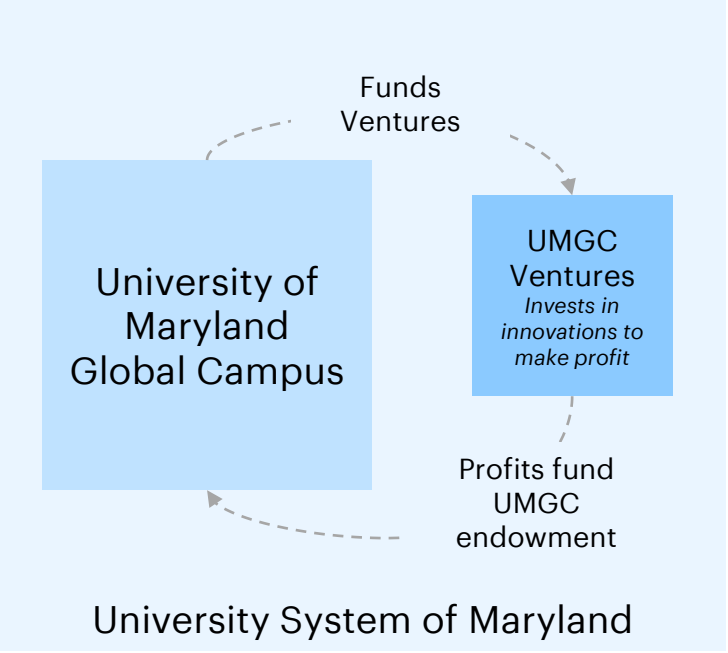
Source: Sampling of ROI metrics from benchmarking institutions

Case Study | University of Maryland Global Campus Ventures 2e

A unique workaround to a need to spend most of their annual state funding within the fiscal year

What is UMGC Ventures?



UMGC Ventures is an affiliate organization of UMGC. But it's also a hub for innovation, 100% focused on identifying revenue-generating opportunities to support the transformation of higher education.

The proceeds of its efforts are returned to the UMGC endowment, helping to maintain the affordability of a high-quality education for adult learners in Maryland and around the world.

How Does UMGC Navigate Around State Funding Restrictions?

By leveraging its status as a separate 501c3, UMGC Ventures is funded by UMGC and acts as an incubator (which includes start ups, student ventures etc.)

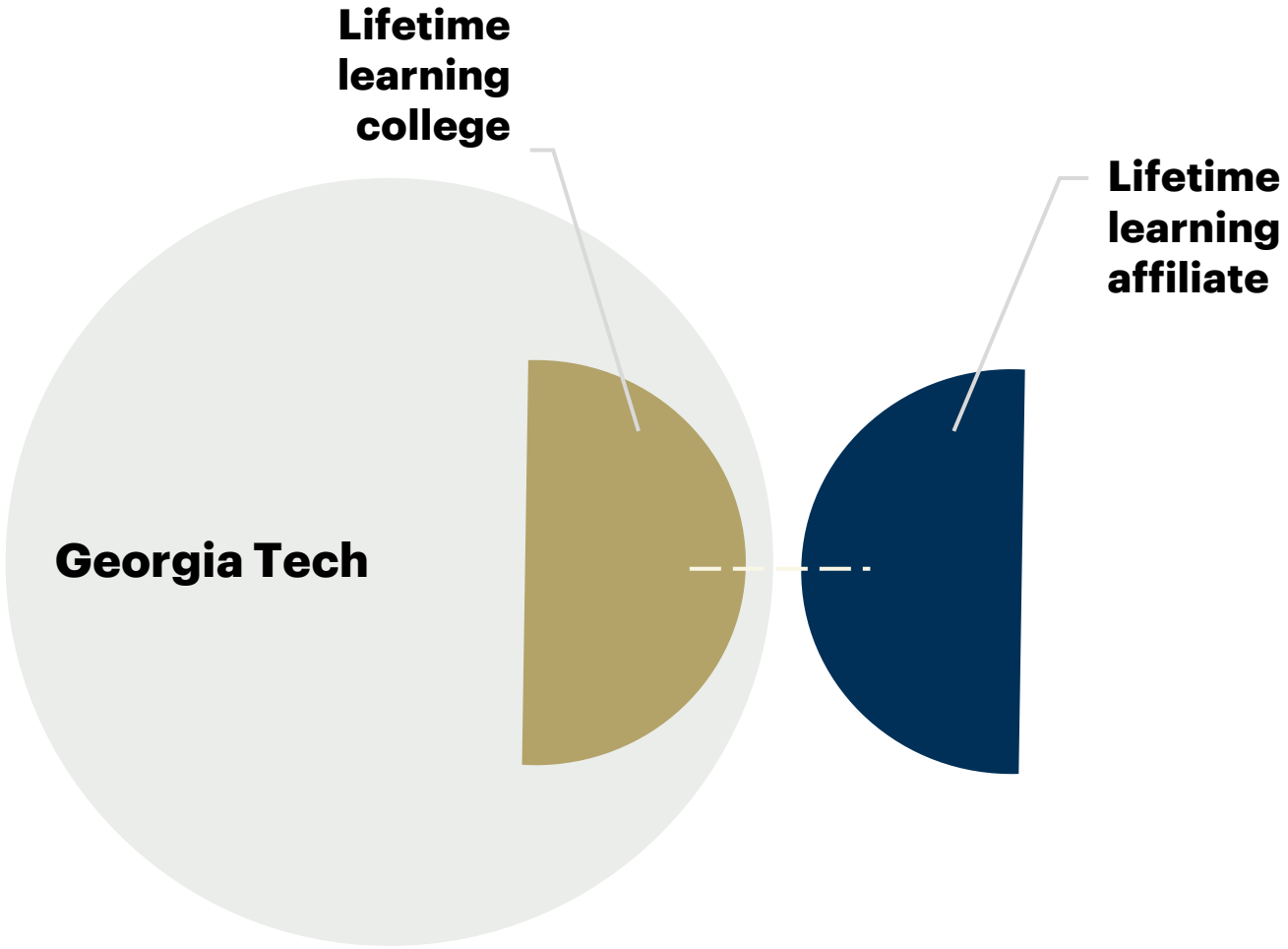
Profits made on their investments then roll back into the UMGC endowment – which has more flexibility in funding than state funds directly.

Note on Revenue Loss: UMGC experienced revenue losses of $8.3 million and $13.3 million in fiscal 2021 and 2022, respectively, as a result of the COVID-19 pandemic, which were offset utilizing various federal Higher Education Emergency Relief Fund (HEERF) stimulus payments -Maryland Operating Budget

Operating model recommendations

2e

A dual operating model structure would enable GT to better meet its objectives for lifetime learning



Funding Sources

	LTL college	LTL Affiliate
State appropriations	☑	☒
Tuition (paid by learner)	☑	☑
Tuition (paid by employer)	☑	☑
Fees from services rendered	☑	☑
Federal Funding	☑	☒
Other funding (e.g., foundation)	☑	☑
Alumni/donor gifts	☑	☑

Note: there may be an opportunity to leverage an existing affiliate instead of creating a new one, potentially reducing start up costs (min. $250K)

Consideration for next steps

Georgia tech may consider the following in addition to this report when approaching the lifetime learner market:

01

Define clear, measurable goals

- Financial structures should enable the business you want to create, not the other way around. Start by clearly defining your goals for the lifetime learning program

02

Discuss & prioritize

- Once you have a clear path forward, look at the different funding sources and ROI methods. Combining that with the financial governance pieces in the operating model section, work to outline what financial restrictions you might be willing to accept and what funding sources would best help you meet your goals

03

Follow up primary research

- Conduct follow up interviews with organizations doing something similar to what you are envisioning for GT so that you can dive deep on how they set up their finances

04

Understand any barriers

- If your chosen financial model involves some barriers like the need to change a USG bylaw or the need to request special permission from university admin, those barriers should be clearly defined

05

Create an action plan

- Create a strategic plan for how you will address any barriers including materials you need to create and stakeholders you need to engage. If USG needs to make a change, that material can be drafted for them like GT has done in the past

3. Appendix

Glossary

Glossary of key market terms

Term	Definition
Academic unit	A unit within an institution or university that is responsible for academic programming around a specific subject. Ex. a school of engineering
Admin unit	A unit that maintains responsibilities for administrative duties and programming in an institution. Ex. Office of pre-college programming
Continuing education unit	A unit of an institution or university that focuses on non-traditional learning experiences and groups. Ex. Division of continuing education
Digital badges	An indicator of accomplishment or skill that can be displayed, accessed, and verified online
Dual enrollment	A program where a student is enrolled in high school and college courses at the same time. Typically, the college credits earned will also count towards high school learning requirements
Employer-sponsored learning	Structured learning programs paid for by the learner's employer; typically, non-credits
Higher education	Higher education is post-secondary or tertiary education that is leading towards a formal undergraduate or graduate degree
Lab school	Elementary or secondary schools that operate in conjunction with a university or college to test emerging educational methods and/or research
Lifetime learning	All intentional learning conducted throughout a learner's lifetime with the goal of knowledge whether through traditional or alternative sources and regardless of credit awarded in compensation for knowledge received
Non-credit	Any intentional learning not leading towards a formal diploma or degree
Online program management (OPM)	For-profit vendors hired by nonprofit (and for-profit) universities to help convert in-person courses/programs to online courses/programs as well as to recruit and admit students to them. Usually OPMs are paid by fee-for-service or revenue sharing
Open access	Refers to freely available digital information e.g., YouTube, MOOCs
Post-secondary education	Encompasses any structured education completed after the learner's receipt of a high school diploma
Primarily online institutions (POIs)	Any institution that reports more than 95 percent of its undergraduate and graduate enrollments combined enrolling exclusively in distance education courses prior to the pandemic era
Pro-bono	Without charge (in particular, education offered free of charge)
Registered apprenticeships	An apprenticeship or internship that is registered with the US Department of Labor
Services	Offerings made to learners inclusive of those beyond the traditional GT student population. Offerings may include career coaching, resume reviews, administration of career placement exams etc. These services are distinct from "student services" meaning offerings available to in-person GT students such as mental health services, health services, financial services etc., though there is a potential for overlap in offerings.
Stackable credential	A credential that is part of a sequence of credentials that can be accumulated over time to build up an individual's qualifications and help that individual move along a career pathway to further education, different responsibilities and potentially higher-paying jobs.
Teacher development	Training K-12 teachers on emerging or best practice teaching techniques
Tertiary education	See: post-secondary
Unregistered apprenticeships	An apprenticeship or internship that is not registered with the US Department of Labor

Internal GT insights and workshop takeaways

Workshop Executive Summary

Dual model

GT is interested in pursuing a dual operating model that allows the University to unlock the benefits of both being within the University and replicating successes of other GT affiliated organizations

Autonomy vs funding opportunities

The three most important things to GT in an operating model are being able to offer faculty incentives, being able to nimbly work within an increasing array of regulations while meeting industry needs for partnerships and being able to gain federal research funds easily

Holistic approach to K-12

The group emphasized the need for K-12 student experiences along with development of teachers, and consultation for school systems to create environments conducive to STEM teaching and learning

Research is a top priority

As a R1 University, with research as a core part of the mission, the lifetime learning academic and services units must have research as an integrated part of credit and non-credit teaching and learning experiences, building on the research already done by C21U.

Accelerating the pace of innovation

GT stands out as a leader in lifetime learning and is highly regarded by employers for developing sought after skills. The pace of innovation must accelerate to remain competitive.

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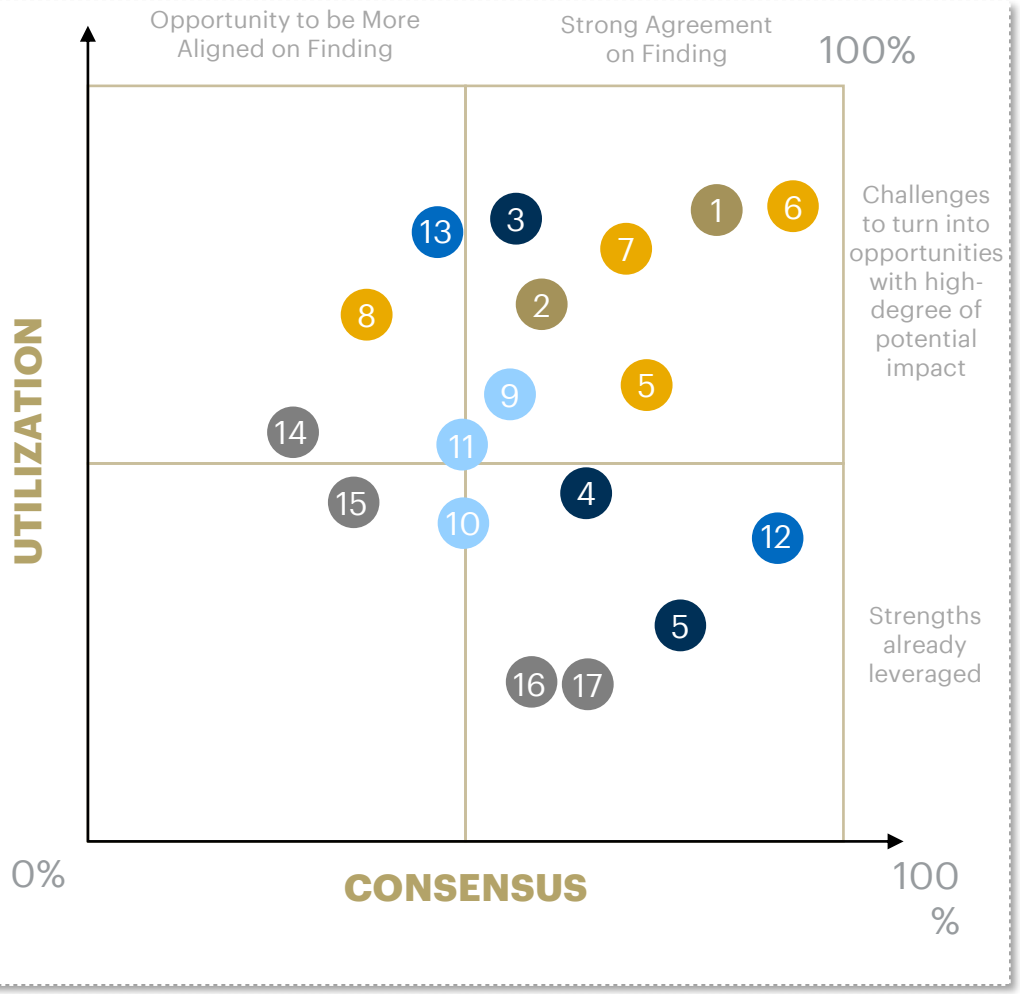
Internal insights (1 of 2)

Non-exhaustive

Vision | Governance & Structure | Financial Model | People & Culture | Policy and Procedures, Process | Capabilities



Internal - Emerging Interview Findings

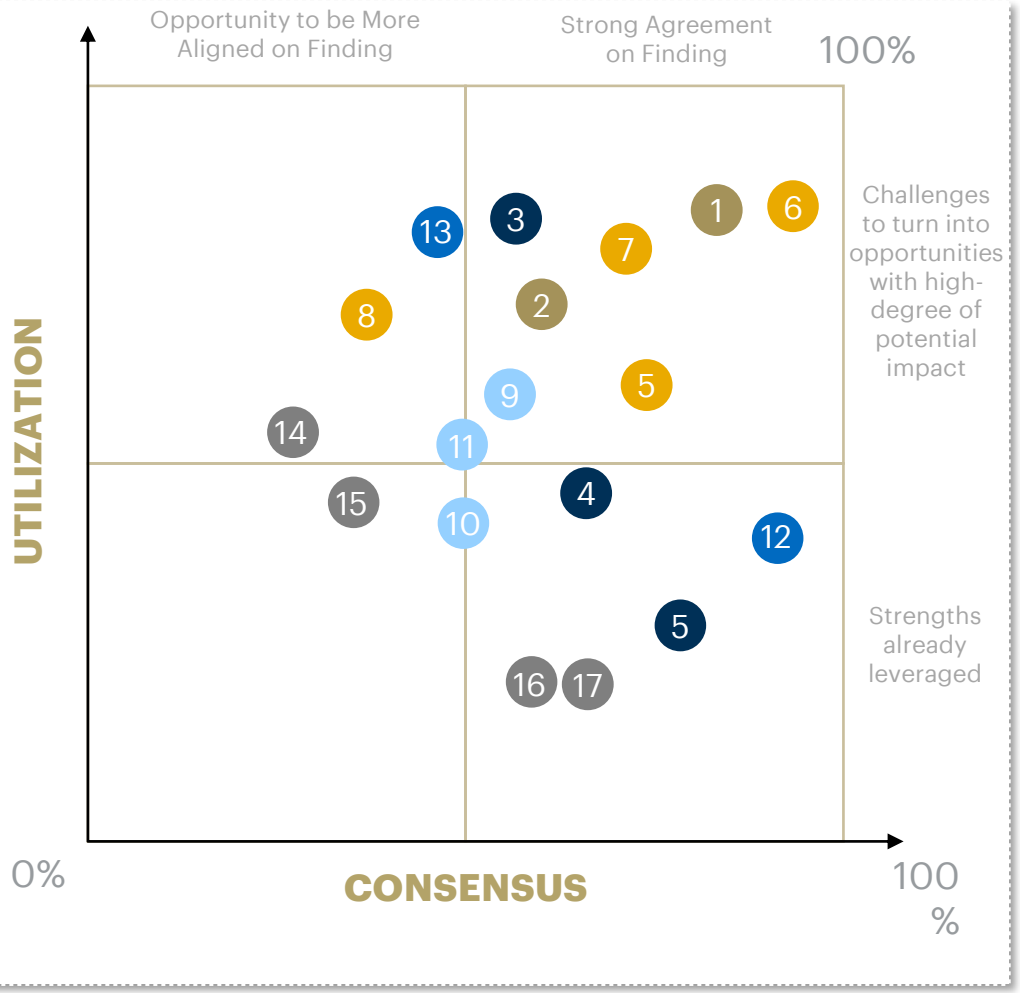
1. **Aligned vision areas:** research needs to be a component, expanding access is critical,, be an innovative leader in the space, enable flexibility and ability to quickly pivot, scale over time, become a lab for innovation that will fundamentally shift higher ed
2. **Other vision areas:** knowing that this will likely be a stepwise process, the top priority areas need to be defined— e.g., the K-12 vs. professional development, focus on being global while still serving GA community to align with USG practices and standards, program should have the ability to decide whether to conduct a course or not (i.e., breakeven point) , Differing opinions on how to navigate the K12 space – balancing desire to expand K12 outreach with regulatory limitations in this space
3. Merging 3 different business units (GTPE, C21U, and CEISMC) presents an opportunity to define new governance structures, roles and responsibilities, and leverage the strengths of the three
4. Key stakeholder groups include Working Groups, GTPE Partners, Faculty Leadership, USG, Board of Regents, Campus Community (including students, faculty, staff, alumni, board of trustees). Anticipate pushback from traditionalist alumni / faculty, and USG / Board of Regents
5. Affiliate organizations may be brought in if there is a limitation to provide flexibility in a dedicated area
6. Current state-level funding policies are designed for traditional credit-earning tuition rates. The market rates for lifetime learning experiences are more varied and aligned with demand for skills and cost of delivering the programs. To cover costs and meet evolving market needs, a different revenue model will be needed.
7. May need to consider impacts of differing funding models when merging existing organizations (USG dollars, state-funded grants, external grants, or employers). Opportunity to include monetary incentives for faculty / staff participating in the program
8. There are differing views on adjusting day to day operations for Cost Accounting, they vary between thinking it is an integral part of the new model to being a high change impact area that would benefit from retaining day to day operations

Low consensus – room for additional alignment on vision, challenges or opportunity areas
High consensus – team is aligned on what the opportunities are regarding people, process or tech, or they agree that finding is positive as is
High opportunity – may not currently have the resources, technology, skills or policies to enable, but could be impactful if achieved
Low opportunity – the people, process or technology are close to maximized or the system is working well

Internal insights (2 of 2)

Non-exhaustive

Vision | Governance & Structure | Financial Model | People & Culture | Policy and Procedures, Process | Capabilities



Internal - Emerging Interview Findings

9 GT has an internal culture of creativity, entrepreneurship, enthusiasm, and willingness to jump into a new idea at scale

10 Hesitancy to this magnitude of change is expected as faculty, staff, and other key contributors must understand the purpose and expected benefits of changes for them individually as well as the organization collectively.

11 Faculty incentives need to align with any new model so that they can be appropriately compensated, advance their careers, and be recognized for their contributions to scholarship more broadly. Staffing levels and capabilities will need to be adjusted to shift focus or take on additional workload.

12 **Policy and Procedures**: Georgia Tech is committed to adhere to USG policies and bylaws. However, some standards may inhibit GT's ability to support both their goals and the state's goals of expanding education to Georgia residents (namely: 3% funding rule, inability for CIO team to support non-credit bearing programs, and procurement policies). There is a need for more flexible ways to hire, appoint, and pay employees

13 **Processes**: There may be challenges in combining the distinct core processes of each individual unit; opportunity to define the core functions and business processes needed to enable lifetime learning; presently the processes not fully documented and / or standardized

14 Existing experience and framework in the lifetime learning spaces. Including: Ability to deliver online programs exceptionally as evidenced by the CS Online Masters and Large and well-functioning research capabilities with C21U and CEISMC

15 Existing infrastructure of GTRI to incorporate research components and expand upon publications in the learning sciences space

16 Opportunity to incorporate tools like predictive analytics and data mining to understand what tools people will need for their jobs in the future, as well as strong marketing to leverage GTs brand and recruit participants for lifetime learning

17 **Metrics**: Metrics align with Institute Strategic Plan priorities including amplifying impact (through growth), expanding access (particularly for learners across socioeconomic, racial/ethic, cultural, and chronological identities), and championing innovation (new ways of teaching/learning). Traditional measures of selectivity will not apply.

Low consensus – room for additional alignment on vision, challenges or opportunity areas
High consensus – team is aligned on what the opportunities are regarding people, process or tech, or they agree that finding is positive as is
High opportunity – may not currently have the resources, technology, skills or policies to enable, but could be impactful if achieved
Low opportunity – the people, process or technology are close to maximized or the system is working well

Other relevant market research and insights

CHIPS for America workforce and education fund ($200M)

The National Science Foundation will use the funds appropriated to engage workforce development activities using the $200M through FY2027 ($25M for FY2023, $25M for FY2024, $50M for FY2025, $50M for FY2026, $50M for FY2027). **Details of this specific program are currently TBD**, but the below summarizes the provisions of the CHIPS Act Section 10318 Microelectronics Workforce Development Activities, empowering National Science Foundation to create helpful initiatives to produce personnel in needed industries.

Eligible partners

Institutions of higher education, non-profit organizations, and consortia thereof.

Uses of Funds

Development of industry-oriented curricula and teaching modules

for topics relevant to microelectronics, including those that provide meaningful hands-on learning experiences. Includes these materials' dissemination and maintenance of publicly-accessible database and online portal.

Development and implementation of training, research, and professional development programs for teachers

including innovative pre-service and in-service programs, in microelectronics and related fields.

Support for learning activities and experiences

that provide physical, simulated or remote access to training facilities and industry-standard processes and tools, including equipment and software for the design, development, manufacturing and testing of microelectronics.

Support for innovative industry pathway programs

that connect high school, vocational, military, college, and graduate programs

Providing informational hands-on microelectronics learning opportunities

for Pre-K-12 students in different learning environments, including competitions

Timelines and application process

Details are TBD. The White House must submit to Congress detailed account, program, and project allocations for fiscal year 2023 no later than **October 8th,** 2022. Funding documents, which will provide specific application guidance for the CHIPS for America program, will be released by early February 2023. Awards and loans will be made on a rolling basis as soon as applications can be responsibly processed, evaluated and negotiated.

Sources: H.R. 4346. "Biden Administration Releases Implementation Strategy for $50 Billion CHIPS for America program," US Dept of Commerce.

STEM education and rural STEM opportunities

Congress has authorized the National Science Foundation and NASA to establish programs to bolster STEM education, STEM education research, and related partnerships. This includes funds for rural STEM education.

$13B for STEM education via the National Science Foundation Budget

Division B, Titles III-VI incorporate a massive variety of provisions to support STEM education, research, as well as expanding access. Partners will likely be nonprofits and schools.

Authorizes the National Science Foundation to engage in activities supporting research on barriers to STEM education and solutions, including:

- Support for Pre-K informal STEM opportunities
- Establishing Centers for Transformative Education Research and Translation to facilitate partnerships for wide-spread implementation STEM education that harnesses leading practices.
- Supporting Rural STEM education (see below)
- Encourage the addition of art and design to STEM curricula to promote creativity and innovation
- Other various implementations including establishing a chief diversity officer at NSF

Authorizes NASA to:

- Codify the Office of STEM Engagement to promote STEM literacy and workforce development

Other Provisions include but not limited to:
- Establishment of a National Engineering Biology Research and Development Initiative

"CHIPS and Science Act authorizes significant investment in STEM," ASTC.org.

Rural STEM education & research

Division B Title V Subtitle B. The National Science Foundations shall make awards to institutions of higher education, nonprofit organizations, or consortia thereof.

Preparing rural STEM educators ($45M over FY23-FY27)
- Engaging rural educators in STEM learning opportunities
- Supporting research on Effective STEM teaching
- Developing training resources for educators
- Coordination of adapting training practices to local assets
- Hands-on training for educators and professional development
- **Rural STEM collaborative:** Establishing a pilot program of regional cohorts in rural areas to provide peer support, mentoring, and hands-on research experiences for Rural STEM Educators to build an ecosystem of cooperation.

Broadening the participation of rural students in STEM ($60M over FY23-FY27): Research and development of programming to identify barriers rural students face in accessing high-quality STEM education; developing innovative solutions to improve preK-12 student participation.
To name a few provisions:
- Developing partnerships with community colleges to offer advanced STEM course work
- Supporting research on effective STEM practices in rural settings and supporting better federal support.
- Implementing school-wide STEM approaches

Other provisions include improving rural opportunities for online education, introducing a National Academies evaluation of rural STEM education and research ($1M), a GAO review, and NIST engagement with rural communities ($5M).

Sources: H.R. 4346. Section-By-Section Summary of the law; "CHIPS and Science Act authorizes significant investment in STEM," ASTC.org.

Success trends | Where we find inspiration

Online and non-traditional learning is a big factor for the lifetime learner market – so where and how have we seen it be successful before?

Stanford University

Stanford successfully created the **Stanford Advanced Project Management Program.** They attribute their success to their strategic decision to identify and leverage gaps in the industry for working professionals.

After analyzing the market, Stanford Center for Professional Development noticed learners with PMP certification often still lacked effective communication skills, so they worked with IPS learning to build and launch program. It offered 14 courses, and 10k people completed 6 or more courses.

UNIVERSITY of WASHINGTON

The University of Washington Continuum College is **44th in the Nation for college completion** and credits this to their focus on short programs that deliver subset of relevant skills needed today.

The college has a robust network of corporate partners that work with the university to develop degree programs as well as programs with staged credentialing that allows people to still get jobs without completing degrees. This offering makes education accessible to learners in and outside of Washington, easily scalable, and valuable for learners looking for alternative pathways to employment.

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Source: Synthesized from external interviews

In- vs out-of-state tuition for online classes

Though providing differing tuition for in- and out-of-state students taking classes or completing degrees or certificates online is an uncommon practice, there are a few schools who offer lower tuition rates to those in state.

For example, **Ohio University gives a $5 discount per credit hour** for in-state residents taking online courses.

The **University of West Georgia** also charges the full **out-of-state tuition** for online courses offered to **students who also attend in person classes**.

External case study

University of Washington Continuum College

UNIVERSITY of WASHINGTON

Quick Facts

If separated from the University of WA (UWA), the Continuum College (CC) would still be the **largest educator in the state**

Background Context

Serving students from **8-98,** the Continuum College provides educational programs to meet the needs of new and nontraditional learners.

The college runs 111-degree programs at University of Washington (offered both online and in person) and engages K-12 populations through summer youth camps.

The CC is **44th in the Nation for college completion** and credits this to their focus on short programs that deliver subset of relevant skills needed today. The college has a robust network of **corporate partners** that work with the university to develop degree programs as well as programs with **staged credentialing** that allows people to still get jobs without completing degrees.

Value Proposition

The CC is focused first and foremost on **statewide education KPIs** and understands that enrollment numbers are not a 1-to-1 correlation for actual student job placement or success. For example, UWA **recognizes that "some college" in reality means "some skills," but those candidates are often invisible to employers**, meaning they effectively have no higher education.

One of their goals is working with employers to focus on skills-based hiring over degree hiring and reducing employer degree requirements. Another is to **reduce the "some college" population by 50% in the next 10 years.**

Structure and Organization

The Continuum College (CC) **sits inside the broader University of Washington (UWA)** structure and has two main components—**assisting academic units in taking their courses online and providing their own non-credit course content.**

UWA has a **decentralized service model** meaning each college has their own support staff that feed into a centralized unit, including HR. The CC does their own instructor hiring, and though some faculty do teach across both units, it is a small percentage of instructors. The **incentives to teach are low**, as is the pay, but they find that many **instructors are either participating to give back to the UWA community, or to seek out high performers early.**

Other Information

- Marketing team size – 50
- Longevity of lifespans is impacting learning markets
- Market for 50 – 65 is growing dynamically (ex. 65-year-olds starting their own business)
- Washington does not have a system of higher ed
- Instead has a council of presidents (Leadership feeds into legislature)
- University of Washington is the only R1 in the pacific NW
- Continuum College is working hand in hand with legislature for pre-college programs
- Seattle is the 2nd highest R&D spending in the world

accenture

Source: Synthesized from external interviews

External case study

Stanford University

Quick Facts

200 + academic credit bearing courses

150+ continuing studies courses

140+ lifetime learning courses

90+ professional education courses

30+ custom and executive education programs

13 online or part time master's degree programs

Background Context

The Stanford Center for Professional Development (SCPD) was established in 1995 and is focused on **leveraging Stanford's content and faculty** in an accessible format that could be consumed right away **benefitting industry leaders**.

Programs include a **$25 million Professional Ed Program** (B2C) and a **$15 million Graduate Program**. The graduate program allows students to pursue their degree part time. Often times, the graduate program operates where the consumer is the employee, and the payer was the employer.

Core capabilities included high quality instructional design, a stakeholder with strong business acumen, and robust marketing. Marketing was one of the largest financial components (ex. spent $3 million on Google)

Value Proposition

The goal for the SCPD was to expand the delivery of education for Stanford faculty (content is relevant and helpful for over 16 million users) and to help build upon learning sciences.

Target learners are **working professionals ($120 Billion Market)**. Goals vary across Graduate Programs and Prof. Development Programs

These programs often leveraged gaps in existing certifications. A successful example of this was the **Stanford Advanced Project Management Program.** SCPD noticed PMPs often missed effective communication skills, so they worked with IPS learning to build and launch the program. It offered 14 courses, and 10k people completed 6 or more.

Structure and Organization

The SCPD was created **within the engineering college**. The program worked closely with the chairs of 3 departments in this space on both governance and maintenance. It occasionally brought in free agent academic directors that still required approval from dept chairs.

In 2016, the SCPD shifted to serve as a centralized resource under provost's office. In this transition, the SCPD had to work with 7 schools with a variety of readiness levels in this space.

Stanford stood up / built their own platform for online learning and have integrated additional vendors along the way.

Faculty and departments received incentives for Professional Ed Programs.

Other Information

- Stanford stood up / built their own platform and have integrated additional vendors along the way
- Referenced GT as having innovative school of professional studies
- 90% of the portfolio was online
- Received tuition reimbursement from certain companies
- Professors have 1 day a week for consulting opportunities

Source: Synthesized from external interviews

External case study

Harvard University

Quick Facts

70 degrees & certificates
Harvard Extension School

110 years
Distance education trailblazers

120
Professional Development programs

60 countries
Harvard Summer School

29,000
Harvard Extension Alumni Association members

550 members
Harvard Institute for Learning in Retirement

Background Context

Harvard Extension School is a self-sustaining college that has four main programmatic offerings: a degree-granting extension school, summer programs for K-12, executive education offerings and community-run courses led and attended by retirees.

The summer school program is a secondary school program that rising sophomores can attend (15+).

The 55+ retirement program is a membership program that is peer taught and led. Learners in this program **teach and learn together as a community**.

Value Proposition

Harvard's Programs are **utilizing student success as a measure** of the program. This encompasses how students are doing after graduation in their current jobs, throughout their career journeys, and even in their personal lives.

Harvard has a **robust data pipeline** to track their students. Harvard also utilizes student success stories and results – especially around transformational journeys.

Making the Harvard more accessible while still mainlining the brand while students meet minimum requirements.

The **summer programs** offer value for K-12 populations by helping students get prepped for admission to colleges – this also helps to build out a pipeline for Harvard. Program is self sustaining; Extension School is primary source of revenue.

Structure and Organization

As an academic institution, the extension school is right **on the border** of Harvard University. An individual can enroll and take a course but isn't automatically admitted. They would need to do 2-3 courses with a B or better to be admitted.

Online learning is seen as a must-have pillar – now it has several parallels to traditional learning, it is critical to have at a university

There is still opportunity to brainstorm what can be added to online learning to make online learning more community-based vs more individualized

Source: Synthesized from external interviews

External case study

Arizona State University

Quick Facts

8,500+ Starbucks College Achievement Plan graduates to date

20,000+ partners (employees) participating in the Starbucks College Achievement Plan

1,000+ admitted to ASU through Pathway to Admission

400+ undergraduate programs and majors

590+ graduate degree programs and certificates

Ranked **Top 10** nationally for best online bachelor's programs by U.S. News and World Report

Background Context

AU has 3 programs which include: academic degree granting, learning (non-degree),and knowledge enterprise. All 3 enterprises work together with a corp. partnership office to create a comprehensive pitch that crosses all 3 to make a holistic view for employers. These programs are 80% digital.

ASU also has expansive corporate partnerships, the most notable is with Starbucks, which provides pathways to education.

Value Proposition

ASU is building its partnerships and programs to enable community enrichment and overall make content accessible. They are primarily focused on giving back to community in within the LTL space, and less focused on revenue in that space

ASU's value also supported by Geographic location. ASU is one of the largest universities in Arizona and is one of two R1 institutions in the state.

ASU's focus is on measuring how many learners are initially reached, engaged (actively taking a course), completing courses, and experiencing areas of economic transformation or successful transition is next step

Structure and Organization

ASU has a central team that provides shared operations across programs.

It also staffs the same faculty across the different organizations – they do non-credit and for-credit work. There are no additional incentives for faculty.

Outside of this program ASU also oversees a charter school – which see themselves as an institution across an entire lifetime. The goal is to serve the community more broadly

Source: Synthesized from external interviews

External case study

Purdue University

Quick Facts

92% of students believe what they learned in the classroom will help them reach their personal and career goals

96% of students felt more confident in their job search after career services classroom presentations

The average completion time for Purdue Global bachelor's degree graduates in 2020–2021 was **2 years**

Bachelor's degree graduates with prior learning credits **save an average of 50%** on tuition.

Background Context

Purdue Online enables learner to pursue online master's degrees, professional doctorates, certificates, and upskilling / reskilling opportunities in the current workforce.

K-12 is another area the program touches through their **polytechnic institute** but isn't a core focus of the program.

In addition to academic programs, Purdue works with companies to identify what their **workforce needs** are and how they are changing (this work ranges from manufacturing to C Suite jobs). This is to help predict future trends in order to prepare graduates for **emerging jobs**.

Value Proposition

Purdue's value proposition for lifetime learning is in their **predictive and progressive methods** for building out their curriculum (this can be seen in their intentional programs within the semiconductor industry).

They created a division with office of **industry partnerships** to proactively find / work with companies, identify needs for lifetime learning, and develop curriculum.

Purdue's **expansive Online Education platform** positions it to reach a large market. Land grant institutions are limited to the land of their state. Purdue Online believes that they can be a public national university.

Structure and Organization

Purdue Global and Purdue Online are not integrated with the university

Although they are separate entities, Purdue anticipates the structure shifting to a OPM that serves both Purdue Online and Purdue Global. This would include common shared services across both

A key to success in this transition will be stakeholder buy in. In order to integrate it is helpful to **build the narrative** of people working together (i.e. this is all Purdue University).

Source: Synthesized from external interviews

Alternative budget models

Budgets can be managed centrally (centralized budgeting) or by independent schools (responsibility center management). Another lever that can be pulled in this space is the frequency with which budgeting is conducted (e.g., quarterly vs annually). Some budget models that are working with shrinking state funds and tuition caps are:

Incremental Budgeting

Based on funding models from previous year

Zero-Based Budgeting

At beginning of each year, balance from previous year is cleared for each unit

Activity-Based Budgeting

Awards funds to activities that see the most return / revenue

Cost Based Budgeting

Activities are mapped and projected costs are calculated, and budget awarded correspondingly.

Centralized Budgeting

All budgeting decisions are made by upper-level administrators

Performance-Based Budgeting

Awards funds to top performing programs measured against their own KPIs

Employer Perspectives (1 of 2)

What is the gap between what employer's value and what employees want?

- Learning investments are a key employer differentiator
- Tuition assistance or reimbursement are a major retention vehicle
- A large gap in the employer led learning initiative is that "organizations should help to identify skills and provide feedback and resources so that individuals can design their own learning path"

What are employers willing to pay for in terms of education/training among their employee base?

Education as a Benefit

- Amazon Career Choice partnered with Kaplan to provide pre-paid college tuition for hourly employees

Specific Skilling

- Synchrony is reimagining the company's tuition reimbursement program into "boot camp reimbursements" for specific skilling

Executive training

- Berkley Haas launched a free serries of videos for corporate clients during the pandemic

Which employers, or employer industry sectors, are using third party tuition management companies?

- Guild works mostly with higher turnover industries such as retail or food service for tuition management
- FACTS (a subsidiary of Nelnet) works mostly with private K-12 institutions for LMS and hybrid learning solutions
- Blackbaud's education arm mostly works with larger universities for fundraising campaigns and alumni engagement

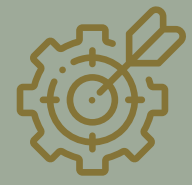
Why would an individual, or company, partner with Coursera, edX, FutureLearn than directly with a university?

Target Audience

- Most universities are often target towards high school or early-stage degree seekers whereas platforms such as Coursera or edX can market directly to specific skilling, working professionals, or folks otherwise not seeking a full degree program

Flexibility

- Overall, these platforms target more flexible professional learners looking for a specific skill.



How are employers prioritizing underserved populations?

- Skills based hiring in order to broaden access (i.e., workers coming from community colleges, apprenticeships, military service, boot camp courses, OTJ training, etc.) rather than four-year degrees and credentials that may exclude underserved populations
- Talent pipelines through partnerships with universities

Source: "The New Landscape for Workplace Learning: Employers and Workers Managing the Digital Transition" (provided by GT), NGA, McKinsey

Employer Perspectives (2 of 2)

What does this mean for GT?

1. For the employer, **learning pathways, career investment, and upskilling** are no longer "nice to have". They are key differentiators for recruitment and retainment of employees
2. Employers provide **three general categories of lifelong learning benefits**: education as a benefit (tuition assistance), specific skilling, and executive/management training. These are a diverse set of frameworks GT could plug into.
3. Employers are often **seeking flexibility, short programs, with a specific goal for employees in mind**. University's ability to respond to this scaling and flexibility is key to future partnerships with employers.
4. Employers continue look to universities for **diverse pipelines** in addition to an employer's **skills-based hiring policies** means universities can be in a unique position to fulfill both fronts of DE&I priorities for employers.

This employee perspective is the beginning of better understanding what employers are looking for, their constraints and opportunities, and how higher education institutions such as Georgia Tech can capitalize on this to deliver innovative outcomes.

Georgia Tech being situated in midtown Atlanta provides access to close employer relationships as well as it's reputation as global institution.