



**Project Kitty Hawk:
Progress Report to the North Carolina General Assembly**

September 2, 2022

University of North Carolina System
Project Kitty Hawk
Chapel Hill, North Carolina

Introduction

The state constitution calls on the University of North Carolina to “extend the benefits of public higher education to the people of North Carolina”—all of them. To truly fulfill the University’s constitutional duty, the System must adapt to the needs of today’s learners and a changing labor market.

Accessing higher education and relevant training can be challenging for working adults. Barriers include time, money, a bewildering array of options, uncertain connections to a clear career path, and a hesitancy to step into the classroom after many years away.

Though working adults across the state would benefit from the high-quality education UNC universities provide, the University of North Carolina (UNC) System has not traditionally served these learners on a broad scale. It is not a shortage of demand for postsecondary education from nontraditional students. In fact, data indicate that tens of thousands of North Carolinians choose to enroll online with out-of-state universities, presumably because they could not find an option that fits their goals, budget, and schedule closer to home.

The System has an opportunity to develop new models and services that can fit into the busy lives of working adults and that directly align with careers in growing fields. Developing these models will not only help North Carolinians access better jobs; they will also help our institutions grow their digital offerings and serve a new segment of the population that is larger than the diminishing pool of 18–24-year-olds. Creating pathways for working adults will also benefit the state, driving economic growth by creating a more skilled workforce, extending our educational mission to more students in underserved areas, and diversifying revenue with new markets.

The North Carolina General Assembly’s \$97 million investment in Project Kitty Hawk (Kitty Hawk) presents the University of North Carolina System with an unprecedented opportunity to capitalize on this opportunity and further accelerate the state’s economic growth. As a new venture, it will take time for Kitty Hawk to establish itself and develop the talent, tools, and technologies needed to address the opportunity afforded by this mandate. Great progress has been made over the course of 2022 to chart a clear, timely path from promising concept to successful enterprise. This memorandum provides an overview of how Project Kitty Hawk will allocate the state’s investment to serve the UNC system (Kitty Hawk’s investor) and its 16 public universities (Kitty Hawk’s customers) and create new economic value for the state and its employers (Kitty Hawk’s beneficiaries).

The memorandum contains:

- 1) Overview of the educational context
- 2) Overview of the investment context for Project Kitty Hawk
- 3) Build by Partnership approach
- 4) Return on investment metrics
- 5) UNC System adult learner goals
- 6) Financial projections
- 7) Phase development schedule
- 8) Constraints
- 9) Appendices

1. Overview of the Educational Context

North Carolina has set an ambitious attainment goal that by 2030, 2 million North Carolinians between the ages of 25 and 44 will have completed a postsecondary degree or high-quality credential. If current trends persist, the state will be more than 400,000 adults short of that target by the end of the decade. To reach the state’s goal, colleges and universities must extend the benefits of higher education to far more North Carolinians than just those between the ages of 18 and 24.

Re-engaging adults who started college but did not finish a degree is a particularly promising strategy, especially considering demographic shifts that will affect the UNC System over the next two decades. Census data indicate that in 2019, approximately 1.5 million North Carolina adults over the age of 25 had “some college, no degree,” 586,000 of whom were between the ages of 25 and 44.¹ Meanwhile, the state demographer projects that, after decades of growth, the number of North Carolinians between the ages of 18 and 24 is likely to level off by the end of the next decade due to declines in fertility rates—a trend that COVID-19 has exacerbated.²

Adult students are different from traditional-age undergraduates in several ways. They are more likely to enroll exclusively online and to attend part-time. They tend to value flexibility (in course delivery and academic calendar), structured and accelerated paths to a degree, and programs that are closely aligned to their career goals. Universities that serve working adults are likely to accept substantial amounts of transfer credit, have degree programs that are closely aligned to the labor market, and feature year-round calendars with multiple start dates.

With the support of the General Assembly, the UNC System and constituent universities have taken steps to re-engage “part-way home” students and build new pathways to a degree. Many of the constituent institutions have developed “completion degrees” designed to provide a streamlined pathway to complete a bachelor’s degree. The General Assembly included a one-time appropriation for a “Part-way Home” initiative in its 2016 short session budget, designed to learn more about the causes of stop-out and to understand what options are best suited to returning adults.³ More recent efforts include re-engagement campaigns funded by the North Carolina Pandemic Recovery Office (NC-PRO) and the Lumina Foundation.

While these efforts have benefited students and the state, they represent a small fraction of the UNC System’s enrollment and the one million-plus working adults with some college, no degree. In 2019 (pre-COVID), just 10 percent of the System’s undergraduate full-time equivalent (FTE) enrollment was over the age of 25, and enrollment by adult students has declined over the past decade. Thirteen percent of UNC System undergraduate students were enrolled exclusively online. When it comes to bachelor’s degree programs offered by System institutions, less than 15 percent are available online.

¹ 2019 American Community Survey, One-year Estimates, Educational Attainment in North Carolina.

² Rebecca Tippet, “Early signs indicate pandemic baby bust,” Carolina Demography, June 15, 2021: <https://www.ncdemography.org/2021/06/15/early-signs-indicate-pandemic-baby-bust/>

³ The Part-way Home initiative’s survey of stopped out students found that 40% of survey respondents cited work commitments and the fact that they “didn’t see the value of a Bachelor’s degree” as the primary reasons for not being interested in completing a degree. When asked what delivery mode they would prefer if they were to re-enroll, a plurality (40%) said they would prefer to enroll exclusively online (as compared to the 21% who would prefer to enroll in-person. See “Report on Partway Home Initiative”, September 2017, <https://www.northcarolina.edu/apps/bog/doc.php?id=57874&code=bog>

In the absence of flexible online degree options in the public university system, many North Carolinians are looking out of state for more flexible options. In 2019, 61,000 North Carolinians were enrolled exclusively online with out-of-state four-year universities, more than twice as many as were enrolled online in one of the 16 UNC System universities. During COVID, the number of residents studying online at out-of-state four-year universities grew to 72,000, nearly 30,000 of whom were enrolled in for-profit colleges.⁴

Project Kitty Hawk is a bold response to the needs of the state and will enable our public universities to keep more of that talent and tuition in-state.

2. Overview of the Investment Context

Per Section 8.24(c) of the Operations Appropriations Act of 2021, S.L. 2021-180, Project Kitty Hawk is a non-profit affiliate of the UNC System created to support digital learning and career development programs offered by constituent institutions of The UNC System. To accomplish this, the organization will deliver online program management services to UNC's 16 universities. Online Program Management (OPM) is a growing industry in which typically for-profit firms provide a suite of services that enable traditional universities to develop and launch online programs, recruit and enroll students in those online programs, and support online students through to program completion. In exchange, the OPM receives a substantial share of the institution's online tuition revenue (a "revenue share"), often ranging between 50% and 60%. Nationally, most existing OPM-supported degree and credential programs are at the graduate level (Master's, Professional, Doctoral) where tuition rates are typically higher.

By contrast, as a non-profit corporation chartered by the UNC System, Project Kitty Hawk has the flexibility to focus on a broad mandate to expand access to higher education for North Carolina's working adults, particularly those without a bachelor's degree, thereby helping to bridge the gap between public higher education's workforce development mission and the state's employment and economic needs.

Problem -> Opportunity Statement

Our growing understanding of the problem to be solved is that UNC universities have under-invested in the technology and processes needed to effectively compete in the adult learner market, resulting in structural constraints that have historically precluded our System from serving adult learners at scale. This under-investment reflects, in part, the substantial growth in the number of 18-24-year-olds in the state over the past two decades, which resulted in growing enrollment without a concerted effort to serve working adults. Presently, universities cannot capitalize on adult enrollment growth in the state; nor can they compete with disruptive out-of-state providers, which are crowding out UNC institutions and reaping ever-greater returns from serving NC's adult learner population. The system's lack of capacity inhibits its ability to meet adult residents' growing demand for more flexible, high-quality options, leading large numbers of them to look outside of the state for educational opportunity.

The General Assembly's investment in Project Kitty Hawk provides the funds needed to build a new capability to address this problem at scale, and to "leapfrog" into the adult learner market with a solution that not only competes with but exceeds the capabilities of disruptive providers. However, capital alone is not sufficient: The system also needs a transformational mechanism to address structural constraints and invest in scalable solutions that will meet both current and future demand. To

⁴ For data on "outgoing exclusively distance education enrollment," see National Council for State Authorization Reciprocity Agreements (NC-SARA) data dashboards here: <https://nc-sara.org/data-dashboards>

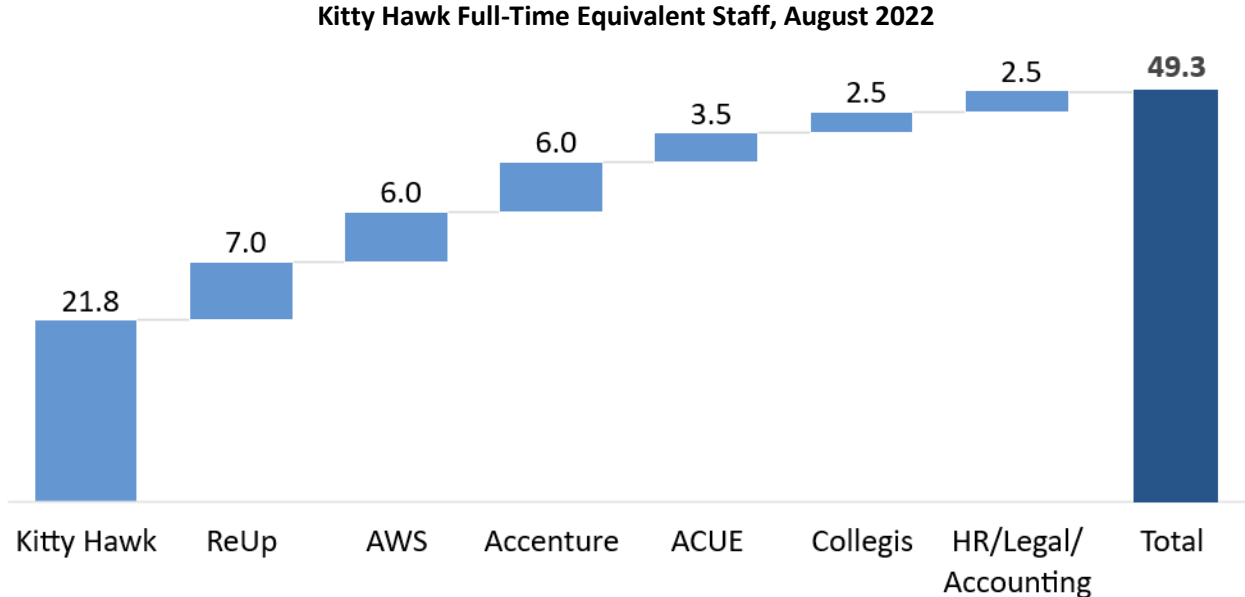
this end, this investment will also “future-proof” NC’s economic environment for the next recession, at which time adult learner demand will increase and UNC universities will be poised to grow their share of the adult learner market and supply talent to the state in a timely manner.

3. Build by Partnership Approach

Because Kitty Hawk’s start-up investment comes from Coronavirus State and Local Recovery Funds (SLFRF), the organization must encumber these funds by 2024 and spend them down by the end of 2026. Given this timeline, Kitty Hawk faced an immediate decision about how to balance the need to quickly build a state-of-the-art capability while ensuring that the end product matches the UNC System’s national standard for quality. The organization could build the capabilities from scratch, a long and expensive path to viability. Or Kitty Hawk could start quickly by relying on the expertise and capacity of partner firms. Because of the limited window to invest the state’s start-up investment, Kitty Hawk has prioritized working with a small but strategic portfolio of third parties to help accelerate our work and deepen our access to external expertise, processes, and technology solutions. This “Build by Partnership” approach will enable Kitty Hawk to enter the market more rapidly and will also allow the organization to remain agile and select capabilities as needed for the current phase of its overall build.

Faster Entry into the Market: Building an online program management venture from scratch would require at least three years from launch to enrollment of the first cohort of new students: One year for corporate formation, hiring, and administrative infrastructure; one year for business development and customer/program selection; and one year for program development and student acquisition activities. Without the Build by Partnership approach, the earliest market entry date would be mid-2025; with it, Kitty Hawk-enabled programs will be in market in less than two years from formation.

Greater Human Capital Resources: Since the Kitty Hawk operating agreement with the UNC System was finalized in April 2022, Kitty Hawk has engaged a world-class team of nearly 50 through a combination of internal hires and partner staff.



Deeper Capabilities: Both our hiring and partnership practices focus on engaging industry experts with significant experience in the space and who know how to scale to the level of demand. Many of the

capabilities committed to Kitty Hawk would be inaccessible to an early-stage company that chose to grow solely through internal hires. Further, the breadth of skills that our partners provide enables Kitty Hawk to reach operational readiness far faster than “going it alone.” (For a summary of the capabilities that Project Kitty Hawk will provide, see Appendix 2: Artifacts for Reference).

Lower Risk: By not building everything in-house, Project Kitty Hawk shifts risk to our partners. This gives us more flexibility (e.g., lower headcount, including minimal administrative headcount) and faster utilization (e.g., our partners’ deep expertise and proven success).

4. Return on Investment

While the full return on the state’s investment in digital postsecondary education will be realized in future years, the project has already started generating positive financial impact to the state. For example:

- Many Kitty Hawk team members are relocating to North Carolina. Nine of Kitty Hawk’s full-time staff, including their families, have moved, or have committed to moving to the Research Triangle region, representing over half of staff payroll. Many more will be hired locally as Kitty Hawk grows. These jobs typically require postsecondary credentials and generate positive downstream effects such as increasing the tax base. On an annualized basis, North Carolina-based staff will contribute at least \$100,000 in state income tax in the current fiscal year.
- Kitty Hawk prioritizes North Carolina-based vendors for our Build by Partnership approach, including Accenture (Raleigh office), Davidson Human Resources Group (Greensboro), Schell Bray attorneys (Greensboro), and Slate Accounting Group (Chapel Hill).
- As a non-profit entity, Kitty Hawk plans to solicit grants and other external funding and resources to augment its capabilities, adding additional value to other stakeholders across the state in the form of new solutions and services.

5. System Enrollment Goals and Enrollment Projections

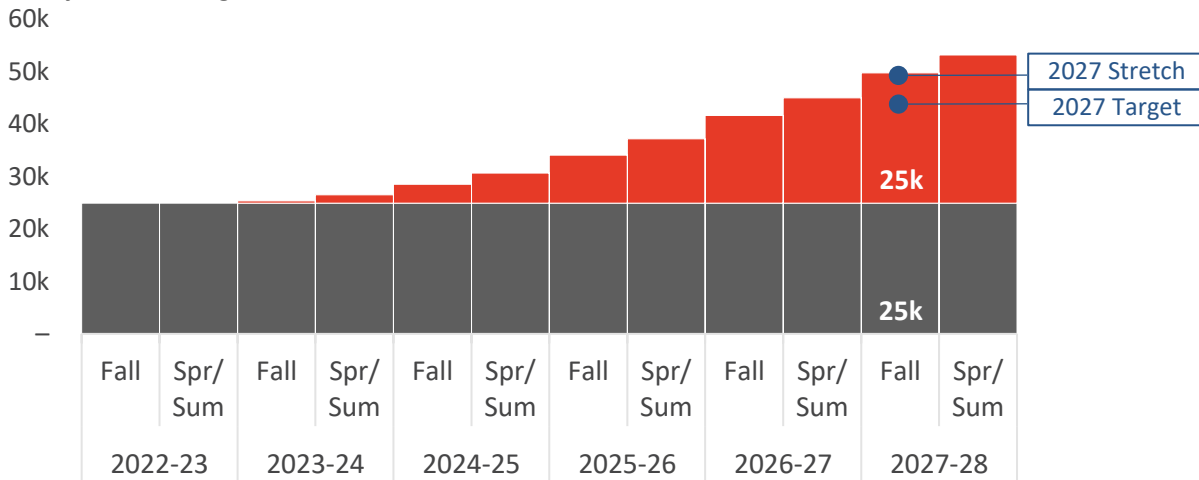
Currently, the 16 UNC institutions enroll approximately 25,000 adult learners at the undergraduate level. The 2022-2027 UNC System Strategic Plan has a target goal to increase the number of adult learners to 45,000 students by Fall 2027, with a stretch goal of 50,000 by that time.⁵ Kitty Hawk will expand the capacity of the UNC system to recruit, enroll, and retain adult learners, exceeding the UNC System target and reaching the stretch goal.

- By our **third year in market** (FY26, ending June 30, 2026), Kitty Hawk will expand the UNC System’s capacity for digital enrollments by 50%, to 37,000 students.
- By our **fifth year in market** (FY28), Kitty Hawk will increase the System’s current capacity by 115%, to 54,000 students.

Project Kitty Hawk will do this through a laser focus on building and investing in workforce-aligned degree programs accessible to working adults.

⁵ 2022-2027 UNC System Strategic Plan. Theme 1: Access | Goal 1: Increase Adult Learner Enrollment.

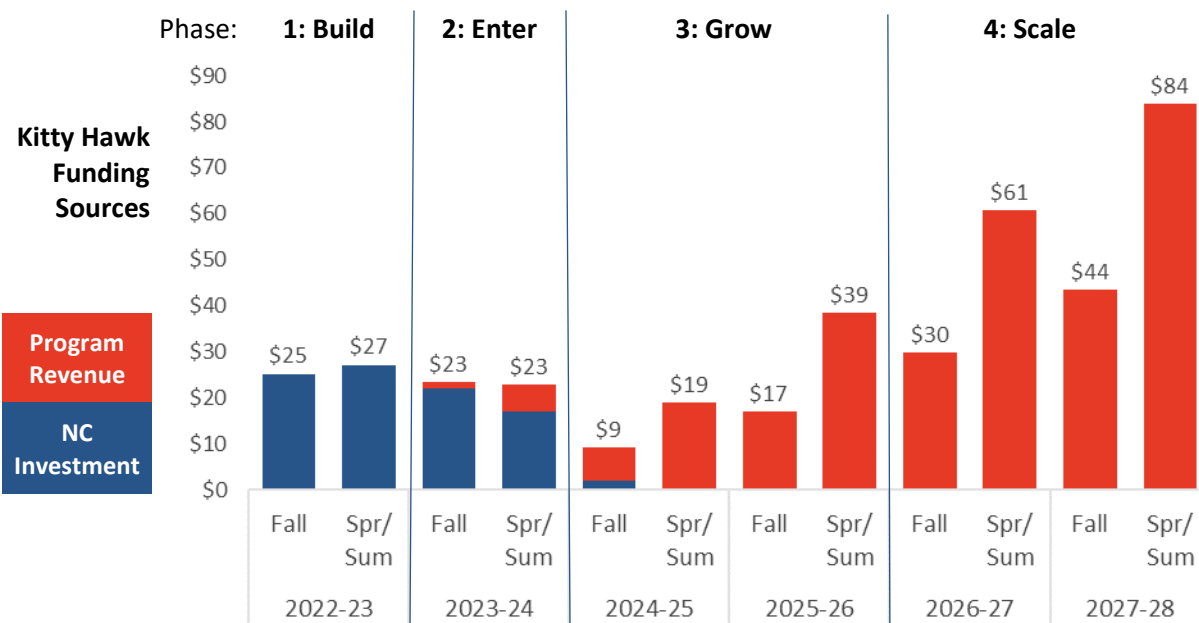
UNC System Strategic Plan Goal: Increase Adult Student Enrollment



6. Financial Projections

The North Carolina General Assembly’s investment will enable Kitty Hawk to build a world-class adult learner experience and expand the UNC System’s digital capacity.

- The North Carolina investment will fund Phase 1: Build, Phase 2: Enter, and a portion of Phase 3: Grow.
- Phase 3: Grow will be funded by a mix of the state investment and program revenue, with state investment allocated to program launches.
- Phase 4: Scale will enable Kitty Hawk to reach operational break-even in Spring 2027.



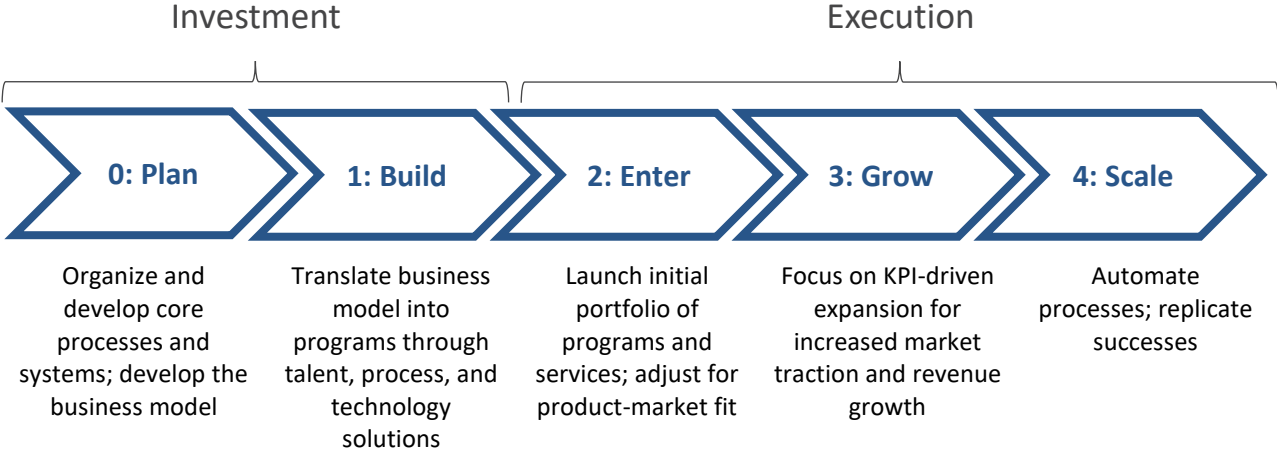
Kitty Hawk Five-Year Forecast

	Phase: Fiscal Year:	Plan FY22	Plan/Build FY23	Enter FY24	Grow FY25	Grow FY26	Scale FY27	Scale FY28
Programs in Market		–	–	20	40	60	80	100
New Student Starts		–	–	3,600	8,300	14,200	19,900	25,600
Average Annual Headcount		–	–	1,700	5,900	12,500	20,400	28,600
Course Enrollments		–	–	14,100	49,500	104,400	169,600	237,300
Annual Credit Hours Enrolled		–	–	42,200	148,500	313,200	508,900	712,000
Program Financials								
PKH Program Revenue		–	–	\$7.4	\$26.2	\$55.5	\$90.6	\$127.3
PKH Program Expenses								
Direct Marketing		–	\$1.4	\$6.3	\$12.6	\$19.9	\$27.0	\$32.9
Marketing & Recruiting		–	\$0.9	\$4.0	\$8.0	\$12.6	\$17.2	\$20.9
Student Success		–	\$0.2	\$0.9	\$2.3	\$4.1	\$6.2	\$8.2
Course Development		–	\$1.5	\$5.2	\$11.0	\$15.0	\$16.7	\$16.9
Technology		–	–	\$1.0	\$3.5	\$7.3	\$11.9	\$16.6
Total Program Expenses		–	\$3.9	\$17.4	\$37.3	\$58.9	\$79.0	\$95.5
Program Contribution		–	(\$3.9)	(\$10.0)	(\$11.1)	(\$3.3)	\$11.6	\$31.8
Administration Expense								
Technology Stack		–	\$9.4	\$5.9	\$0.3	\$0.3	\$0.3	\$0.3
Service Partners Business		\$0.5	\$2.9	\$2.7	\$2.7	\$0.7	\$0.7	\$0.7
Intelligence/Research		–	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7
Staff		–	\$3.4	\$9.3	\$10.6	\$11.3	\$13.4	\$15.1
Total Administration Expense		\$0.5	\$16.3	\$18.5	\$14.3	\$13.0	\$15.0	\$16.8
Net Operating Income		(\$0.5)	(\$20.2)	(\$28.5)	(\$25.4)	(\$16.3)	(\$3.4)	\$15.0
NC Investment		\$4.0	\$52.0	\$39.0	\$2.0	–	–	–
Net Inflows/(Outflows)		\$3.5	\$31.8	\$10.5	(\$23.4)	(\$16.3)	(\$3.4)	\$15.0
Cumulative Inflows/(Outflows)		\$3.5	\$35.3	\$45.8	\$22.4	\$6.1	\$2.7	\$17.7

Notes

1. Kitty Hawk's fiscal year is July 1 to June 30 and indicated by the ending period calendar year (e.g., FY23 corresponds to July 1, 2022 to June 30, 2023)
2. Program contribution is calculated as program revenue less direct program expenses
3. Net inflows/(outflows) are the sum of program contribution/(loss) and the NC investment
4. Kitty Hawk is projected to reach positive net operating income in the fourth quarter of FY27 (the fourth year with programs in the market)

7. Phases



Phase 0: Plan (January to September 2022)

Goals	Establish the business; engage partners and customers
Cost Drivers	Recruiting and hiring; employee orientation and onboarding; travel for initial customer engagement; core enterprise operations (HR, Finance, IT)
Margin Characteristics	Moderate infrastructure spend; no program contribution margin
Success Measures	Org established; mobilization and mission formation; proof of progress to stakeholders

Kitty Hawk concluded Phase 0 in August 2022 and has entered Phase 1: Build. This section highlights our key activities and successes, including metrics that demonstrate our progress against the approved plans.

Key Activities

- **Established the corporation:** Kitty Hawk has taken the necessary steps to build a strong foundation for operations and independent board governance.
 - The Board of Governors, in consultation with President Hans, identified seven outstanding board members to serve on the initial Project Kitty Hawk Board of Directors, along with the two ex-officio directors (the UNC System President and the Chair of the Board of Governors).
 - Since then, the PKH Board of Directors has met and taken foundational actions, including: adopting bylaws and conflict of interest, whistle blower and document retention policies, all consistent with UNC System Associated Entity regulations and Section 501(c)(3); identifying and appointing a President and CEO and a board secretary; establishing personnel and delegation/contracting policies; entering into agreements with the UNC System for associated entity support and other services; applying for federal designation under Section 501(c)(3); building financial systems, controls, and accounts; and acquiring appropriate insurance.
 - To provide board oversight over internal operations, Kitty Hawk has established that the board will develop three committees: Executive, Audit, and Personnel to conduct board business, and will meet quarterly, twice in person and twice virtually as a full board, with ad hoc committee meetings as needed. We selected BoardEffect as our board communication platform that will hold all documentation.
- **Developed the business model:** Kitty Hawk enlisted experienced human resources, IT, and project management companies to support business model development. We also registered with the federal procurement system (SAM.gov) as a non-profit affiliate organization serving the UNC System.
- **Formed partnerships:** In consultation with the UNC System and trusted stakeholders, Kitty Hawk selected a Build by Partnership approach with the goal of entering the market by Fall 2023 with a comprehensive enrollment platform. Building the core product with world-class partners is essential to Kitty Hawk’s mission. Our partners enable Kitty Hawk to build capabilities in five areas:
 - Platform technology development (Amazon Web Services)
 - Enrollment and student success (ReUp Education)
 - Faculty development (ACUE)
 - Enterprise technology (Collegis Education)
 - Program and project management (Accenture)

- **Worked with Amazon Web Services:** A major effort during this phase was working with AWS to develop customer requirements for our technology platform, which included three on-site design sessions (Austin, Chicago, and Washington DC) with Kitty Hawk leadership and partners. This process produced a strategic narrative and development backlog to begin the build.

Phase 0: Plan | Annual Financial Projection (millions)

	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Total
Program Revenue	–	–	–	–	–	–	–	–
Program Expenses	–	–	–	–	–	–	–	–
Program Contribution	–	–	–	–	–	–	–	–
Administration Expense	\$0.5	\$2.7	–	–	–	–	–	\$3.2
Net Operating Income	(\$0.5)	(\$2.7)	–	–	–	–	–	(\$3.2)
NC Investment	\$4.0	\$10.0	–	–	–	–	–	\$14.0
Net Inflows/(Outflows)	\$3.5	\$7.3	–	–	–	–	–	\$10.8

Phase 1: Build (October 2022 to July 2023)

Goals	Solution and services development; foundational sales, account management, and strategic partnership functions
Cost Drivers	Implementation partners; technology stack development; business development; go-to-market strategy formation and portfolio design
Margin Characteristics	High infrastructure spend for technology solution development; no program revenue
Success Measures	Overall: Solution-ready; initial go-to-market strategy; defined and proactive processes For the technology: Flexible, data-driven, secure For account management: Audience-focused, workforce-aligned, stop-out-friendly

Kitty Hawk has entered Phase 1: Build ahead of the original October start date.

Key Activities

- **Building the technology platform:** To compete and win in the online higher education space, our technology must be more agile and insightful than current solutions. The technology stack includes the consumer relationship management system (learner CMS), learning management system (LMS), customer insights hub (university analytics), and market research toolset. The Kitty Hawk team has the experience to guide its implementation partners in building a best-in-class tech stack that encompasses student recruitment, retention, and learning, with an analytics layer that is unavailable in off-the-shelf solutions. (See the [Technology Platform](#) section below for additional detail.)
- **Building account and portfolio management:** In Phase 1, we will conduct readiness assessments and gap analyses to understand the initial strengths and opportunities at each institution. We will identify the first cohort of UNC university partnerships—three to five institutions for which we will begin building programs and implementing systems—and will develop the initial portfolio of programs with high workforce and employer demand, stratifying program offerings using the brand/volume/cost framework described below. (See the [Account and Portfolio Development](#) section below for additional detail.)
- **Recruiting students:** ReUp Education can support Kitty Hawk in quickly entering the postsecondary education market by enrolling students who have stopped out of UNC degree programs. We selected ReUp as our initial student acquisition partner for its successful record of re-enrolling students and coaching them to degree completion.

Technology Platform

The build phase “sets the table” for our success in recruiting and retaining adult learners. The Kitty Hawk platform will enable participating UNC institutions to compete with for-profit institutions (e.g., Strayer University) and non-profit disruptors (e.g., Liberty University) that currently capture 68% of the North Carolina resident online learner market. The key factors that will enable competition are inherent in both the technology and processes that we are building and include:

- A learning platform that supports eight start terms per year, increasing student acquisition velocity
- A lead management system that enables advisors to respond to leads within 30 minutes through multimodal communication (calls, emails, SMS, social media)
- An application process that will aspire to reduce the timeframe from initial inquiry to applicant decision times to one week, and a transfer credit evaluation process that can be completed in two days
- Twenty-four-hour support for students (technology and coaching)

- See [Appendix 2: Artifacts for Reference](#) for examples:
 - [Operating Model](#) (page 21)
 - [Technology Build](#) (page 22)

Account and Portfolio Development

In this phase, Kitty Hawk is developing the go-to-market strategy of institutions and programs that will best serve the North Carolina adult market.

- Immediate focus on stop-out needs: Bachelor completion in business, psychology, etc.
- Planning for STEM and healthcare programs (which links to the System’s Strategic Plan goal to increase the university system’s contribution to the state’s critical workforces).
- Developing audience personas to understand and categorize adult audiences into concrete examples.
- Building a best-in-class market analytics function that can provide value in the form of insights and deliverables that can drive university and System decision-making about academic programs; focus will be on building deep connections between academic programs and their ROI to the state economy. These insights will be made widely available to schools, the system, and the state.
- Amplifying data and insights from other state entities (e.g., system, workforce agencies) in the form of deliverables to extend their reach and voice across the NC’s educational environment
- Developing unique insights and models for serving adult learners to provide value to universities but also community colleges, employers, and other adult education efforts across the state.
- See [Appendix 2: Artifacts for Reference](#) for examples:
 - [Audience Persona Development](#) (page 22)
 - [North Carolina Resident Online Market Share Analysis](#) (page 23)

Phase 1: Build | Annual Financial Projection (millions)

	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Total
Program Revenue	–	–	–	–	–	–	–	–
Program Expenses	–	\$3.9	\$0.9	–	–	–	–	\$4.8
Program Contribution	–	(\$3.9)	(\$0.9)	–	–	–	–	(\$4.8)
Administration Expense	–	\$13.6	\$1.8	–	–	–	–	\$15.4
Net Operating Income	–	(\$17.5)	(\$2.7)	–	–	–	–	(\$20.2)
NC Investment	–	\$42.0	–	–	–	–	–	\$42.0
Net Inflows/(Outflows)	–	\$24.5	(\$2.7)	–	–	–	–	\$21.8

Phase 2: Enter the Market (August 2023 to June 2024)

Goals	Initial go-to-market focused on stop-outs Focus on generating volume for learning and improvement
Cost Drivers	Program development; student and customer services; risks associated with learning and improvement
Margin Characteristics	High spend on recruitment, program development, and delivery; high negative margin as programs launch
Success Measures	Learning toward efficiency and process automation; coherent portfolio strategy

Key Activities

- **Recruiting learners.** Marketing and recruitment operations, enabled by our experienced implementation partners, will be the largest investment in this phase. We will re-enroll students who have previously stopped out of UNC System programs and will design and develop/redevelop high-demand programs per the portfolio strategy. We will also continue to invest in implementation partnerships as we recruit students for the Fall 2023 term.
- **Completing tech stack.** Kitty Hawk will complete the build-out of the technology stack, including the LMS, CMS, and customer insights and analytics platforms.
- **Launching the first cohort.** Kitty Hawk will build programs with the first cohort of UNC university customers and identify the institutions and offerings for the second cohort.
- **Begin nurturing employer channels.** At this time, Kitty Hawk will have conducted outreach to the former students on the System’s stop-out list and begin building partnerships with large North Carolina employers (with most of this effort in phase 3).
- **Forming approach to KPI-level expansion:** During this phase, Kitty Hawk will establish company-level key performance indicators (KPIs) in line with the approved budget, including the number of enrolled learners, average enrollments per student, student retention, student success, and net revenue. We will communicate these KPIs to employees and customers, and KPI achievement will drive employee incentive compensation metrics.

Phase 2: Enter the Market | Annual Financial Projection (millions)

	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Total
Program Revenue	–	–	\$7.4	–	–	–	–	\$7.4
Program Expenses	–	–	\$16.5	–	–	–	–	\$16.5
Program Contribution	–	–	(\$9.1)	–	–	–	–	(\$9.1)
Administration Expense	–	–	\$16.7	–	–	–	–	\$16.7
Net Operating Income	–	–	(\$25.8)	–	–	–	–	(\$25.8)
NC Investment	–	–	\$39.0	–	–	–	–	\$39.0
Net Inflows/(Outflows)	–	–	\$13.2	–	–	–	–	\$13.2

Phase 3: Grow (July 2024 to June 2026)

Goals	Additional channels, including B2B; portfolio expansion and market coverage; continuous improvement
Cost Drivers	Student acquisition; additional hiring/talent development; building innovation capacity; portfolio optimization
Margin Characteristics	High revenue growth; negative but improving contribution to margin
Success Measures	Increased efficiencies and gains in process automation to drive scale

Key Activities

- **Growing enrollments.** With multiple program vintages in the market at different brand, volume, and price points, Kitty Hawk will rapidly grow enrollments across the portfolio during phase 3. At this point, Kitty Hawk will be serving multiple UNC universities with programs in the market and a robust pipeline of new programs.
- **Strengthening internal capacity.** Kitty Hawk will build internal teams for consumer-facing operations (marketing, recruiting, student support, and course development). Implementation partners will continue to provide support as needed while Kitty Hawk grows its headcount.
- **Expanding into new channels and products.** Kitty Hawk will expand the UNC System offerings by launching certificates, micro-credentials, boot camps, and other non-degree programs that complement the core portfolio. Further, it will engage medium and large employers to align educational outcomes with employers' needs and create long-term student pipelines.

Note: The final state investment distribution is scheduled for August 2024. During this phase, Kitty Hawk's revenue from operations will exceed state investment income. As we focus on student acquisition growth, this phase is also the tipping point for investment in internal Kitty Hawk capabilities (marketing, recruitment, student success, and course development). We will maintain relationships with implementation partners to ensure capacity for new growth.

Phase 3: Grow | Annual Financial Projection (millions)

	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Total
Program Revenue	–	–	–	\$26.2	\$55.5	–	–	\$81.8
Program Expenses	–	–	–	\$37.3	\$58.9	–	–	\$96.2
Program Contribution	–	–	–	(\$11.1)	(\$3.3)	–	–	(\$14.4)
Administration Expense	–	–	–	\$14.3	\$13.0	–	–	\$27.3
Net Operating Income	–	–	–	(\$25.4)	(\$16.3)	–	–	(\$41.7)
NC Investment	–	–	–	\$2.0	–	–	–	\$2.0
Net Inflows/(Outflows)	–	–	–	(\$23.4)	(\$16.3)	–	–	(\$39.7)

Phase 4: Scale (July 2026 to June 2028; subsequent years)

Goals	Embedded improvement processes supported through continuous monitoring; efficiencies identified and shared among units, customers, and networks
Cost Drivers	Student acquisition; process automation; innovation funding
Margin Characteristics	Revenue growth; positive contribution margin; opportunities to reduce Kitty Hawk's revenue share
Success Measures	Strategic and operational metrics validate success

Key Activities

- **Scaling through business process optimization and automation:** To grow by an order of magnitude or more, we must eliminate constraints by automating business processes.
- **Entering new markets:** We will explore opportunities to engage other learner populations and grow through alternative revenue streams and business models.
- **Replicating successes:** With over three years of operation in-market, Kitty Hawk will have a concrete playbook for designing, launching, and optimizing online programs.

Phase 4: Scale | Annual Financial Projection (millions; FY27 and FY28 only)

	FY22	FY23	FY24	FY25	FY26	FY27	FY28	Total
Program Revenue	–	–	–	–	–	\$90.6	\$127.3	\$218.0
Program Expenses	–	–	–	–	–	\$79.0	\$95.5	\$174.5
Program Contribution	–	–	–	–	–	\$11.6	\$31.8	\$43.4
Administration Expense	–	–	–	–	–	\$15.0	\$16.8	\$31.8
Net Operating Income	–	–	–	–	–	(\$3.4)	\$15.0	\$11.6
NC Investment	–	–	–	–	–	–	–	–
Net Inflows/(Outflows)	–	–	–	–	–	(\$3.4)	\$15.0	\$11.6

7. Constraints

The mandate behind Kitty Hawk is ambitious and timely, but not without challenges. For one, this investment is designed to overcome decades of underinvestment in the capabilities needed to serve adult learners through a high-quality solution developed on a tight timeline and under the following constraints.

- 1. Adult learners are a difficult population to reach.** Capitalizing on the adult learner market requires capabilities, systems, and levels of institutional change that break from the historic business and operating model of most universities and public systems. Disruptive providers are successful because they have spent years embedding the characteristics of this market into their models and investing in new structures and solutions to reach adult learners at scale. Our internal expertise will help us identify ways around some of these challenges, but we will also need to use best-of-breed digital solutions designed for this population and enlist partners that can help us build an adult-serving model where one does not currently exist.
- 2. Success in the adult learner market is a marathon, not a sprint.** Serving this population will provide extraordinary benefits to the system and the state; however, how we measure our success will need to be grounded by phases of development and factor in the cycles of post-secondary enrollment and outcomes measurement. In the next five years, we will be able to demonstrate measurable outcomes to the system including increased adult enrollments and the development of a broad, future-proof program portfolio; however, the full economic impact on the NC economy and return on investment will be measured over decades, not months or years.
- 3. Our customer base is large and diverse.** Working with fewer universities would permit a more limited scope. Kitty Hawk needs to be designed to serve all UNC System universities, which themselves represent different brands, models, opportunities, and challenges. Each customer will require unique solutions and modes of engagement beyond just programs and services including process improvement and change management support. We must account for and optimize not only one system but 16 different manifestations of that system.
- 4. We have limited time to invest.** This investment comes from federal State Fiscal Recovery Funds (SFRF), which must be committed by the end of 2024 and spent by the end of 2026. Time is scarce; we must move quickly to both build the platform and develop the capacity to execute our mission. We are using a build-by-partnership approach to engage multiple customers and markets simultaneously.
- 5. Interest is high, but still no commitments.** To date, Kitty Hawk has been well received, and there is acceptance of the need for this capability and interest in working with us in some way. We need to move from mere interest to firm commitments, which will require regular and increased engagements with all universities, “road shows,” and opportunities to build relationships and demonstrate our value proposition.
- 6. The hiring market is fiercely competitive.** Right now, it is difficult to recruit and bring on talent with the expertise needed to build this capability. We are prioritizing building a highly professional and motivated core team with experience in high-scale, adult-serving university environments and business formation, including employees with expertise in growth-oriented adult higher education and deep-bench implementation partners with expertise in faculty

development, software development, and customer experience. To attract internal talent, we are providing competitive pay and benefits and building a magnetic, mission-driven culture. We are also making every effort to move talent to the state and have already hired nine staff members who have relocated to NC or have committed to do so by Fall 2022.

- 7. Legacy processes and infrastructures at the system level limit our ability to be agile and responsive to demand.** Years of inattention to the needs of adult learners means there are limited resources devoted to working adults, processes that do not account for the new business and economic models Kitty Hawk will create, and barriers to accessing data needed to inform the unique parameters of this initiative. The Kitty Hawk investment will build relationships across institutions and functional silos, including at the system level, which will improve the quality of information and decisions.
- 8. All eyes are on North Carolina; failure is not an option.** Several states have tried and failed to launch similar efforts in the past. Piecemeal attempts to expand online education have faltered in nearly every case in the past, including the UNC Online portal and initiatives by Texas, Illinois, California, and Florida. Media coverage is high due to the size of North Carolina's investment. Solving the adult learner problem is not a simple fix. This effort cannot fail.
- 9. All signs point to a coming recession.** An economic downturn will lead to a tightening of resources in the public and private sectors and will stimulate demand for higher education among adults. In an environment shaped by the COVID-19 pandemic and greater national and global volatility, demand for higher education is likely to skyrocket but will take new forms. Accelerated degree formats, digital learning, alternative workplace credentials, and employer-sponsored training will be the norm in a new educational marketplace. Some competitors will be ready and able to capitalize on this moment; others will not. Kitty Hawk will position UNC institutions to enter new markets with a ready-made marketing strategy, program offerings across multiple institutions, and an operating infrastructure capable of absorbing demand.

8: Appendices

Appendix 1: Kitty Hawk Development Schedule Summary

	Investment Phases		Execution Phases		
	0: Plan	1: Build	2: Enter the Market	3: Grow	4: Scale
Timeframe	Jan to Sep 2022	Oct 2022 to Jul 2023	Aug 2023 to Jun 2024	Jul 2024 to Jun 2026	Jul 2026 and beyond
Goals	Business establishment Partner and customer engagement Organizational culture and process formation	Solution and services development Foundational sales, account management, and strategic partnerships functions	Initial go-to-market focused on stop-outs Focus on generating volume for learning and improvement	Additional channels, including B2B Portfolio expansion and market coverage Continuous improvement	Embedded improvement processes supported Efficiencies identified and shared among units, customers, and networks
Cost Drivers	Recruiting and hiring Employee orientation and onboarding Travel for initial customer engagement Core enterprise ops (HR, Finance, IT)	Implementation partners Technology stack development Business development Go-to-market strategy formation and portfolio design	Program development Student and customer services Risks associated with learning and improvement	Student acquisition Additional hiring/talent development Building innovation capacity Portfolio optimization	Student acquisition Process automation Innovation funding
Margin Characteristics	Moderate infrastructure spend No program contribution margin	High infrastructure spend for technology solution development No program contribution margin	High spend on student acquisition, program development, and delivery High negative margin as programs launch	Revenue growth Negative but improving contribution margin	Revenue growth Positive contribution margin Opportunities to reduce Kitty Hawk revenue share
Success Measures	Org established Mobilization and mission formation Proof of progress to stakeholders	Solution-ready Initial GTM strategy Defined and proactive processes Building team and establishing org culture	Learning toward efficiency and process automation Coherent portfolio strategy	Increased efficiencies and gains in process automation to drive scale	Strategic and operational metrics validate success

Appendix 2: Artifacts for Reference

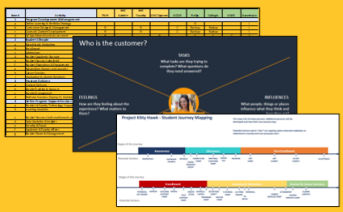
Operating Model

Next Steps

Next steps for planning phase include leveraging initial inputs, aligning to operating model, and further defining the function catalog and key experiences


1

Leverage existing inputs, align them to Operating Model framework, and identify areas requiring further development



2

Draft and validate initial function catalog to L2 level; catalog will serve as foundation for capabilities to offer to Customers



3



















Outline initial key journeys

- Customer Experience (Institutions & Employers)
- Consumer Experience (Learners)
- Faculty Experience
- PKH Employee Experience

4 Finalize PKH Conceptual Operating Model outline that will guide Phase 1 Build

Next Steps: 2. Function Catalog

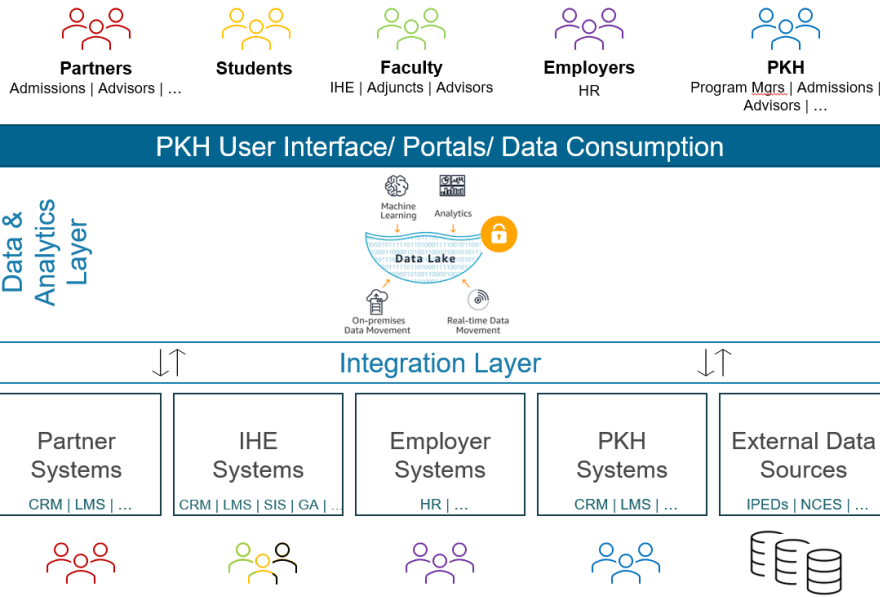
Deepen detail of function catalog to guide PKH's capabilities needed to serve Customers

Customer Account Management <small>Support iXEs and employers with navigating, design, launch, and management of educational offerings</small>					
Program Development and Management <small>Identify relevant programs or credentials for development; design the curriculum & develop the courses</small>	Student Lifecycle <small>Support program goals and address faculty, staff, and student needs</small>			Program Delivery <small>Ensure appropriate supports and infrastructure are in place to deliver on program vision and quality</small>	
 Online Learning & Portfolio Strategy	 Recruiting & Marketing	 Student Experience & Engagement	 Content Delivery (Teaching)		
 Curriculum Design & Management	 Enrollment & Admissions	 Career Services	 Faculty Training & Support		
 Course & Content Development	 Student Academic Support	 Graduation & Alumni Relations	 Platform Services (Deploy, SI, Maintain)		
Online Program Support Services <small>Develop robust infrastructure to support program goals and address faculty, staff, and student needs</small>					
 Student & Faculty Technology Support	 Learning Analytics & Student Success	 Data Analytics & Insights	 Security & Fraud		
		 Academic & Faculty Affairs	 Student Records Management		

Next Steps

- Tailor functional catalog to PKH context
- Add additional level of detail to what's shown
- Leverage additional detail to inform Phase 1 planning

CONCEPTUAL PLATFORM DIAGRAM



TECHNOLOGY CRITICAL SUCCESS FACTORS

- Flexible
 - Assume no two partners are the same in terms of systems or capabilities
- Interchangeable
- Configurable
- Data-driven
 - All data flows into PKH data and analytics layer from day 1
- Security and compliance
- Ease of Use/Consumer Driven Experience
- Scalable

Audience Persona Development

AGE | 35

GENDER | FEMALE

RACE | LATINA

EDUCATION | HIGH SCHOOL DIPLOMA

OCCUPATION | COMPUTER SUPPORT SPECIALIST

Claudia THE Climber

Claudia is currently employed in IT. Skeptical of the value of a four-year degree and unsure of what to do after graduating high school, she enlisted in the Army where she worked as an Information Technology Specialist. After serving in the military for 15 years, she's now back home and looking to level up in her career, but doesn't want to "waste time and money" taking general-education classes. She wants more of a practical, hands-on program that will offer a quick credential for career advancement. Claudia is willing to invest financially in her education if it leads to a quick payoff. Her family and her spouse are very supportive of her earning a degree or credential.

GOALS

- Level up in the quickest and most cost-effective way
- Make a career change or advance into a higher position

CHALLENGES

- Concerned about the time it will take from beginning to end
- Skeptical about traditional four-year degrees

REUP SPHERE HEALTH

SAYS
"I'm ready to jump into what will get me where I want to go."

THINKS
"How soon can I get started and how long will this program take?"

FEELS
Driven
Inquisitive

DOES
Searches "college after military" on Google

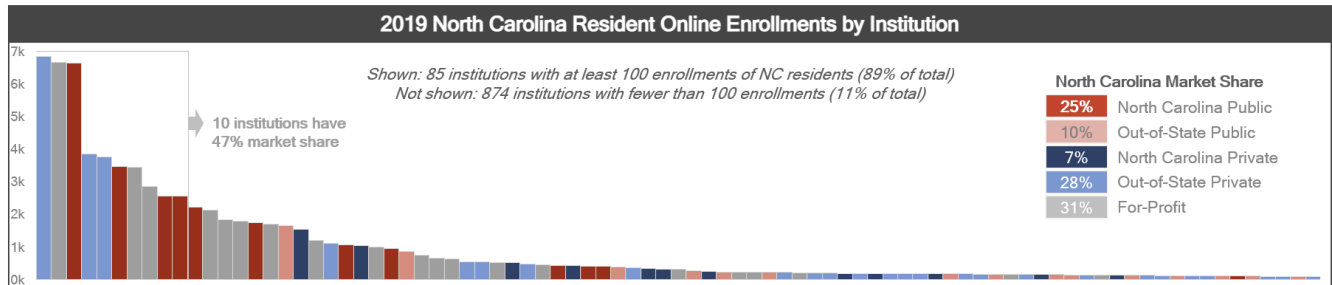
PREDICTIVE ANALYTICS

ENGAGE	IMPACT	ENROLL	RETAIN
87%	32%	76%	51%

North Carolina Resident Online Market Share Analysis

NC Online Market Share Breakdown and Competitive Landscape

NC market share is highly concentrated among the largest providers; four public state universities in the top 10, with ECU on par with the largest out-of-state competitors



Top 10 by Online Market Share

Provider	Size and Competitive Strategies in NC	Provider	Size and Competitive Strategies in NC
1 Liberty University	6.8k NC learners; high-scale, digital-enabled; faith-based appeals to large segments of Southeast; invests heavily in student success/predictive analytics	6 UNC Wilmington	3.5k NC learners; military friendly; growth through online programs in healthcare (RN-to-BSN) and education (elementary ed)
2 Strayer University	6.7k NC learners; operates several in-state campuses for working adults, which increases brand awareness and credibility for its online programs	7 U. of Phoenix	3.5k NC learners; operates Charlotte campus for working adults, which increases brand awareness and credibility for its online programs
3 East Carolina University	6.6k NC learners; state's largest and most advanced online education provider; program portfolio aligned to regional/state workforce needs	8 American Public University	2.8k NC learners; exclusive focus on the military; high investment in student and military family support; high focus on undergrad degree completion market
4 Southern New Hampshire	3.8k NC learners; markets heavily in NC (est. \$30M in regional ad spend)	9 NC State	2.6k NC learners; high brand; focus on graduate programs in high demands fields of computer science and IT
5 Western Governors	3.8k NC learners; has in-state presence to allow access to state workforce development funds; investing in online education for rural populations	10 UNC Greensboro	2.6k NC learners; master's and bachelor's programs in business, liberal arts, library science; multiple term starts

Sources: NC-SARA, IPEDS, PKH Analysis. Includes only four-year, Title-IV-eligible degree-conferring institutions, excluding California, which does not report to NC-SARA.

Project Kitty Hawk