ENHANCING DOCTORAL EDUCATION AT FSU

A QUALITY ENHANCEMENT PLAN

Prepared for the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) as a component of Reaffirmation of Accreditation

Spring 2024







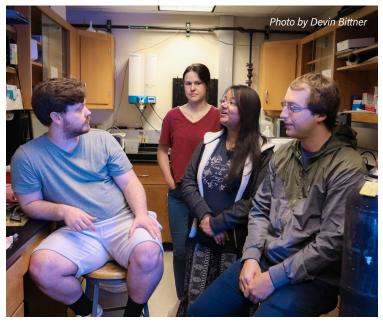




TABLE OF CONTENTS

Message from the Provost4
Executive Summary5
Introduction: Florida State University6
Ongoing Institutional Planning and Evaluation Process at FSU7
Broad-based Support: The QEP Committee14
Foundation of Student Success at the Doctoral Level15
Literature Review19
Doctoral Education at FSU27
Outcomes and Implementation
Timeline for Resources44
Assessment46
References
Appendices

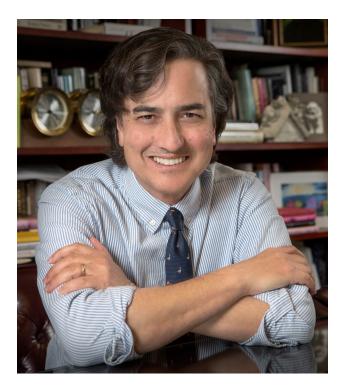
MESSAGE FROM THE PROVOST

octoral students are integral to the mission of Florida State University. As one of the top public research institutions in the nation, FSU is invested in attracting high-quality doctoral students and top-notch faculty. I am grateful to the countless faculty, staff, administrators, and Trustees who have made student success a hallmark of FSU. The university derives its strategic direction from their vision and commitment to students.

Florida State University is committed to the academic excellence of its doctoral students. Doctoral education has been a key component of the university's two previous strategic plans. Responding to recent academic program reviews, the QEP Committee conducted an in-depth examination of doctoral education at FSU and investigated best practices in graduate education across the nation to identify initiatives. The Committee focused on outcomes related to scholarly and creative activity and engagement, career readiness, and teaching preparation. Outcomes in these areas will be measured and assessed for improvement. The Quality Enhancement Plan (QEP) invests \$10 million over five years to enhance doctoral education in alignment with our 2023–2027 Strategic Plan.

The QEP will be initially housed in the Office of the Provost with units across campus including the Career Center, the Center for the Advancement of Teaching, University Libraries, and the Graduate School providing new and enhanced services to support doctoral students. The establishment of a new Graduate Student Resource Center marks a new era of investment in doctoral education at Florida State University.

I appreciate the contributions of the doctoral students, faculty, and administrators who served on



the QEP Committee, especially Chair Piers Rawling and staff from the Graduate School, Institutional Research, Office of Institutional Performance and Accountability, and the Office of the Provost who supported the work of the QEP Committee.

With the bold vision outlined in the university's QEP, Enhancing Doctoral Education, the next five years will no doubt see unprecedented advancements in the quality of doctoral education at FSU.

Sincerely,

(Vail

Jim Clark, Ph.D. Provost and Executive Vice President for Academic Affairs Florida State University



EXECUTIVE SUMMARY

This Quality Enhancement Plan (QEP), *Enhancing Doctoral Education at FSU*, was shaped by the institution's ongoing, comprehensive planning and evaluation processes including the results of FSU's academic program reviews (referred to as Quality Enhancement Reviews), participation in the Council of Graduate Schools Ph.D. Completion Project, the selection as a state preeminent institution, and the emphasis on graduate education in its last three strategic plans. Building on this broad-based support for doctoral education and the experiences of doctoral students, the provost convened a QEP Committee to consider initiatives that would improve the experience, performance, and prospects of doctoral students.

The Chair of the QEP Committee previously served on the 2017-2022 Strategic Plan Committee and was familiar with FSU's long-standing focus on student success. The QEP Committee included multi-disciplinary faculty, doctoral students, and administrators from across campus. The Committee examined doctoral education at FSU, literature about doctoral education, promising practices identified by experts including publications by the Council of Graduate Schools, and best practices at institutions across the United States. The QEP Committee conducted surveys of doctoral students and faculty, held focus groups with university constituencies, and reviewed data on doctoral milestones at FSU and other public research institutions. After reviewing this data, the QEP Committee recommended pursuing outcomes in five key areas for doctoral student success and learning:

- 1. Boosting doctoral student use of existing university resources and services,
- 2. Improving time from doctoral candidacy to graduation,
- 3. Increasing doctoral student participation and presentations at research conferences and creative events,
- 4. Improving doctoral student job placement skills, and
- 5. Developing doctoral teaching preparation and effectiveness.

Each of the outcomes spotlighted by the QEP Committee is associated with milestones in doctoral education and lends to some practicable form of measurement and assessment. Each is addressed within the administrative structure of the university without undue disruption and in a fashion that promises success.

FSU committed resources to initiate, implement, and complete the QEP. The plan is funded by the Office of the Provost with a \$10 million investment over the next five years to support activities such as Research and Creative Activity grants, job placement skills, teaching preparation, and a Graduate Student Resource Center.



INTRODUCTION: FLORIDA STATE UNIVERSITY

Founded in 1851, Florida State University (FSU) is an R1 doctoral institution with very high research activity in the Carnegie Classification. It is a public university, part of the State University System (SUS) of Florida, with a mission to "preserve, expand, and disseminate knowledge in the sciences, technology, arts, humanities and professions, while embracing a philosophy of learning strongly rooted in the traditions of the liberal arts. The university is dedicated to excellence in teaching, research, creative endeavors, and service."

FSU offers undergraduate, graduate, and professional programs on its 487-acre main campus located in Tallahassee, Florida, as well as its off-campus instructional sites. It offers 283 degree programs, mostly baccalaureates, across 17 colleges (reflecting the Fall 2023 merger of two colleges). More than 44,000 students attend FSU, and the majority (32,795 as of Fall 2022) are undergraduates. Nearly 11,000 students are enrolled in graduate and professional degree programs. There are 2,880 doctoral students in 63 programs (as of Fall 2022). FSU has more than 14,000 employees, including approximately 2,600 traditional faculty. FSU's research expenditures totaled more than \$414 million in FY 2021. FSU is one of three preeminent universities in the State of Florida.

ONGOING INSTITUTIONAL PLANNING AND EVALUATION PROCESS AT FSU

Florida State University monitors and plans for the quality of its academic programs through Quality Enhancement Reviews (QERs). While the process has changed periodically since it was initiated in 2003, its central elements and purposes have remained largely the same.

The QER examines the institutional effectiveness of a unit in shaping and guiding its undergraduate and graduate academic programs. It assesses what is required to sustain or improve performance and recommends changes needed to ensure the quality of programs.

The QER process is based on an extensive self-evaluation by each academic unit. The evaluation reviews its undergraduate programs on such matters as the curriculum, advising, postgraduate plans and outcomes, quality of job placements, retention levels, diversity, class size, and faculty involvement. It outlines academic program plans for the coming years. For graduate programs, the focus is somewhat similar with attention also given to the distinctive issues associated with master's, doctoral, and professional degrees, especially research productivity.

The entire process is overseen by the Office of the Provost working in tandem with the academic dean of each relevant college. The Office of the Provost identifies and selects an independent external reviewer for each selfevaluation and schedules a campus visit with associated interviews touching on all aspects of the programs under consideration. External reviewers submit a final report that outlines their findings and makes recommendations for planned improvement regarding both the unit and its undergraduate and graduate programs. The external reviewer's report along with the selfevaluation of each unit becomes the information base for further examination by the Undergraduate Policy (UPC) and Graduate Policy (GPC) Committees of the Faculty Senate. A three-person faculty subcommittee of the UPC and a five-person faculty subcommittee of the GPC each develop their separate findings and recommendations. The Faculty Senate committees are explicitly intended to provide a forum for students and faculty to voice their concerns and bring significant issues to the attention of the administration. Notably, the GPC examines a sample of dissertations in order to comment on quality.

Each of the relevant academic deans and the Faculty Senate, in turn, considers the Committee reports, recommendations, and concerns. The deans develop an action report for review by the Provost (prior to 2023, final reports were submitted to the statewide governing body, the Florida Board of Governors).

The QER planning process operates on a seven-year cycle with follow up after two years. In all, it includes hundreds of faculty intensively involved in academic program evaluation, identifying trends and spotting weaknesses with an eye toward program improvements. The UPC and GPC direct the attention of faculty members to emerging fault lines.

In the first years after being initiated, QERs often focused on advising and retention issues among undergraduates. The university made sustained refinements to such undergraduate activities, gradually improving student experiences and success. For graduate programs, the academic program review process directed new attention to issues such as time to degree, program resources, mentoring, and graduate student stipends for programs in social science, business, education, fine arts, health, humanities, and the sciences.

Raising these concerns proved exceptionally timely. The national Council of Graduate Schools (CGS) initiated

its Ph.D. Completion Project just as the FSU QER process had begun. The Vice President for Academic Quality and External Programs who was responsible for the university's academic program review process also served as the Graduate School Dean.

Florida State University applied for and was accepted as first a project partner and then a research partner in the CGS project, joining other southern universities such as the University of Florida, the University of Georgia, and Duke University.

The project afforded the university an opportunity to follow up on concerns raised in the QERs and begin to tackle issues ranging from definitional precision and financial support to mentoring and student progression. Participation in the CGS Ph.D. Completion Project was an outgrowth, in part, of QER reviews with similar findings related to graduate education. FSU's goals in participating in the project were multi-fold, including:

- To increase Ph.D. retention and completion by developing and implementing a web-based system to track graduate student progress,
- To expand the professional development workshop series,
- To develop a workshop for faculty focused on mentoring students,
- To assess the annual graduate student review process and recommend improvements, and
- To conduct surveys in order to get additional student feedback of doctoral education, student services, and their experiences.

During the first phase of the Ph.D. Completion Project (2004-2007), FSU focused on detailed data collection and developing completion reports on seven departments. A pilot effort was begun, placing various demographic, enrollment, retention, and completion data online in a demonstration aimed at improved transparency and an exploration of better student tracking information. In addition, during this first phase, a doctoral student exit survey was developed and distributed involving about 500 respondents as a part of the investigation of the value of such a tool.

During the second phase of the Ph.D. Completion Project (2007-2010), FSU continued to add data elements for its student online tracking. In addition to basic elements such as name, gender, ethnicity, and discipline, additional features were included such as doctoral milestones (i.e., preliminary exam, admission to candidacy, dissertation defense), funding source/ waiver information, program of study data, annual review documentation, doctoral student committee composition tracking, and TA certification and evaluations. Student transcript data were included to show a student's grades and a variety of custom reports and queries were developed to assist program directors and dean's offices in the monitoring of their students and degree approval process.

While the Ph.D. Completion Project was in progress at FSU, the first student collective bargaining agent for graduate students, FSU-Graduate Assistant United, was formed in 2008. The formation of a collective bargaining unit, along with the Ph.D. Completion Project and years of QER recommendations, reinforced interest in doctoral education and the experiences of graduate students throughout the university. This interest surfaced in the many meetings and discussions conducted as part of the university strategic planning process in 2008. The 2009-2014 plan identified eight strategic priorities and ten urgent initiatives meriting funding. While undergraduate concerns rated highly, the top ranked priority was to "Ensure that graduate student stipends and benefits are nationally competitive." The second priority of the university's strategic plan was to "expand targeted financial assistance to attract outstanding students;" more specifically, the university priority was to increase the number of graduate fellowships by 30 and expand graduate student need-based aid to 500 students. The direction of more attention to and the expansion of research on campus ranked fourth (although it was the most expensive planned initiative), while increased financial support for academic support services came in at eight.

The support for this plan by the university community, administration, and Board of Trustees was impressive, but ultimately short-lived, curtailed by the Great Recession of 2008 and 2009, even as the plan was being adopted. State recurring general revenues, a mainstay of university financial support, fell dramatically between 2008 and 2009 responding to a contracting housing market and the faltering economy. The downturn was followed by a measured recovery in 2010 and 2011. Overall, though, state general revenues did not reach 2007 levels until 2012, which led to postponing virtually all expensive university initiatives, essentially undercutting the impetus of the 2009-2014 Strategic Plan.

Nonetheless, university planning processes were not totally derailed. The Graduate School continued to work on the Graduate Student Tracking System and it was broadened incrementally. Moreover, the dramatic cuts had some unanticipated positive consequences. At the state level, legislators reacted to the funding blow sustained by universities in 2013 by creating "preeminent institution" status for Florida public universities that reached 11 of 12 benchmarks widely accepted as indicators of excellence among the nation's institutions. The qualifying universities were appropriated significant additional state funds. Notably, many of the 12 put a new focus on doctoral education and research. These quality indicators included, at varying levels set in law: total research expenditures, research expenditures in STEM related fields, patents awarded in the most recent 3-year period, the number of post-doctoral degrees, and the number of doctoral degrees awarded annually.

Doctoral students were perceived as the key to the research emphases of the preeminence program. Florida State University was one of two universities initially qualifying for preeminence. The state's program conferred a new cachet on doctoral education.

With the rebound of the Florida economy, the university's financial picture improved. The university acquired new leadership as the President and Provost, under whom the 2009 Strategic Plan had been developed, stepped down. A range of university activities, reined in during the Great Recession, acquired renewed urgency. First among these were various initiatives targeted toward undergraduates. The university reinforced efforts to restore unit funding. Undergraduate student success became a central university focus in the years following the recession and were given additional administrative attention. At the same time, the QER evaluation and

planning process continued to spot weaknesses and identify recommendations for undergraduate programs and for the university's master's and doctoral programs.

Between 2015 and 2022, the university conducted Quality Enhancement Reviews for almost all of the university's programs. Doctoral education received continuing focus. As might be expected, the most common recommendations related to funding for doctoral students. Program faculty members and external reviewers repeatedly suggested that the university explore ways to increase graduate student stipend rates. However, the academic program reviews also raised a number of other issues.

The FSU Graduate School developed a summary of the trends and recommendations issued during that period, which, apart from better funding, included the following:

- Explore ways to increase travel funding for doctoral students to attend, participate, and present at professional conferences;
- Explore hiring additional dedicated staff support for advising and coordinating doctoral programs;
- Explore challenges, while not common, in obtaining site licenses of software used by doctoral students in their research and dissertations;
- Explore issues in advising and the transparency of student progress in their doctoral programs;
- Explore ways to improve doctoral teaching and reduce doctoral student teaching loads;
- Improve and foster a stronger research culture on campus and involve doctoral students more in the scholarly presence on campus; and
- Explore ways to increase diversity among doctoral students and ensure such directions are included in unit strategic plans.

The university experienced another leadership change of the President and Provost during this same period which resulted in a new strategic planning effort, launched in 2016. The university developed its 2017-2022 Strategic Plan by involving committees from across campus in ongoing discussions using contextual information provided by the Office of Institutional Research, making use of experienced staff insights, and benefiting from the experiences of faculty having



participated in QERs that examined a wide range of undergraduate and graduate programs. Deliberations in the planning effort ultimately coalesced around strategic goals, including commitment to innovation, excellence in academic and research programs, student success, and career preparedness. Leaders for each goal engaged faculty, students, staff, alumni, and members of the community. More than 100 people across campus participated in the development of outcomes and tactics.

After the FSU Board of Trustees approved the 2017-2022 Strategic Plan, the Strategic Plan Implementation (SPI) Steering Committee, an interdisciplinary group of 15 faculty, administrators, staff, students, and a trustee, oversaw its implementation. The SPI Steering Committee met 38 times over five years, developed clusters of priorities based on thematic unity (e.g., graduate education), and resulted in 17 university-wide initiatives aimed at improving institutional quality and effectiveness (e.g., attract and graduate top graduate and professional school students and postdoctoral scholars). While much of the plan focused on undergraduate experiences and success, it also developed tactics aimed at graduate education. These tactics included plans to strategically grow the graduate and postdoctoral population and improve recruitment; increase retention and support for graduate and postdoctoral students;

increase participation in career readiness activities; improve student career competencies; and prepare students with "dissertation boot camps" and other opportunities.

The 2017-2022 Strategic Plan developed campus-wide initiatives and linked macrolevel university planning to its institutional effectiveness process, cyclical planning, and implementation and assessment effort.

This connection was designed to improve the integrative reach of the overall plan by incorporating it into the university's micro-level planning. In that process, every university unit and educational program defines and sets goals for program success and learning. These goals are assessed and reviewed annually and involve both an analysis of results toward achieving outcomes and planned improvements. Each unit and program must develop outcomes aligned with the strategic plan. The results and plans provide an overview of the issues on which academic programs are focused. All 63 doctoral programs align with the 2017 plan in some fashion. For example, the most frequent concerns at the doctoral level centered on job placement (36% of issues identified).

The doctoral outcomes in the university's Institutional Effectiveness Portal system are linked to the 2017-2022 plan. The latest entries are for the academic year 2022-2023. They will only catch up with recent developments in the coming year and will emerge after several years of notable change. In 2020, the university president announced his plans for an impending departure. FSU embarked on a national presidential search. Between October 2020 and May 2021, nine Presidential Search Committee meetings were held with nine candidates invited for semi-finalist interviews. These interviews involved candidate presentations and questions from the Presidential Search Committee. Both the questions and comments during the interviews raised issues about graduate education.

Three candidates were chosen as finalists, and they participated in open forums with institutional constituencies (students, faculty, deans, staff, and community members) before a final interview with the FSU Board of Trustees. The interviews and associated town hall meetings drew wide ranging and probing questions. The themes of much of the commentary centered on the priority of research, the need for increased research funding, and the scholastic research infrastructure challenges facing the university. The trends in research expenditures and the overall number of peer-reviewed publications gave substance to the questions and concerns raised throughout the interviews.

Based on his reading of the evidence and considerable experience, one of the finalists, Dr. Richard McCullough, argued that the biggest issue for FSU was its need to increase research expenditures and improve its overall performance sufficiently to gain membership in the AAU. In the associated sequence of interviews and forums, Dr. McCullough sketched a new vision for FSU, guiding the university to the next level by a heightened focus on research, innovation, and entrepreneurship, by supporting more robustly the scholarship of students and faculty, even while continuing to build on existing successes at the undergraduate level. He talked about growing the atmosphere of excellence, especially among graduate students, because such an atmosphere attracts stronger students and leads naturally to more research expenditures.



Dr. McCullough's vision was rooted in his background as Vice Provost of Research at Harvard University where he oversaw the development, review, and implementation of strategies, planning, and policies related to academic research and his prior experience as Vice President of Research at Carnegie Mellon University. It reflected cumulative comments by participants in the many presidential search forums. Consequently, Dr. McCullough voiced their concerns and gave expression to a broad undercurrent within the university.

Dr. McCullough's presentation resonated with the FSU Board of Trustees. In selecting him as the next president, the FSU Board of Trustees embraced Dr. McCullough's vision and reinforced both the focus on undergraduate success and the centrality of research, graduate education, and university innovation. The President emphasized their commitment and his views during the presidential investiture address in February 2022, when he said,

"Graduate education is the hallmark of any great research institution and our graduate applications have grown by nearly 85% over the last four years and are up 21% this year—also leading to an improvement in the quality of our graduate students - the fuel for research discovery."

The President's approach acknowledged the significance of the continuing energies of faculty and staff, making meaningful changes to ongoing processes. It was, at the

same time, a recognition of the university's role as a public institution. Upon receiving the APLU 2021 Degree Completion Award, President McCullough recognized that "Student success is at the heart of Florida State University's mission." Certainly, such success is crucial to an institution serving thousands of undergraduates. However, his argument extended the vision. Along with the university community, he argued for a new sense of that success - one that recognized the responsibility of a public research institution. Far from a new direction, this view elaborated a refinement and expansion of what was already underway. Since his appointment, President McCullough has made investments in academic excellence to drive greater student success as one of his 2023 goals. His goals encompass student success at the undergraduate level and embrace student success at the graduate level, with particular attention paid to doctoral students.

One of the first significant outcomes of this new vision came in negotiations with the Graduate Assistant Union when the most common recommendation emerging from the QERs was resuscitated. Historically, most stipend rates at the university have been significantly lower than rates offered to doctoral students in peer institutions. Low stipend rates are an obstacle for program recruitment efforts and make attracting top-tier and minority students a challenge. They discourage high-quality applicants from accepting admission to a program.

As part of more recent collective bargaining with the United Faculty of Florida-Florida State University-Graduate Assistants Union, graduate students received a 5% pay increase and guaranteed minimum of \$23.08 per hour (\$18,000 for 0.50 FTE academic year appointment; \$9,000 for 0.25 FTE academic year appointment) beginning September 29, 2023. In September 2024, graduate assistants will receive a 4.0% increase in pay and guaranteed minimum of \$23.97 per hour (\$18,700 for 0.50 FTE academic year appointment; \$9,350 for 0.25 FTE academic year appointment). In addition, graduate assistants will receive tuition fee relief (\$250 per semester for 0.50 FTE academic year appointment; \$125 per semester for 0.25 FTE academic year appointment) and increased health insurance subsidies.

This change in university presidential leadership came just as the 2017-2022 Strategic Plan was about to expire.

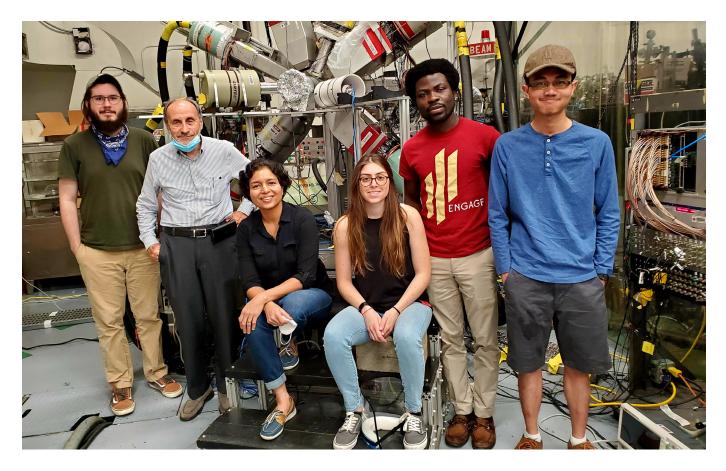
It accompanied other changes, most notably in its chief academic officer. The President initiated a search for a new Provost in mid-2021. Again, the search involved a series of fact-finding meetings – 19 in all - across campus. The search included two campus open forums and six meetings of the Provost Selection Advisory Committee. These meetings were designed to both capture the tenor of the campus reaction to the emerging leadership vision and to identify the qualities of a Provost and a candidate who could navigate its execution for the president and FSU Board of Trustees. Dr. James Clark was appointed effective January 2022. Dr. Clark had served as dean of the FSU College of Social Work since 2015, and in that leadership role had significantly developed the research infrastructure of the college and the university.

In Summer 2022, the President and Provost addressed the pending expiration of the university strategic plan. They chose to involve the campus community in a revision of the existing plan, conforming it to the new vision of the FSU Board of Trustees embodied in their recent presidential selection.

An FSU Strategic Plan for 2023-2027, they argued, could be updated, extending and refining the prior strategic plan. The links to the vision that the FSU Board of Trustees had adopted in accepting the President's goals were to be woven throughout the new plan. The refocused plan would place a renewed emphasis on excellence in academic and research programs.

A steering committee of 29 people was convened to formulate the new plan. The group worked on creating the Strategic Plan 2023-2027 while vetting it with internal and external constituencies. The committee updated the plan to reflect current needs and opportunities. The goals were crafted to align with the University Board of Trustees' vision as embodied in the new President's goals, including development of a broad new health initiative sponsored by the state legislature and increased readiness for membership in the Association of American Universities (AAU).

The new plan broadly retained the goals of the 2017-



2022 Strategic Plan, minus those that had been successfully accomplished. The previous plan's priorities that were extended represented those which the campus community identified as important, but where the desired amount of progress had not yet been achieved. Several areas were re-focused (e.g., pivoting from "growing the number graduate students" to "enhancing the quality of doctoral education"). The first goal, "expanding research and academic excellence," comports with the overall shift in vision. To achieve this goal, FSU plans to promote the development of new graduate training opportunities and expansion and retooling existing programs to meet strategic needs, especially at the doctoral level. Implicitly, the university's current strategic plan recognizes the critical role of doctoral education. Significantly, a focus on additional funding in areas that are consistent with a continued push to membership in the Association of American Universities was included in the strategic plan.

Both internal and external stakeholders participated in the vetting and planning process and informed drafts of the 2023-2027 Strategic Plan. These stakeholders included members of the President's Cabinet, Academic Deans Council, Faculty Senate Steering Committee, Academic Deans and Chairs, the Chair of the Board of Trustees, the Chair of the Board of Trustee's Academic Affairs committee, students, donors, alumni, and community partners. The university Board of Trustees considered the 2023-2027 Strategic Plan, and it was unanimously approved during its general meeting on February 24, 2023. The Florida Board of Governors subsequently reviewed and approved the university's plan in March 2023.

The 2023–2027 Strategic Plan and associated planning efforts set the university's course toward new strategic opportunities, many of which involve doctoral education.

Drawing on the experiences shaping the plan, the issues repeatedly raised in townhall meetings, and the vision adopted by the FSU Board of Trustees, the university president working with the Provost convened a QEP Committee to direct its attention to doctoral education and consider initiatives that would improve the experience, performance, and prospects of doctoral students.

BROAD-BASED SUPPORT: THE QEP COMMITTEE

The Quality Enhancement Plan (QEP) Committee was established at FSU, chaired by Dr. John "Piers" Rawling, former chair of the Council on Research and Creativity (CRC) and long-time chair of the Philosophy department. The CRC serves as an advisory board to the Vice President for Research and promotes research and creative activity at FSU across all disciplines and their intersections by sponsoring a competitive internal grant program and merit-based honorary awards. Because Dr. Rawling served on the 2017-2022 Strategic Plan Committee, he is familiar with FSU's ongoing comprehensive planning and evaluation processes and its long-standing focus on student success.

The QEP Committee includes multi-disciplinary faculty representing academic programs from the College of Arts and Sciences; College of Business; College of Communication & Information; College of Education, Health, and Human Sciences; College of Medicine; College of Music; College of Nursing; College of Social Sciences & Public Policy; College of Social Work; and the FAMU-FSU College of Engineering. Three members have received the Robert O. Lawton Distinguished Professor award, the highest honor faculty can bestow on a colleague. Nine members have won university teaching awards, a student-oriented award with nominations submitted by students and alumni. Four members have served as department chairs. Most faculty members have experience working with and supervising doctoral students.

The QEP Committee includes doctoral student representatives from Biological Sciences and the FAMU-FSU College of Engineering selected by the Congress of Graduate Students (COGS). Another doctoral student from the College of Education, Health, and Human Sciences also serves on the Committee. The Committee includes the Dean of the Graduate School, the Dean of University Libraries, the Director of the Office of Research Development, the Director of the Center for Undergraduate Research and Academic Engagement, and the Program Director for Career Advising, Counseling and Instruction at the Career Center. The QEP Committee had access to deep expertise in data. Staff supporting the Committee came from Institutional Research, the Office of the Provost, and the Graduate School. See Appendix A for a list of QEP Committee members and staff.

At its first meeting, the QEP Committee received its charge from Provost Clark. Key elements of the Provost's charge included:

- Reviewing the university strategic plan and leadership priorities as the framework to guide the development of the plan,
- Compiling institutional data relevant to the university plan and leadership/Board of Trustees goals,
- Identifying potential gaps and areas needing improvement between current practices and leadership goals for doctoral education,
- Examining national best practices for doctoral education in light of the university plan and leadership/Board of Trustees goals,
- Involving the campus community in the discussion and refinement of the topic within doctoral education.

The QEP Committee met 12 times in Fall 2022 and Spring 2023. The Committee examined doctoral education at FSU, FSU's participation in the Council of Graduate Schools (CGS) Ph.D. Completion project, literature about doctoral student development, promising practices from CGS (based on its work with institutions across the country such as Duke University, the University of California, Los Angeles, and Yale University) and others, and national best practices by looking across institutions in the United States. The Committee looked at Quality Enhancement Reviews (QERs), conducted surveys with doctoral students and faculty, held focus groups with university constituencies, learned about the development of online doctoral tracking systems such as Graduate Student Tracking (GST) and GradPhile, and reviewed the AAU Initiative on Doctoral Education.

FOUNDATION OF STUDENT SUCCESS AT THE DOCTORAL LEVEL

Doctoral students at FSU have a choice of 63 degree programs. More than one-third (22) of the doctoral degree programs are offered in the College of Arts and Sciences. The remaining doctoral degree programs are distributed across the College of Education, Health, and Human Sciences (12); College of Engineering (7); College of Social Sciences and Public Policy (6); College of Music (4); College of Communication and Information (3); College of Fine Arts (3); College of Medicine (2); College of Business (1); College of Criminology and Criminal Justice (1); College of Nursing (1); and College of Social Work (1). Only two online doctoral degrees (Educational Leadership and Policy; Instructional Systems and Learning Technologies) are offered, and both are through the College of Education, Health, and Human Sciences.

FSU awarded its largest number of doctoral degrees in 2022-2023 (n=501). As seen in Figure 1, the number of doctoral degrees awarded remained relatively steady between 2013-14 and 2021-22 (ranging from low of 406 in 2015-16 to a high of 448 in 2017-18).

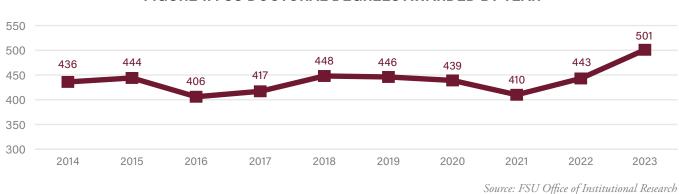


FIGURE 1: FSU DOCTORAL DEGREES AWARDED BY YEAR

Council of Graduate Schools Ph.D. Completion Project (2004-2010)

Doctoral student attrition and the long period of training associated with doctoral education has costs that are generally agreed upon: the personal costs to the student, the lost investment for the institution, and the societal loss of future leaders, researchers, scholars, and educators (Council of Graduate Schools, 2004; Gardner, 2009; Sowell et al., 2008). As noted earlier, FSU participated in the Council of Graduate Schools (CGS) Ph.D. Completion Project from 2004 to 2010. The national project's goals were to understand trends in completion and attrition rates and to determine which interventions could lower attrition and improve completion rates.

During the first phase of the Ph.D. Completion Project, program-level completion and attrition data were collected for 49,119 students from cohorts entering Ph.D. programs from 1992-93 through 2003-04 representing 330 programs across 62 disciplines at 30 universities (Sowell et al., 2008). Overall, 56.6% of students who entered between 1992-93 and 1994-95 completed programs within ten years (Sowell et al., 2008). Completion rates varied across disciplines from 49.3% in humanities to 63.6% in engineering (Sowell et al., 2008).

Differences in definitions for attrition across institutions

^{5001111.100} Office of institutional Testal



made it difficult for the Ph.D. Completion project to measure time to degree. Most definitions looked at both the number of students entering and leaving the doctoral program. Unfortunately, "institutions differ in the ways they define when a student begins and who is, and who is not, a doctoral candidate" (Council of Graduate Schools, 2004, p. 6). If counted as doctoral students only after completing a master's program, then students who leave early may be missed; however, including all post-baccalaureate students may capture students who did not intend to get a doctorate (Council of Graduate Schools, 2004). The Ph.D. Completion Project identified categories of attrition: withdrawal without a master's degree; withdrawal with a master's degree (before and after candidacy); transfer to another Ph.D. program; temporary leave ("stopping out" from the Ph.D. program, for personal, family, financial, or other reasons, with intention to return); and unknown (Sowell et al., 2008, p. 12). Such observations helped set the stage for a reconceptualization of doctoral education as involving a series of milestones, each with its own issues and criteria for success. This is at the heart of what the Completion Project called the Ph.D. Completion-Attrition Kaleidoscope.

The Ph.D. Completion Project found that most noncompleters who entered between 1992-93 and 1994-95 left in the first four years: 6.6% left in the first year,13.8% left by the second year, 19.9% left by the third year, and 23.6% left by the fourth year (Sowell et al., 2008). Students who left in the first four years included students who left their institution without a master's degree, students who left with a master's degree without reaching candidacy, students who left with a master's degree and achieved candidacy, and students who transferred to another doctoral program at their same or another institution (Sowell et al., 2008). Attrition continued to climb to 30.6% by the tenth year (Sowell et al., 2008). Attrition rates ranged across disciplines from just over 25% in life sciences to almost 37% in mathematics and physical sciences (Sowell et al., 2008).

During the first phase of the Ph.D. Completion Project, FSU collected and reported data from the College of Arts & Sciences for English, Chemistry, Clinical Psychology, Humanities, Mathematics, Neuroscience, Oceanography, and Physics. Demographic, enrollment, retention, and completion data were placed online by the Graduate School as an initial effort aimed at improving transparency and providing a foundation for improved enrollment management. A Ph.D. exit survey was conducted by FSU with about 500 respondents. This formed the foundation of subsequent efforts to understand the experiences of FSU's doctoral students.

During the second phase of the Ph.D. Completion Project, the Graduate School at FSU continued to add elements for online tracking. This tracking system (Graduate Student Tracking [GST]) used existing data systems from Campus Solutions (FSU's university-wide enterprise resource planning student information system), added information at the program level, and provided a messaging capability (e.g., annual review not conducted).

Extension of Graduate Student Tracking to GradPhile

The Graduate Student Tracking System (GST), initially used by the FSU Graduate School, was created as an outgrowth of such efforts to improve the monitoring and implementation of university milestones, policies, and procedures relevant to graduate education. GST has expanded over time, and Graduate Coordinators, Program Directors, Department Chairs and Academic Dean's Offices university-wide now use this system daily to keep track of their students' progress in the program. At this time, doctoral students and most faculty do not have access to GST.

The GST includes information on doctoral milestones such as the status of each student's preliminary exam, admission to candidacy, and dissertation defense. It also includes progression items that are required for the student's degree program, such as completing a program of study and selecting a major professor and/or a supervisory committee. The committee composition tab includes the names of the chair, university representative, and members from the department. An administrative check can be run by those with an authorized role in the system to determine whether the committee meets the minimum university requirements. Additional elements in GST include annual review documentation, courses taught, conference presentations, select workshops attended, test scores (e.g., GRE, TOEFL), funding source/waiver information, and TA certification status. Student transcript data is displayed, which shows the student's coursework and grades by term.

Over the years, a variety of custom reports and information queries have been developed to assist program directors and dean's offices in monitoring students and their degree approval process. For example, a departmental query can be run to determine which students have attended the mandatory TA trainings required to certify TAs for instructional roles. Reports may be run for doctoral milestones such as preliminary examination, admission to candidacy, and dissertation defense. A report may also be run to determine completion of annual reviews. Custom reports include graduation counts by academic plan and academic year, faculty member and committee role, years since reaching doctoral candidacy, and doctoral completion for a department (number of entering students, number of students who left without a master's or doctoral degree, number of students who left after receiving a master's degree, and number of students receiving a doctoral degree).

Graduate Coordinators can use GST to send messages to students. For instance, the Graduate Coordinator can use GST to send a message to graduate students who do not have an annual review on file. Templates are available; however, a template may only be used by the unit that created it (i.e., a template created by the Department of Mathematics is not available for the Department of English). A major limitation of the current system is that a student receiving a message cannot respond to the Graduate Coordinator in GST.

The GST maintains a wide array of data but primarily supports administrative processes more than advising. This situation motivated one academic department to develop a software companion to make GST information accessible to faculty and students. GradPhile is essentially a front-end visualization of data in the GST, some of which is pulled from the student information system or entered by departments. GradPhile gives students the ability to view their own educational progress and it gives faculty access to more complete student milestone information to enhance advising and timely feedback. While GradPhile has been used in the Department of Biological Sciences for several years, a recent review of its features confirmed the feasibility of adapting it to all graduate programs across the university.

- Simple configuration files that codify the degree requirements and deadlines are prepared with the Graduate Coordinator based on the Graduate Bulletin and departmental handbook. GradPhile can serve (and filter) its data displays by graduate degree plan and/or departmental subarea.
- Students are able to access academic and advising information that includes a timeline of their progress, checklists of degree requirements, and semester activities. GradPhile also provides feedback that helps make a graduate program self-correcting: when

a milestone is reached (e.g., prelims are passed), the graduate office for the department and the Graduate School are notified and that requirement can be checked off in the display, which turns it green.

- Faculty can monitor the progress of their students by seeing all the student supervisory committees they serve on and their progress.
- Dashboards are also provided for historical and analytical purposes, such as alumni lists, time to degree, composition of classes, student TA/RA support, etc. These dashboards provide the tables needed for a quantitative review of the program. Access to these analytical dashboards is limited to administrators, unless the data is sufficiently anonymized and aggregated so that faculty can be allowed to view it (e.g., summaries of time to degree).
- Online PDF forms are integrated into GradPhile, so annual review reports and committee memoranda of milestones can be stored in a document archive for student and committee reference.

GradPhile has served as a pilot about the possibilities of improving advising and encouraging greater communication. If expanded across the university, GradPhile would offer a new interface to allow graduate students, faculty, and staff to check on the student's progress towards their degree, as measured by meeting milestones and formal programmatic requirements.

IE Outcome Data

FSU's university-wide approach to planning and evaluation of institutional goals and outcomes includes the university's unit level institutional effectiveness (IE) assessment process. As noted earlier, this process is supplemental to, and supportive of, institutional strategic planning. IE is assessed at the level of educational programs and at the level of support units that provide academic, student, and administrative services. All educational programs and support units define and set performance goals; the goals are periodically planned and evaluated to determine how well they are achieved. The unit-level goals are referred to as program outcomes (POs).

When educational programs plan specific unit-level goals to establish and evaluate, they typically choose

POs focused on improving indicators of the overall department and/or program success, such as student enrollment, generated credit hours, awarded degrees, application and admission rates, and student diversity. Many educational programs choose POs focused on a specific dimension of student success, such as student persistence/retention, degree completion/graduation, post-graduation success (securing employment and/or further studies), and licensure/certification passage rates. Some educational programs aim to improve faculty recruitment and retention, scholarly productivity, instructional output, and faculty awards and accomplishments. Programs also support a specific aspect of the university mission and/or Strategic Plan, such as excellence in teaching or excellence in service.

Importantly, all program and unit-level POs must support institutional-level priorities as expressed in the FSU Strategic Plan. The alignment between programand unit-level outcomes and university-level priorities is documented in the university's assessment portal.

Each doctoral program is required to formulate and actively pursue at least one PO and at least two student learning outcomes (SLOs) in any given year. The most frequent concerns at the doctoral level centered on job placement, issues surrounding time to degree completion, student publication activities, and doctoral enrollment. Doctoral student learning outcomes concentrated on improving research skills, resolving preliminary examination issues, increasing student publication efforts, improving student teaching efforts, bettering dissertation quality and completion, and developing student communication skills.

In 2021-2022, the most frequent concerns among program outcomes at the doctoral level (n = 56) centered on job placement (36% of issues identified), issues surrounding time to degree completion (5% of issues identified), student publication activities (5% of issues identified), and doctoral enrollment (8% of issues identified). Doctoral student learning outcomes (n = 126) concentrated on improving research skills (23% of issues identified), resolving preliminary examination issues (11% of issues identified), increasing student publication efforts (11% of issues identified), improving student teaching efforts (7% of issues identified), improving dissertation quality and completion (17% of issues identified), and developing student communication skills (6% of issues identified).

LITERATURE REVIEW

There is a robust empirical literature related to doctoral education, which the QEP Committee integrated into its discussions. As part of the background materials developed for the Committee, research studies, institutional assessment reports, and promising practices publications broadly related to doctoral education were reviewed. The QEP Committee considered and discussed this research at its meetings.

At the broadest level, foundational literature on doctoral student success has shown that academic integration is a strong predictor of retention and completion, and supportive campus relationships (including advisors, mentors, and peers) have a positive impact on success (Nettles & Millett, 2006; Thomas et al., 1987 & 1992; Tinto, 1993). Consequently, much has been written about doctoral student socialization, including scholarly engagement and career readiness for academic and nonacademic positions. As Tinto (1993) points out, the socialization process for doctoral students is experienced primarily at the disciplinary level, so students in different fields of study experience structures and norms that vary widely across the same institution. Understanding and mitigating those differences across the institution is critical, and the literature includes some good models. Finally, the literature revealed a robust set of promising practices for the Committee's review. Institutions have successfully used these promising practices to support doctoral students and prevent attrition that is costly for both students and the institutions investing in them.

Academic Integration and Socialization

Based on earlier research indicating the positive impact of faculty and student interaction on doctoral student completion (Thomas et al., 1987 & 1992), Vincent Tinto (1993) put forward a theory of doctoral persistence which suggests that "graduate persistence is...shaped by the personal and intellectual interactions that occur within and between students and faculty and the various communities that make up the academic and social systems of the institution" (p. 231). Primary reference groups for doctoral students are more focused on the "local" communities residing within academic programs and departments where that interaction largely takes place. Additionally, he argued that graduate student persistence is tied to student interaction with external communities that influence doctoral persistence, including professional networks in the discipline as well as students' own personal situations related to family and work which affect time and motivation.

Gardner (2009) developed a theory of doctoral student development based on the idea that development occurs as a result of challenge and support across three phases of development: Entry (Phase I), Integration (Phase II), and Candidacy (Phase III).

Entry (Phase I) is the time before admission until coursework begins, including visiting campuses, applying, selecting a program, and moving. During this phase, Gardner advises that institutions should focus on structuring interactions for new students and faculty to benefit their sense of belonging in the department and lay the groundwork for future socialization and success (Gardner, 2009, p. 58). Relationships with faculty and peers can be developed through programs and activities at a variety of levels, including program or department, college, or at the university level.

Integration (Phase II) includes both the coursework and much of the social and academic integration that doctoral students will experience (Gardner, 2009, p. 10). During integration, students "explore their cognitive, intellectual, and epistemological development through their coursework" and "begin to become truly immersed in the language and culture of the discipline" (Gardner, 2009, p. 62). Challenges in Phase II include demonstrating competency in coursework, passing examinations, learning to conduct research, and forming relationships with faculty and other students. One of the factors contributing to attrition in this phase is the fear of failing the candidacy examination. Relationships with other students and faculty are the primary sources of support in Phase II, which underscores the need for effective advising and mentoring along with the information tools required to support those relationships. Students are encouraged to become involved with professional associations which afford the opportunity to practice and model the research and presentation skills required of them while interacting with scholars from other institutions. (Gardner, 2009, p. 73).

Candidacy (Phase III) occurs when students pass their comprehensive examinations and advance to the status of doctoral candidate. At this point, the sense of community built with peers and faculty may diminish somewhat as students spend less time in their departments to focus on their independent research. The loss of community is coupled with the need for heightened levels of self-direction, self-monitoring, and selfmotivation as required of the dissertation. In Phase III, doctoral students become professionals - conducting research, writing, and job searching, which is especially challenging for those with families and/or full-time positions. A supportive advisor is crucial during this phase even as that advisor transitions to the role of colleague by the end of the dissertation (Gardner, 2009, p. 83). Essential support during this phase includes regular meetings with the advisor, writing support groups, time management strategies, and job placement support (e.g., resume review and feedback, job search skills workshops, and practice interviews).

Weidman et al (2001) defined socialization in graduate school as "the processes through which individuals gain the knowledge, skills, and values necessary for successful entry into a professional career requiring an advanced level of specialized knowledge and skills (p. iii). They describe it as an ongoing process of becoming acquainted with expectations by transitioning through four increasingly complex developmental stages that reflect different levels of understanding and commitment to the professional roles to which they aspire. These developmental stages are:

- Anticipatory reflecting preconceived notions and initial expectations upon entry into the doctoral program;
- Formal reflecting a formal introduction into expectations and norms based on documentation, instruction, and observation of others;
- Informal reflecting knowledge of unofficial and sometimes understated role expectations through interactions with others, including faculty and peers; and
- Personal reflecting the fusion of the individual with roles within the social structure, i.e., role internalization.

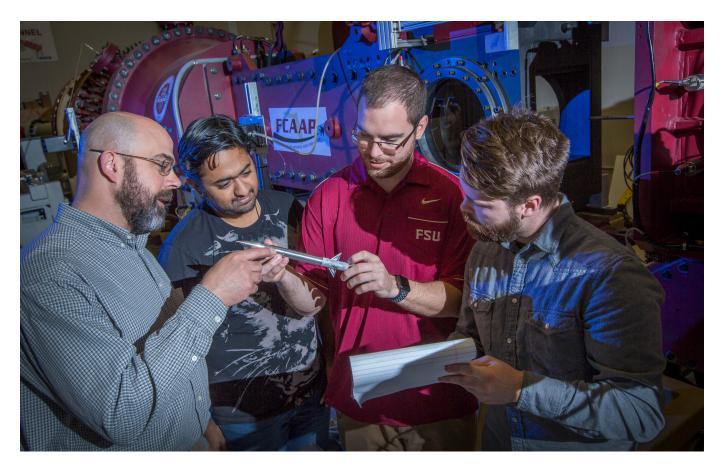
According to this view, the challenge for doctoral

programs and the larger departments and institutions in which they operate is to offer the right kind of support to students during these various stages of socialization.

Scholarly Engagement: An Aspect of Socialization

An important aspect of socialization involves learning how to participate in scholarly engagement and creative activity. While doctoral education includes coursework focused on the mechanics of conducting research, participation in scholarly activities outside of coursework is generally expected of doctoral students as a means of connecting, observing, and learning from a broader set of individuals with common intellectual interests. It also facilitates the practice of networking and the enhancement of research skills in increasingly complex ways. Meyer (1985) describes professional association membership and conference attendance as an essential type of experiential learning that contributes to the professional identity of doctoral students. She encourages volunteering at conferences, presenting, and networking with both faculty and peers. These activities serve as an entry point to the scholarly community and a road map to further involvement.

Beyond common practice, there is empirical research to support the positive impact of scholarly engagement. Nettles and Millet (2006) conducted a national survey of over 9,000 doctoral students at 21 of the top 60 institutions awarding doctoral degrees. Across the index of 22 items composing their definition of research activities (e.g., conference presentation, grant proposal, book chapter, article), they found that only 51% of doctoral students reported having done at least one of these activities. Notably, across all five broad fields of study examined (education, engineering, humanities, mathematics and hard sciences, and social sciences), engagement in research activities positively influenced degree completion. Nettles and Millet (2006) also highlighted the importance of a well-matched and supportive advisor in mentoring students in their scholarly engagement. Bagaka's et al. (2015) add another element for consideration. Their mixed methods study found three features related to doctoral student success: scholarly engagement, effective mentoring, and supportive program structure. They conclude that embedding effective mentoring and scholarly engagement within a supportive academic program structure that is supported by campus resources is most effective, not



only for enhancing degree completion but also for launching productive scholars.

Weidman (2010) articulated a conceptual framework on graduate student socialization and outlined a series of recommendations for students, faculty, and departments to maximize opportunities for scholarly engagement. His framework posited that (1) doctoral students enter a program with a set of "skills and predispositions" about what is required to earn the degree and pursue a related career; (2) are socialized professionally through experiences contextualized within that program; and (3) complete their degrees with research skills that are appropriate to the discipline. Beyond coursework, socialization activities include interaction with faculty and peers, research collaboration, writing for publication, networking, and attending and presenting at professional meetings. Additionally, Weidman called for more of a focus on university-wide strategies addressing common barriers to student participation in research activities:

- Competitive funding for student travel to conferences,
- Competitive funding for doctoral student research expenses,
- Expansion of university resources to support

student research (e.g., free software, survey research centers, data collection and management resources),

- Guidance for faculty and departments on how to develop mentoring programs, and
- Pursuit of funding for endowed scholarships, fellowships, and assistantships.

Teaching Preparation: An Aspect of Socialization

Doctoral students with instructional responsibilities often get limited training and development on effective teaching practices, which means they are at risk of being unprepared for a key part of their academic role (Boice, 1992; Golde & Dore, 2001). This institutional lack of attention and focus on teaching development for graduate students squanders opportunities twofold for graduate students entering the academic job market lacking instructional expertise and confidence but also for the undergraduates who might otherwise have benefited from better classes delivered by well-trained graduate instructors of record. Recently, the Boyer 2030 Commission Report (2022), which focused on quality and equity issues in U.S. undergraduate education,



reiterated the importance of taking an evidence-informed approach to teaching and emphasized that pedagogical training and experience should be part of doctoral education.

Connolly et al. (2016) conducted a longitudinal study of more than 3,000 STEM doctoral students as they completed degrees from 2009 to 2013. This included examining teaching development experiences during their program and the effects of that participation on their teaching knowledge, skills, and abilities. Participation in teaching development was common among doctoral students, with 85% participating in at least one formal activity (i.e., brief workshop or presentation). Moreover, intensive engagement in an activity that required a higher level of effort (i.e., teaching development course or program series) increased participant self-efficacy, sense of community with peers, range of instructional practices, and interest in teaching undergraduates. Additionally, participants with more than 55 hours of teaching development were significantly more likely to attain a tenure-track or non-tenure-track faculty position within five years of degree completion.

Walsh et al. (2022) surveyed 166 faculty hiring committee chairs from nine academic disciplines and drawn from

a variety of institutional types about how they evaluate teaching effectiveness for tenure-track positions. They found that teaching effectiveness is a top factor in hiring decisions and, that while hiring committees have different approaches to evaluating effectiveness at time of hire, the candidate's teaching philosophy statement is a particularly important piece of evidence.

Changing Expectations of Doctoral Education in the Knowledge Economy

Much has been written about the changing demands being placed on doctoral education in meeting the needs of a wider array of industries in the knowledge economy (Cardoso et al., 2022; Campbell, Fuller, & Patrick, 2005; Busby & Harshman, 2021). Since 2015, more than half of U.S. doctoral degree recipients with definite postgraduation commitments obtained employment outside of academia (NSF, 2020). Duke and Denicolo (2017) contrasted the resounding call for doctoral graduates who are better prepared for industry needs, a recommendation often delivered in governmental reports and policy papers over the last two decades, with the lack of empirical research on how such employability initiatives have impacted doctoral student career readiness. "Although most studies show a reducing trend in the number of doctoral students desiring an academic career as their programme progresses, there does not appear to be a corresponding increase in knowledge about the variety of alternatives available to them" (p. 3).

The Council of Graduate Schools (CGS) made their own call to action on this front. In a CGS-sponsored report, Denecke, Feaster, and Stone (2017) put it succinctly: "While the majority of Ph.D.s gain employment outside the academy, too often Ph.D. candidates receive little or no preparation in skills and competencies needed to thrive in non-academic careers" (p.8). In their survey of leaders at member institutions, fewer than half (44% of respondents representing 134 institutions) reported that their own campuses had existing formal programs for development of skills for non-academic careers. More than half (56%) of those reporting such programs on their own campuses indicated a combination of both centralized and program- or department-based activities to support non-academic career development. Clearly, institutions adept at meeting the needs of students with more diverse career interests have learned to navigate this gap with campus collaborations.

As a part of the CGS Career Pathways for Program Improvement project, Mitic and Okahana (2021) highlighted some of the most useful professional development opportunities identified by doctoral alumni: communication, public speaking, networking, digital literacy, project management, data analytics, academic writing, career preparation (e.g., vita, interviewing), leadership development, and research ethics/scholarly integrity. Non-faculty alumni generally found topics like project management and entrepreneurship to be more useful than their faculty alumni.

Allum, Kent, and McCarthy (2014) make a persuasive argument for collecting better data on career pathways for doctoral students. "Currently there exist no standards, definitions, processes, or procedures for collecting or using Ph.D. career pathways information, and the feasibility study found a clear need for a nationallycoordinated effort to identifying such standards" (p. 1). Doing so would strengthen doctoral programs and better serve a variety of constituencies (i.e., students, faculty, institutions, industry, and government), ultimately making a better case for graduate education as a public good.

Doctoral Student Perceptions of Challenges and Attrition Factors

A number of researchers have investigated the issues and barriers that impede persistence by surveying doctoral students about their own experiences and perceptions. These studies identify specific challenges that, if addressed, may impact student success.

Castello et al. (2017) surveyed 724 social sciences doctoral students in Spain. Approximately 30% of the sample considered dropping out at some point in the program. The group that considered dropping out was more likely to be younger (1.82 years on average), female (1.31 times more than men), and part-time students (1.29 times more than full-time). The most frequent reasons reported for those who considered dropping out were imbalance between work, school, and personal life (26%); low socialization and integration into the community of scholars (20%); low motivation and attribution of meaning (19%); lack of resources (18%); inadequate personal and research skills (11%); and stress and emotional management (7%).

The dissertation stage (the period after candidacy) can be a particularly grueling experience for some, coupling a new isolation with the need for independent learning and project management skills. Some research has focused on the relationship between self-regulation and time to degree and completion. Self-regulation "refers to learning that results from students' self-generated thoughts and behaviors that are systematically oriented toward the attainment of their learning goals (Schunk & Zimmerman, 2013). It involves the degree to which individuals are capable of independent goal-setting, self-monitoring, self-evaluating, help-seeking, and applying effective learning strategies (Zimmerman, 2000). Kelley et al. (2016) found a statistically significant relationship between higher levels of self-regulation skills and shorter time to completion of the dissertation following coursework. Sverdlik, Hall, McAlpine, & Hubbard's (2018) review of 163 empirical articles identified a number of factors that impact doctoral student completion, including motivation, writing skills, regulatory strategies, and academic identity (i.e., selfworth and self-efficacy). Locke and Boyle's (2016) qualitative study of educational leadership doctoral student experiences also honed in on self-regulation. The most common challenges identified included time management, writing, knowing where to begin, and

getting the needed level of advising and mentoring. The authors advocate for targeted and frequent institutional assistance for students (e.g., writing support, time management workshops, and dissertation boot camps). They also recommend creating faculty opportunities to further develop advising and mentoring skills specific to the dissertation stage.

A 2014 Yale University study of doctoral students found that some of the most prominent obstacles to academic progress included challenges with time management, academic and/or social isolation, low self-confidence, writing difficulty, and physical or mental health issues. This prompted Yale to enhance the resources already available at the McDougal Graduate Student Hub, a physical and online center that provides support and enriches the academic and personal experience of graduate students. The McDougal Graduate Student website includes links to academic guidance, health and wellness resources, financial support, writing assistance, professional development, career services, teaching enhancement, and more.

Duke University's Final Report of the Provost's Committee on Reimagining Doctoral Education (Balleisen & Lozier, 2018) summarized a university-wide effort to evaluate doctoral education (54 programs) informed by research, internal and external data, peer comparisons, meetings with key stakeholders, and surveys of their own doctoral faculty, students, and alumni. The findings affirmed that Duke University doctoral students have access to worldclass faculty and facilities leading to impressive careers in academia and a small but growing complement of other industries. Additionally, it reported significant progress had been made on raising funds to support graduate fellowships and expand summer funding such that approximately 80% of doctoral students are on 12-month funding. The Duke report also identified areas that could be improved, including initiatives aimed at:

- Enhancing training and accountability for advising and mentoring roles so that faculty are prepared to meet the broad and evolving needs of doctoral students,
- Increasing support for non-academic career trajectories across all programs and departments,
- Increasing student and faculty awareness of the high number of innovative opportunities available to doctoral students beyond the

academic department,

- Increasing awareness and encouraging more use of existing mental health resources among doctoral students, and
- Reducing constraints on summer and out-year funding that are particularly difficult for students in the humanities and social sciences.

In 2019, the Association of American Universities (AAU) launched a Ph.D. Education Initiative to improve the way that universities prepare doctoral students for diverse career pathways both inside and outside of academia. The initiative aimed to change the culture surrounding doctoral education by making graduate education more student-centered. A pilot group of eight AAU institutions (six public and two private) implemented reforms aimed at addressing university culture, behavior, policies, and practices. The intent was to create educational environments where students would have the support necessary to achieve their educational and professional goals. There were several components in play across the institutions. Some included changes designed to promote careers beyond academia. Others, following the Ph.D. Completion Project, promoted data transparency by identifying institutional policies and practices. Yet others worked on implementing effective strategies to improve Ph.D. career pathways. For example, the University of Texas at Austin committed to collecting and providing more accurate data on doctoral education for stakeholders including students, faculty, and administrators. Duke University planned a data-informed program evaluation that included mapping existing advising and mentoring resources and ensuring that robust data about programs, student experiences, and career pathways was readily available.

The need to provide a centralized way for doctoral students to access information about university services was a common approach among institutions. Some AAU institutions including the University of California Davis, University of California Los Angeles (UCLA), the University of Oregon, and the University of Pennsylvania have developed resource centers with both physical and online components to serve their doctoral students. The Graduate Student Resource Center at UCLA provides writing consultations, workshops, programs, and online writing resources for graduate students, and it has developed a flow chart to guide graduate student through finding resources to deal with



issues ranging from academic issues and post-graduate career opportunities to difficulty navigating relationships with an advisor or mentor.

Many institutions have embraced centralized efforts to enhance doctoral education. An analysis of centralized graduate education resources among all AAU institutions reveals that virtually all of them offer centralized resources to promote student success, generally through offices of graduate studies and online resources. However, approximately 25% of the AAU institutions have gone beyond that strategy to establish student-focused graduate centers that identify student needs and centralize access to physical and online resources such as workshops on academic and career development skills, writing assistance, meeting rooms, technology and materials, conference funding, academic coaching, mentoring, and peer accountability/support groups. Some of the most effective student resource center models include the UCLA Graduate Student Resource Center, UC Davis Graduate Center, UC Santa Barbara Graduate Student Resource Center, Harvard University Academic Resource Center, Princeton University McGraw Center for Teaching and Learning, University of Pennsylvania Graduate Student Center, and Yale University McDougal Graduate Student Center.

Promising Practices

The Council of Graduate Schools has long been a leader in identifying institutional actions that promote student success, and their work adds to the literature on promising practices for doctoral education.

As referred to previously, the Council of Graduate Schools sponsored the Ph.D. Completion Project in which the Ph.D. Completion-Attrition Kaleidoscope illustration was employed to further an understanding of factors impacting doctoral student success (Sowell et al., 2010). The Kaleidoscope is depicted as a series of concentric circles with student qualities at the center, institutional qualities at the middle circle, and sociodemographic variables at the outer circle. The Kaleidoscope is a term meant to represent the changing perspective of those involved in doctoral education as they reach and pass through each program's milestones. CGS authors asserted that students are selected for their ability to complete the program and, therefore, principal focus must be placed on institutional factors that can be managed or controlled. These institutional factors have been identified based on research indicating their potential to impact doctoral student success:

- Selection promoting shared responsibility of the prospective student and the academic department to consider selection in terms of the student's fit with the program along with a variety of factors, rather than academic reputation alone.
- Mentoring beyond simply advising, enhancing how faculty support students through their personalized interaction, professional guidance, and encouragement.
- Financial support exploring how the timing, amount, and type of financial support impact attrition and time to degree, with the understanding that options promoting academic integration with the department are likely to have the highest impact on success.
- Program environment establishing a supportive climate, including both formal policies and procedures conducive to student success and informal opportunities such as department events, social gatherings, professional publications, and student recognition.
- Research mode considering and mitigating the challenges posed by differences in the way research is organized in various disciplines (e.g., apprenticeship or research team model in the sciences as compared with individual research more characteristic of the humanities).
- Curricula, processes, and procedures structuring curricula and related processes in ways that advance student success and achievement of milestones (e.g., annual written evaluation with actionable feedback or qualifying exam that include a dissertation prospectus).

A review of promising practices in this CGS publication and across other authors (Balleisen & Lozier, 2018; Carter-Veale et al., 2016; Gardner, 2009; Gittings et al., 2018; Hill & Conceição, 2019; Kelley et al., 2016; Locke & Boyle, 2016; Sowell et al, 2010) suggests promising practices can be grouped into three broad areas that inform our QEP: mentoring and advising, administrative processes, and professional development. Some examples of promising practices in these areas are outlined as follows.

- Advising and Mentoring Providing a comprehensive student orientation, ensuring transparent expectations and academic milestones on departmental websites, providing online student resources, ensuring regular advisor/advisee meetings, requiring annual student performance reviews, requiring faculty advising and mentoring training, and offering peer mentoring.
- Administrative Processes and Support: Creating or enhancing an institutional database on doctoral students, tracking and reporting on doctoral student progress, conducting exit surveys on non-completers, tracking and communicating with students who have stopped out, creating a writing center and writing intensive retreats, increasing stipends or other financial support, providing affordable housing, providing affordable childcare.
- Professional Development: Providing travel funds for conferences, offering professional development workshops tailored to student needs at various stages of the doctoral program (e.g., time management, citation management), facilitating enhancement of teaching development, preparing students for job applications and interviews for positions within and outside of academia.

While not all these practices have received empirical evaluation, the Council of Graduate Schools and other authors identified them based on research indicating their potential to impact doctoral student success. For a more extensive summary of these promising practices, see Tables A1 through A3 in Appendix B.

DOCTORAL EDUCATION AT FSU

Quality Enhancement Review Recommendations

One of the key tools for assessing and planning for student success and education at the doctoral level at FSU is the Quality Enhancement Review (QER) process. As noted earlier, every academic program is reviewed on a seven-year cycle. The QER "process enables the university to provide quality assurance, maintain academic standards, ensure continuous improvement of academic programs, and improve the university's reputation" (*Quality Enhancement Review Manual*, 2023). The QER is the university's long-term planning and assessment tool for its academic offerings. The process is built upon an extensive self-examination including a self-study prepared by the academic unit and an external review by an independent evaluator.

The Committee reviewed the Graduate School's summary and analysis of QER findings regarding doctoral education from 2015 to 2022. The QERs regularly pointed out issues needing attention with the doctoral programs. The most common recommendations relate to funding for doctoral students, the program experience for doctoral students, and staffing in doctoral programs. They specifically include:

- Explore ways to increase travel funding for doctoral students to attend, participate, and present at professional conferences;
- Explore hiring additional dedicated staff support for advising and coordinating doctoral programs;
- Explore challenges, while not common, in obtaining site licenses of software used by doctoral students in their research and dissertations;
- Explore issues in advising and the transparency of student progress in their doctoral programs;
- Explore ways to improve doctoral teaching and reduce doctoral student teaching loads;
- Improve and foster a stronger research culture on campus and involve doctoral students more in the scholarly presence on campus; and
- Explore ways to increase diversity among doctoral students and ensure such directions are included in unit strategic plans.

QEP Committee Surveys

The Committee developed an extensive set of concerns about which it wanted information. Working with several skilled survey researchers, it formulated and administered surveys to current doctoral students as well as to faculty and staff in Spring 2023. See survey instruments in Appendix C. Periodic reminders were sent via email to non-responders. Almost 1500 doctoral students and over 800 faculty responded. The response rate for the surveys was 53% (1,456 of 2,728) for doctoral students and 39% (819 of 2,115) for faculty and staff.

The top issues identified by the doctoral student survey concerned milestone monitoring and support, scholarly and creative activity engagement, career readiness, and teaching preparation. While doctoral students were generally satisfied with their programs, the survey revealed some areas of dissatisfaction (dissatisfaction is defined as questions on which fewer than 70% of doctoral students agreed or strongly agreed). Select responses from students, faculty/staff, and differences between the students and faculty/staff on survey items related to milestone monitoring and support, scholarly and creative activity engagement, career readiness, and teaching preparation are included in Table 1.

In the domain of milestone monitoring and support, doctoral students expressed concern about receiving adequate training in time management, publication, public speaking, writing skills, qualitative data collection/ analysis, and quantitative data collection/analysis.

In the domain of scholarly and creative activity, doctoral students were concerned about having opportunities to work on research grants, receiving funding from their program or department to offset the costs of presenting their research or creative work at a professional meeting or conference, and having opportunities to work with faculty on publications/creative works.

In the domain of teaching preparation, doctoral students expressed concerns about whether they received proper training and preparation, received appropriate supervision to improve their teaching/grading skills, and were assigned reasonable instructional loads that did not detract from completion.



In the domain of career readiness, doctoral students indicated concerns with whether they received effective career guidance and planning services, had the opportunity to participate in a practice job interview

and receive useful feedback, and receiving effective job search or job placement assistance. Figure 2 below shows doctoral student responses about career readiness because these items were of great concern to students.

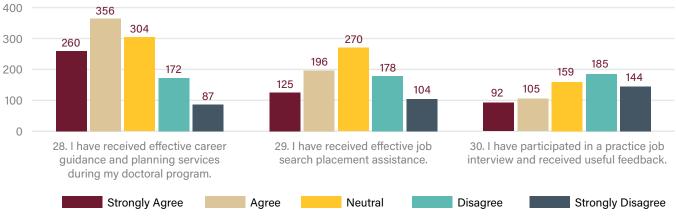


FIGURE 2: STUDENT SATISFACTION WITH CAREER READINESS SUPPORT

Source: FSU QEP Doctoral Student Satisfaction Survey

The differences between faculty and student responses deserve special note. Table 1 also shows satisfaction rates for doctoral students and faculty/staff as well as the difference between faculty/staff and student responses. As seen in Table 1, faculty and students hold different views about job search and placement; job preparation and interviews; opportunities to present at a professional conference; and training in publication skills. Generally, faculty tend to believe doctoral students are given more opportunities and are better prepared than the students think.

Table 1: QEP Survey – Spring 2023

Doctoral Student Survey n=1,456 (53% responding)

Doctoral Faculty/Staff Survey n=819 (39% responding)

MILESTONE MONITORING AND SUPPORT	AGREE/STRONGLY AGREE						
WILLSTONE WONTOKING AND SUPPORT	Students	Fac/Staff	Difference				
Students receive an annual written evaluation with adequate feedback	70%	84%	14%				
Students receive adequate training skills in quantitative data collection & analysis	69%	75%	6%				
Students receive adequate training in qualitative data collection & analysis	63%	64%	1%				
Students receive adequate training in writing skills	61%	54%	-7%				
Students receive adequate training in public speaking skills	50%	52%	2%				
Students receive adequate training in publication skills	49%	67%	18%				
Students receive adequate training in time management skills	45%	33%	-12%				
SCHOLARLY & CREATIVE ACTIVITY & ENGAGEMENT	AGREE/STR	AGREE/STRONGLY AGREE					
SCHOLARLY & CREATIVE ACTIVITY & ENGAGEMENT	Students	Fac/Staff	Difference				
Students have opportunities to present at professional conferences/ meetings	78%	93%	15%				
Students have opportunities to work with faculty on publications/creative work	67%	86%	19%				
Programs/Depts. provide student funding to offset conference/meeting costs	60%	75%	15%				
Students have opportunities to work on research grants	52%	65%	13%				
	AGREE/STRONGLY AGREE						
CAREER READINESS	Students	Fac/Staff	Difference				
Program is effective at preparing students for career	72%	77%	5%				
Students receive effective career guidance & planning services	52%	63%	11%				
Students receive effective job search and placement assistance	37%	58%	21%				
Students have participated in a practice interview and received useful feedback	29%	58%	29%				
TEACHING PREPARATION	AGREE/STRONGLY AGREE						
	Students	Fac/Staff	Difference				
TAs have received proper training and preparation	66%	79%	13%				
TAs receive appropriate supervision to improve their teaching/grading skills	62%	69%	7%				
TAs are assigned reasonable instructional loads that don't detract from completion	61%	68%	7%				

The surveys also revealed other areas of difference in the perceptions of doctoral students and their faculty/staff. Fewer doctoral students were satisfied with their training in publication skills than faculty/staff. Fewer doctoral students were satisfied with opportunities to work with faculty on publications or creative works, opportunities to present at professional conferences, and funding to present research/creative works than faculty/staff. Fewer doctoral students were satisfied with career assistance services, job search or job placement assistance, career guidance and planning services, and opportunities to participate in a practice job interview and receive useful feedback than faculty/staff.

Both the doctoral student survey and the faculty/staff survey included open-ended questions. The survey for doctoral students asked how FSU or the student's program could enhance doctoral education generally. The survey for faculty/staff asked about ways to enhance the academic experience and professional preparation of doctoral students. The open-ended responses echoed issues raised in the surveys.

Students and faculty agreed about the difficulty with tracking information related to completion of milestones and degree requirements.

"Once you are a candidate, it feels like you are treated as somewhat of a ghost in the department, and there is no central source of information." (Doctoral student)

"We have a course handbook, but it's still confusing and I still get confused as faculty (since I only co-chair as a major professor). I wish we had a system to better track prerequisites/milestones like a graduate student tracker." (Faculty)

Students and faculty also agreed about the need to increase travel funding to make professional conference attendance more affordable and accessible to doctoral students. Among the frustrations was the timing of the reimbursement for existing travel funding for doctoral students. "Increase travel funding to actually make a dent in the cost of attending a conference. [Our current funding] won't cover half of a hotel let alone travel or food. This makes wealthy students have access to the development of professional skills and poor students left out." (Doctoral student)

"Travel funding reimbursements are often paid semesters after the travel occurred, leaving students already struggling with housing and food insecurity relying on credit cards or loans to float travel costs covered by the department." (Faculty)

Again, the responses highlighted improvements that could be made to milestone monitoring and support, scholarly and creative activity engagement, teaching preparation, and career readiness.

Focus Groups

The QEP Committee conducted focus groups in Fall 2022 and Spring 2023 with six key stakeholder groups at FSU in addition to the surveys. The groups were: the Council of Assistant and Associate Deans, the Faculty Senate Steering Committee, the Academic Resource Offices, the Science Area Chairs, the Humanities Area Chairs, and Program Coordinators/Staff Advisors. The issues raised by the focus groups generally aligned with the concerns expressed in the surveys.

In terms of milestone monitoring and support, the focus groups pointed to the importance of formalizing timelines to keep all doctoral students progressing toward completion of milestones. Participants in the focus groups stated that doctoral students could benefit from the more "coordinated decentralization" approach to information. The need for additional support for faculty about how to coach students toward completion of milestones was clear. One suggestion for improving doctoral student progression was to improve the technology tools. While degree audits and graduation reports are available for undergraduate students, these tools are not available to doctoral students. The current system (Graduate Student Tracking) is useful for departments; however, there are limitations to GST. For example, some departments use Excel sheets or manual graduation checks for tracking doctoral student progression. The biggest limitation to the current system is that the tools are not available for doctoral students to review. Expanding GradPhile, the tracking system developed by the Department of Biological Sciences to other departments was mentioned as a possible solution.

An improved tracking system could also address issues raised about the annual review of doctoral students. Participants stated that the annual reviews varied widely across departments in quality, content, and process. Some participants stated that the feedback provided to doctoral students in some programs is not adequate. Several participants tied the annual review process to a need for departments to implement technology tools to track doctoral student performance along milestones in a way that is transparent to both students and faculty. (GradPhile incorporates the annual review process with an electronic form, signatures, and document storage.)

A clear need for more academic and student support services for doctoral students was identified. Specifically, doctoral students need ongoing support for areas such as writing and data analysis. While writing support services exist, doctoral students and advisors are often not aware of what is available or do not know how to make referrals. Professional skill development in areas such as public speaking/presentations, grant writing, and time management were identified among the ongoing support needs for doctoral students.

Another issue related to scholarly engagement identified by the focus groups was the need to incentivize presentations by enhancing travel funding for doctoral students. There are currently limits, shortages, and uneven access to travel funding for doctoral students across programs and colleges. One suggestion was to establish a baseline supplemental amount of funding for doctoral students using a centralized process. The process could be modelled on FSU's Council on Research and Creativity (CRC) which sponsors competitive internal grant programs for full-time faculty at FSU to promote research and creative activity.

The need for career and professional development for doctoral students came up during the focus groups. Participants felt that doctoral students were not aware of many support services, in particular, the student services available through the Career Center. One possible support mentioned was training doctoral students to develop career plans that include multiple pathways.

Financial constraints were highlighted as serious issues for doctoral students. These issues were tied to FSU policies concerning health insurance, continuous enrollment, outside employment, and teaching load for teaching assistants. High teaching loads for doctoral students, especially in high-enrollment or gradingintensive courses, has been a long-standing concern, but it has become more complex since Covid because undergraduate students are presenting with higher needs. (The focus groups did not identify the significant progress addressing stipend rates, health insurance subsidies, and tuition fees made in the recent agreement between FSU and the Graduate Assistant Union.)

Data on Doctoral Milestones

The QEP Committee worked with the Office of Institutional Research to gather information about progress toward success in completing doctoral milestones (specifically candidacy and graduation) at FSU. A dashboard was created to identify patterns of doctoral student progression by degree program and broad field over time. Doctoral students were tracked based on the first term in which they began as doctoral students. The dashboard included data for all doctoral students whose admission term occurred in or after Summer 2010.

Doctoral students were tracked in cohorts from matriculation to candidacy, from candidacy to graduation, and from matriculation to graduation. Multiple cohorts could be tracked at the same time. Based on this analysis, the Committee learned that the percentage of doctoral students from all fields of study reaching candidacy within five years of matriculation ranged from 69.6% for the 2013-14 cohort to 82.3% for the 2017-18 cohort while the percentage reaching graduation within five years of candidacy ranged from 81.1% for the 2016-17 cohort to 86.1% for the 2012-13 cohort. The percentage reaching graduation within ten years of matriculation ranged from 66.4% for the 2013-14 cohort to 81.2% for the 2011-12 cohort. The differences among cohorts suggested that with targeted efforts the overall time to degree might be shortened.

Doctoral students were also tracked in a single cohort. For example, the percentage of doctoral students in the 2012-13 cohort from all fields of study reaching candidacy increased from 21.7% within two years of matriculation to 76.0% within five years of matriculation while the percentage reaching graduation increased from 29.0% within two years of candidacy to 86.1%. within five years of candidacy. The percentage reaching graduation increased from 24.9% within four years of matriculation to 77.3% within ten years of matriculation.

Data was also collected showing the percentage of doctoral students that progressed from matriculation to candidacy, from candidacy to graduation, and from matriculation to graduation in seven broad fields: business, education, fine arts, health, humanities, science, and social science. Doctoral students in these seven broad fields could be tracked in a single cohort. As seen in Tables 2-4, the percentage of doctoral students from the 2012-13 cohort reaching candidacy within five years of matriculation ranged from 73.0% in both the science and social science fields to 86.2% in humanities while the percentage reaching graduation within five years of candidacy ranged from 72.5% for humanities to 100% for business. The percentage reaching graduation within ten years of matriculation ranged from 71.6% for social science to 81.0% for business. The differences among fields suggested that with targeted efforts the associated times might be shortened. Shortened times imply considerable savings for doctoral students.

			•	•			
Field of Study	Initial Cohort Count	2 Years	3 Years	4 Years	5 Years	Mean Years	Median Years
Business	21	66.7%	81.0%	81.0%	81.0%	1.91	1.75
Education	66	12.1%	47.0%	68.2%	75.8%	2.99	2.49
Fine Arts	43	14.0%	74.4%	81.4%	81.4%	2.18	2.12
Health	14	0.0%	57.1%	85.7%	85.7%	2.78	2.57
Humanities	58	15.5%	65.5%	82.8%	86.2%	2.59	2.48
Science	278	24.8%	52.5%	66.5%	73.0%	2.41	2.48
Social Science	74	18.9%	62.2%	71.6%	73.0%	2.02	2.36
TOTAL	554	21.7%	57.4%	71.3%	76.0%	2.42	2.44

Table 2: Matriculation to Candidacy by Field, 2012-13 Cobort

Table 3: Candidacy to Graduation by Field, 2012-13 Cohort

Field of Study	Initial Cohort Count	2 Years	3 Years	4 Years	5 Years	Mean Years	Median Years
Business	17	76.5%	100.0%	100.0%	100.0%	2.02	1.92
Education	53	39.6%	67.9%	84.9%	90.6%	2.49	2.26
Fine Arts	35	65.7%	77.1%	80.0%	88.6%	1.84	1.20
Health	12	58.3%	83.3%	91.7%	91.7%	1.88	1.57
Humanities	51	27.5%	52.9%	62.7%	72.5%	2.85	2.44
Science	209	19.6%	46.9%	74.2%	86.6%	3.02	2.93
Social Science	54	11.1%	48.1%	83.3%	85.2%	2.87	2.63
TOTAL	431	29.0%	55.9%	77.3%	86.1%	2.74	2.57

Field of Study	Initial Cohort Count	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years	Mean Years	Median Years
Business	21	61.9%	81.0%	81.0%	81.0%	81.0%	81.0%	81.0%	3.93	3.94
Education	66	21.2%	39.4%	62.1%	72.7%	72.7%	75.8%	78.8%	5.28	4.94
Fine Arts	43	53.5%	65.1%	69.8%	74.4%	79.1%	79.1%	79.1%	4.06	3.29
Health	14	21.4%	71.4%	78.6%	78.6%	78.6%	78.6%	78.6%	4.67	4.69
Humanities	58	20.7%	46.6%	60.3%	65.5%	72.4%	74.1%	74.1%	5.23	4.96
Science	278	19.4%	36.7%	62.6%	71.9%	77.7%	78.4%	78.4%	5.12	5.30
Social Science	74	25.7%	47.3%	62.2%	70.3%	70.3%	70.3%	71.6%	4.66	4.57
TOTAL	554	24.9%	44.2%	63.9%	71.8%	75.8%	76.7%	77.3%	4.95	4.94

Table 4: Matriculation to Graduation, 2012-13 Cobort

The Committee searched for comparative data in order to gain some perspective of the self-generated information. It turned to the Survey of Earned Doctorates (SED). The SED collects information from recipients of research doctorates on educational history, demographic characteristics, graduate funding source, educational debts, and postgraduation plans. It has been conducted annually since 1957. The 2021 SED was sent to 52,250 individuals receiving a research doctorate from 448 institutions between July 1, 2020, and June 30, 2021. The response rate was 91.5%. Nearly all respondents (97.6%) completed the full survey online while a small group (2.4%) completed an abbreviated survey.

According to data from the SED, FSU doctoral graduates

(n=1,829) had a slightly longer median time to degree compared to doctoral graduates from public R1 institutions (n=153,662) every year between 2017 and 2020. As seen in Figure 3, the median time to degree for FSU students fluctuated from 5.8 years to 5.7 years between 2017 and 2020 while the median time to degree for public R1 institutions declined from 5.7 years to 5.6 years over the same time. In 2021, the median time to degree for both FSU and the public R1 institutions was 5.5 years. Notably, the SED data include cases in which students acquire a master's degree, making comparisons with FSU's internal data difficult. In addition, the SED data for public R1s in Figure 3 is an average of medians for the public R1s institutions.

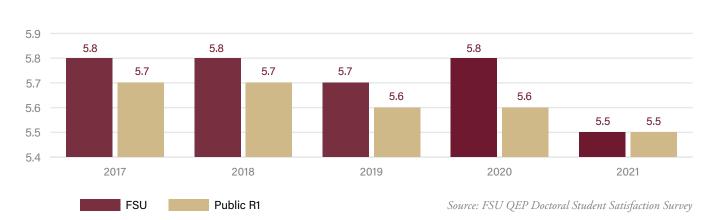


FIGURE 3: MEDIAN TIME TO DEGREE

In addition to the survey information sent to the National Science Foundation for the SED, FSU also conducts its own doctoral exit survey. Since 2015, 2,517 students participated in FSU's doctoral survey. Response numbers range from 374 in 2017 to 234 in 2021.

FSU's survey includes 69 questions on topics including career placement and professional development. Just over half (53%; 1,281 of 2,391) of respondents had access to a job placement officer or other placement resources (a designated faculty or staff member who advises on CVs, job interviews, etc.). Just over half (57%; 713 of 1,261) rated the placement resources as helpful (4 or higher on a 5-point scale). In terms of employment plans, more than one-third (39%; 951 of 2,410) of students who plan to move into the employment sector anticipated working in a position outside of academia. In terms of current employment status, more than half had secured positions: 40% (962 of 2,405) had accepted a position to begin in the following months, and 19% (452 of 2,405) were working in a position that they would continue after graduation. A few students were considering one or more offers (4%; 107 of 2,405) or had declined position offer(s) and were still searching for their preferred position (1%; 29 of 2,405). Onequarter (26%; 619 of 2,405) were searching for or waiting on offers. The remaining students were planning to begin searching in the coming months (10%; 236 of 2,405). These data suggest that FSU could do more to improve the opportunities for career placement of doctoral graduates. These data will be used as baseline pending development of a streamlined survey.

The Graduate School at FSU conducted a gap analysis to determine which of the promising practices found in the literature were already in place and which were missing. Table 5 below shows the areas in which the Graduate School identified gaps at FSU that could be addressed by the QEP.

Table 5: Gap Analysis

Selected Promising Practice Gap Analysis Conducted by the Graduate School during the QEP Development Process

Provide online student resources such as milestone tracking systems, dissertation checklists, electronic portfolios, and annual progress reports

Ensure that there are regular advisor/advisee meetings

Require annual student performance reviews with meaningful feedback

Develop faculty workshops on mentoring, including at new faculty orientation

Ensure accountability for effective, student-centered advising and mentoring

Conduct exit survey for doctoral recipients and students who do not complete doctoral work then use feedback to develop solutions to reduce attrition

Track and report doctoral student progress

Offer workshops on time management

Increase stipend levels to median of university's peer group

Offer professional development workshops tailored to students at the beginning, in the middle, or at dissertation stage

Offer a graduate certification in college teaching

Provide travel funds for attending conferences

Prepare students for job applications and interviews in the academy

Prepare students for job applications and interviews outside the academy

Coordinate professional development activities with individual schools, the Graduate School, and the Career Center

OUTCOMES AND IMPLEMENTATION

The Committee's review of the above information prompted probing questions and conversation. Early on, members recognized that the constraints of the QEP process limited their focus. While they were interested in a wide range of student learning and success topics, they understood that some important issues and their associated outcomes could not be addressed. They were limited by the expectation that the university would need to provide a report on the impact of the Quality Enhancement Plan for review at the SACSCOC fifthyear review. Perforce, this means that some aspects of doctoral education were beyond the scope of the QEP in ways that did not apply for undergraduate programs because the timeframes associated with the educational programs are different. One is typically within four years; the other is typically seven to 10 years. The rates for the whole experience from doctoral matriculation to completion cannot be investigated because the periods are typically too long to allow for the assessment required in the QEP. Such assessment cannot follow activities that take longer than four to four and one-half years if an impact report is to be completed for the fifth-year interim report. Similarly, outcomes associated with information derived over the full period leading to a finished dissertation or other such activities examined during the course of a full doctoral program would necessarily be excluded because the time involved would not allow them to be assessed in time for the interim report.

The measurement constraints imposed by the QEP were mitigated through the use of explicit milestones.

Milestones are times in the doctoral experience in which formal assessments of the student's progress toward the doctoral degree are completed. Milestones are commonly used by graduate programs in the United States and around the globe. The milestones allow points in a doctoral student's education at which student success or the fulfillment of student learning outcomes can be assessed.

Outcomes are associated with learning or success in achieving the milestone or learning recorded at milestones.

Recognizing these boundaries, the Committee identified a series of areas in which improvements to doctoral education would be significant, tractable, and practicable. One dealt with student progression. The Committee was impressed with the GradPhile interface to the GST as a way of improving the ability of doctoral students and faculty to access and track key information. The Committee and supporting staff considered other technologies already in use or previously vetted by FSU for undergraduate advising but found those less conducive to tracking doctoral student progression and much more complicated to implement. The members also recognized that further development and implementation of the improvements would take time even while it might ultimately prove to be an exceptional tool for measuring a whole variety of doctoral experiences. As a result, the committee recommended tackling the improvements and deferring any associated assessments until it had fully incorporated into the administrative procedures of all the related programs. At that point various of its data might be incorporated into assessments. GradPhile as a whole would not be assessed but might be the subject of student evaluations as discussed later in this section.

Another committee recommendation did not fit easily within the requirements of the QEP – development of a Graduate Student Resource Center. The Center, as discussed later in this section, would be an administrative change within the university. During the period of the QEP, it would report to a director position organizationally situated within the Office of the Provost. The director would have broad coordinative and analytical



responsibilities for the various elements of the QEP and would be charged with the development of an enhanced web site that would direct doctoral students to existing university resources from which they might benefit. The impact of the Center as a whole would not be assessed, but its processes would be subject to ongoing evaluations.

The Committee further recommended pursuing outcomes in five key areas for doctoral student success and learning:

- 1. Boosting doctoral student use of existing university resources and services,
- 2. Improving time from doctoral candidacy to graduation,
- 3. Increasing doctoral student participation and presentations at research conferences and creative events,
- *4. Improving doctoral student job placement skills, and*
- 5. Developing doctoral teaching preparation and effectiveness.

The need for improvements in each of these areas had been identified in the surveys of students and faculty/ staff, focus groups, or university data. Notably, they involved areas on which there were often striking differences in the views of students and faculty/staff regarding the extent to which the outcomes had been achieved at the university. Those differences highlighted outcomes that merited attention. Each of the outcomes spotlighted by the Committee could be associated with definite milestones in doctoral education. Each lent themselves to some practicable form of measurement. Each could be addressed within the administrative structure of the university without undue disruption and in a fashion that promised success.

The Committee's deliberations ranged widely over their previous work and own experiences. It focused on a few especially significant and promising issues that had appeared in survey data, focus groups, and external data. Table 6 summarizes their recommendations.

Table 6: QEP Committee Recommendations

OUTCOME(S)	INITIATIVE	RATIONALE
* After implementation of the Graduate Student Resource Center (GSRC) website, doctoral student satisfaction with the referred academic and support services that they used will increase by 5% each year (baseline will be established once the new website is implemented).	Graduate Student Resource Center web site (Milestone monitoring and support)	 * Doctoral students, faculty, and staff are not aware of available services to support doctoral students at FSU or do not know how to access the services because no central source exists to learn about available services. Doctoral students would appreciate a coordinating office and website. * Ongoing support is needed for doctoral students in professional skill development. Neither students nor faculty felt that doctoral students receive adequate training in time management, public speaking, publication, or writing skills. * The existing online tracking system (Graduate Student Tracking) is useful for departments, but the system is not available for students or convenient for faculty. There is a need to implement a dashboard to track doctoral student performance along milestones in a way that is transparent for both students and faculty.
* After completion of two Graduate Skills Workshops, median time from candidacy to degree completion will improve from 2.62 years (baseline associated with 2018-19 through 2022-23 cohorts) by 5% (or 2 weeks to 1.3 months).	Graduate Skills Workshops (Scholarly and creative activity engagement)	 * Median time to degree at FSU is higher than median time to degree at public R1 institutions and much of that is associated with the time from candidacy to degree completion. * Doctoral students at FSU have difficulty developing a dissertation topic and difficulty with statistical skills. Additional training in citation management, data collection and analysis (qualitative and quantitative) could help alleviate some of these difficulties.
* After implementation of the research and creative activity grant program and Graduate Skills Workshops, the number of research or creative works presented by doctoral students at conferences or performance venues (regional, state, national, and international) will increase by 5% each year (over baseline of 43% who strongly agreed on the QEP doctoral student survey that they are able to present).	Research and Creative Activity Grant Program (Scholarly and creative activity engagement)	* Program or department funds to offset the cost of attending and presenting research or creative works at professional meetings or conferences are not adequate. Limits, shortages, and uneven access across colleges and programs exist. Additional funding for doctoral students is needed to incentivize attendance and especially presentation of research and creative works, and a survey should be conducted to determine the baseline numbers for presentations of research or creative works.

OUTCOME(S)	INITIATIVE	RATIONALE
 * After completing virtual mock job interviews using AI software with structured feedback, the score in <i>Quinncia</i> on interview skills will improve by 3% (baseline will be established once <i>Quinncia</i> is implemented). * After completing targeted virtual skills modules in <i>Beyond the</i> <i>Professoriate</i>, opportunities for employment of doctoral students will improve from 58.9% (baseline associated with the 2021 <i>Survey of</i> <i>Earned Doctorates</i> question about whether FSU students had an employment offer or were continuing predoctoral employment) by 5%. 	Career Readiness Activities	 * Doctoral students at FSU are open to jobs both in and out of academia, and nearly one-fifth have decided to enter the non-academic job market. * Few doctoral students take advantage of the Career Center, and faculty could use additional training to help doctoral students that are open to multiple career pathways develop career plans. * Doctoral students are not provided with adequate opportunities to participate in practice job interviews and receive useful feedback. They have not received effective job search/placement assistance or career guidance and planning.
 * After completion of two required elements of the TA teaching preparation program, TA's knowledge and practice of evidence-based approaches to college teaching will improve by 5% (baseline will be established once the TA teaching preparation program is implemented). * After completing the TA teaching preparation program, TAs will demonstrate increased preparedness for teaching and effective teaching practices with 85% earning a score of 4 or higher (of 5) on their teaching portfolio scored by the Center for the Advancement of Teaching (baseline will be established once the TA teaching preparation program, opportunities for placement (interviews, offers, and positions accepted) in faculty positions will improve from 32.4% (baseline associated with the FSU manuscript clearance survey from 2015-2023) by 5%. 	Teaching preparation	* Doctoral students have not received appropriate preparation to improve their teaching and/ or grading skills or proper training for their instructional role.

Activities and Tool

To improve performance outcomes that were identified, the QEP Committee approved six initiatives: the establishment of a Graduate Student Resource Center, Research & Creativity Activity Grants, Quinncia and Graduate Career Liaison, Beyond the Professoriate, Graduate Skills Workshops, and a TA Professional Development Program.

Graduate Student Resource Center (GSRC)

As noted earlier, the Graduate Student Resource Center (GSRC) will be established as a unit within the Office of the Provost in order to ensure that it is closely monitored and provided with timely resources. It will create a "one-stop shop" for graduate student resources and information, with special emphasis on meeting the needs of doctoral students. The GSRC will have several full-time staff and a director with appropriate professional credentials. The GSRC will develop a website with a centralized list of academic and student support services available to all graduate students. The web site will be developed and managed with an eye toward increasing the use of current and new university resources. Additionally, the GSRC, often in collaboration with other units on campus, will establish an annual resource fair and a workshop series to address professional development topics such as time management, writing skills, project planning and management, stress reduction strategies, professional speaking skills, and other topics identified by doctoral students on the QEP survey.

Research and Creativity Activity Grants

The GSRC will develop and implement the research and creative activity (RCA) grant program. The RCA grant program will increase scholarly productivity by providing doctoral students the opportunity to attend and present research or creative works at regional, state, national, and international conferences or performance venues.

Doctoral students will apply for the RCA grant program using a template developed by the GSRC. To be eligible for funding, a doctoral student must have advanced to candidacy, participated in one or more graduate skills workshops offered by University Libraries, and provide evidence of attendance at or acceptance to present at a regional, state, national, and international conference or performance venue (e.g., email confirming conference registration; conference agenda with their name as a presenter; email accepting their proposal). Recipients will be required to establish an individualized FSU ORCID (Open Researcher and Contributor ID) account.

The RCA grant program is intended to supplement and not supplant existing funding available from the Congress of Graduate Students (COGS) and university departments. Proof of application for funding from COGS and the student's department (if available) must be included in the application.

Doctoral students who meet these criteria will be eligible to receive funds prior to travelling to the conference or performance. Funds may be used for conference registration fees, hotel/lodging, airfare, rental car fees, mileage (if a personal vehicle was used), ground transportation, parking fees, and meals (per diem). Applications for funding including documentation of expenses other than ground transportation and parking fees must be submitted at least four weeks prior to travel. Documentation of expenses for ground transportation and parking fees must be submitted within two weeks after travel. The maximum amount of the grant is \$1,000 per student if presenting or \$500 per student if attending per fiscal year (July 1-June 30). These amounts along with other institutional and departmental funding begin to address concerns raised in the surveys and focus groups. A student will be limited to one grant per fiscal year but may receive more than one grant during the period of their candidacy to doctoral completion.

Graduate Skills Workshops

University Libraries will organize several graduate skills workshops. These workshops will complement resources and expertise that the University Libraries already have. The suite of graduate skills workshops will include sessions on citation management, literature review, and data management, analysis, and visualization. The University Libraries and the GSRC will advertise the workshops. Students will register for the workshops through the library. University Libraries will track registration and attendance at the workshops. They will manage all the information associated with the workshops.

Individual consultations about data management, analysis, and visualization will be offered by a statistician hired by the University Libraries. The University Libraries and the GSRC will advertise the individual consultations. Students will register for the data management, analysis, and visualization consultations by emailing the statistician.

The work sessions will increase scholarly engagement

and are intended to enable doctoral students to craft more professional research papers as efficiently as possible, especially among students who are struggling to complete their dissertations. Doctoral students who attend one or more work sessions will be eligible for funding through a new doctoral student research and creative activity grant program.

Virtual Mock Job Interviews

The Career Center will provide a set of activities designed to improve readiness for employment. These activities will include a virtual mock job interview, a meeting with a Graduate Career Liaison, and a second virtual mock job interview. The virtual mock job interviews will be conducted using Quinncia, an artificial intelligence solution that provides analysis of the mock job interview on a range of topics such as eye contact, rate of speech, and answer length. Students receive an overall score for their interview. The Graduate Career Liaison will conduct individual meetings with doctoral students with an aim to improving performance on subsequent mock interviews. The Graduate Career Liaison will provide suggestions and connect students to resources such as virtual skills modules.

Virtual Skills Modules

The Career Center will also provide virtual skills modules aimed at helping doctoral students prepare for faculty or non-faculty careers. The virtual skills modules covering both career tracks will be accessed on the digital e-learning platform Beyond the Professoriate. Each track includes several 20-minute videos where chapters can be skipped if desired. The platform includes trainings about topics for doctoral students interested in pursuing faculty positions such as preparing for a first-round interview or a job talk and for students interested in pursuing professional positions such as the hiring process and how to persuade employers to hire you. It also includes featured career interviews with advice from people who hold doctoral degrees in a range of disciplines. The modules will reinforce the ability of doctoral students to obtain employment in positions inside or outside of academia. Student use of the modules will be tracked and assessed by the Career Center.

TA Professional Development Program

The Center for the Advancement of Teaching (CAT) will provide ongoing teaching development and support by expanding training for Teaching Assistants (TAs). FSU already provides training for TAs on policies and

practices prior to the first teaching assignment. Until Fall 2023, the training was offered through the Graduate School and was called the Program for Instructional Excellence (PIE); in Fall 2023, the training was transferred to CAT and renamed Essential Policies and Practices for TAs. This move will provide more professional oversight and coordination for TA training. For the expanded TA professional development program, CAT will provide workshops, reading groups, and other activities designed to help TAs build knowledge of evidence-informed approaches to teaching and develop learning-centered and inclusive teaching practices that will equip them to teach as future faculty.

The expanded program will include multiple components. Students will participate in five workshops, attend two reading groups, collect and make use of feedback on teaching in two projects (one must be a mutual teaching observation), complete two design/improvement projects (e.g., assignment, in-class activity, quiz, exam, syllabus), and participate in a capstone project. TAs who successfully complete the program will receive an electronic and printed certificate of completion.

The workshops will address designing for learning; assessment and alignment; facilitating learning during class time; feedback and grading; and human dimension and communication. Participants must complete one workshop in each of the five categories. For the capstone project, participants will attend a workshop on writing teaching statements; draft, get feedback on, and revise their teaching statement; and compile a teaching portfolio with their teaching statement as the first item.

Doctoral students will also complete an assessment of their knowledge and practice of evidence-based approaches to college teaching based on a model developed by Hurney et al. (2020). The assessment will occur at the beginning of the program and after the completion of two required elements. It will provide a measure of learning for students who do not complete the entire program.

TAs will generate materials that they will compile into their teaching portfolio throughout the program. This portfolio will serve two purposes. It will furnish TAs with evidence of robust preparation to teach that they can present to prospective employers on the academic job market, and it will provide FSU with evidence of the program's effectiveness in preparing graduate students to teach.

Online Doctoral Progression Tracking Tool

To help coordinate advisor information and resources that promote strong mentoring and guidance for doctoral students, an existing Online Doctoral Progression Tracking Tool (GradPhile) will be expanded and integrated into the Graduate Student Tracking (GST) Database. GradPhile was developed by FSU's Department of Biological Sciences. GradPhile allows programs to collect and share more timely and nuanced faculty feedback with doctoral students, along with information on the completion of program milestones. Students responding to the survey requested more timely annual reviews that provide more useful feedback, and improved advising and mentoring. Faculty also commented on these issues in focus groups. The progression tool will help alleviate these problems. It also will provide a platform from which improved information on doctoral students can be collected and analyzed. The online progression tracking tool (GradPhile) will assist in tracking the initiatives. As noted earlier, GradPhile itself is not an initiative whose impact will be assessed initially but is a tool whose role in student assessment will be determined once it has been fully implemented.

Implementation

The QEP will be implemented in stages beginning in fall 2023 as shown in the table below. The director of the Graduate Student Resource Center (GSRC) will be housed in the Office of the Provost. An advertisement for the director position was posted in Fall 2023, and evaluation of applications is ongoing. The advertisement for the Graduate Career Liaison (to be housed in the Career Center) was also posted in Fall 2023, and the Career Center purchased *Beyond the Professoriate* and additional licenses for *Quinncia* in Fall 2023. Planning for the TA professional development program began in Fall 2023. The instructional specialist for the Center for the

Advancement of Teaching will be hired in Spring 2024. The advertisements for the software developer (an ITS/ Provost's office position) and the business analyst within the Graduate School will be posted in January 2024.

The first programs will be offered in Spring 2024. Doctoral students will be able to participate in virtual mock interviews and meet with the Graduate Career Liaison. Teaching assistants (TAs) will be able to participate in the activities for the TA professional development program (workshops, reading groups, etc.). GradPhile will be rolled out to select departments in Spring 2024.

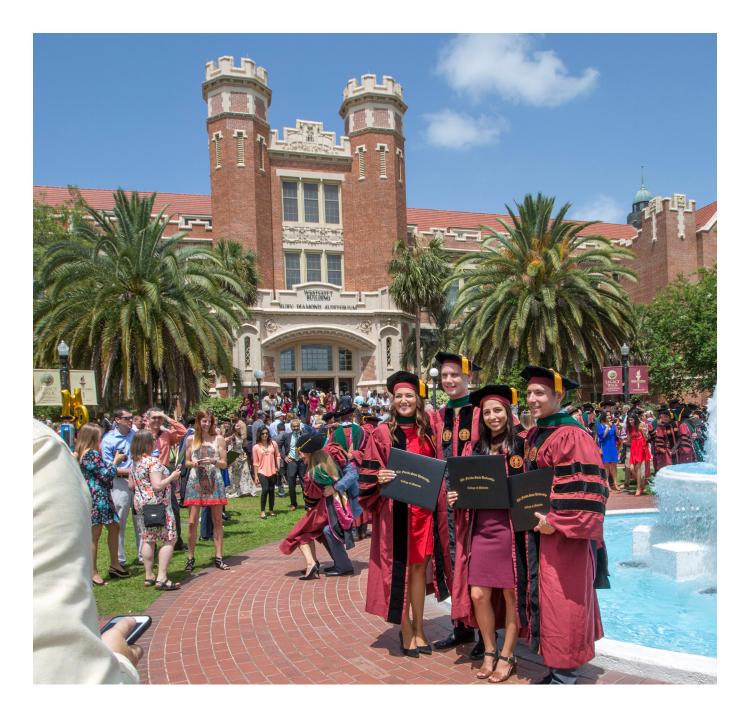
The director of the GSRC will hire a student success analyst and a program manager in Spring 2024 followed by an administrative assistant in Summer 2024. The positions will be housed in the Office of the Provost. Planning for the GSRC website, the resource fair, the GSRC workshop series, and research and creative activity grant program (including collection of baseline data, development of policies for the grant program, and creation of the application) will take place in Spring and Summer 2024. The GSRC website will be launched, and the resource fair and the GSRC workshop series will be announced on July 1, 2024. The first round of RCA grants will be available July 1, 2024.

University Libraries will hire the instructional specialist/ statistician in Summer 2024. The statistician will be housed in University Libraries. Planning for the graduate skills workshops and individual consultations will occur during the Summer 2024. The graduate skills workshops and individual consultations will begin in Fall 2024. Additional departments will begin using GradPhile in Summer 2024, and the rollout will continue until Spring 2026 when all departments will be using GradPhile.

tion
menta
Imple
QEP
ĸ
Table

ACTION TO BE IMPLEMENTED	Fall 2023	Spring 2024	Summer 2024	Fall 2024	Spring 2025	Summer 2025	Fall 2025	Spring 2026	Responsibility
Milestone Monitoring and Support	port								
Planning for Graduate Student Resource Center (GSRC) website, resource fair, and workshop series									Graduate Student Resource Center
GSRC website live; resource fair and workshop series announced			July 1, 2024						Graduate Student Resource Center
Hiring of the Director of the GSRC									Office of the Provost
Hiring of the Student Success Analyst									Graduate Student Resource Center
Hiring of the Program Manager									Graduate Student Resource Center
Hiring of the Administrative Associate									Graduate Student Resource Center
Hiring of the Software Developer									Information Technology Services
Hiring of Business Analyst									The Graduate School
Initial rollout of <i>GradPhile</i> to select departments									The Graduate School
Add <i>GradPhile</i> for select departments each semester									The Graduate School
All departments using GradPhile									The Graduate School
Scholarly and Creative Activity Engagement	y Engagemei	nt							
Planning for Graduate Skills Workshops and individual consultations about data visualization									University Libraries

ACTION TO BE IMPLEMENTED	Fall 2023	Spring 2024	Summer 2024	Fall 2024	Spring 2025	Summer 2025	Fall 2025	Spring 2026	Responsibility
Hiring of instructional specialist/statistician									University Libraries
Graduate Skills Workshops and individual consultations about data visualization begin									University Libraries
Collection of baseline data, development of policies, creation of application for Research and Creative Activity grants									Graduate Student Resource Center
First round of Research and Creative Activity grants available			July 1, 2024						Graduate Student Resource Center
Career Readiness									
Hiring of the Graduate Career Liaison									Career Center
Purchase Q <i>uinncia</i> licenses									Career Center
Virtual mock job interviews begin									Career Center
Meetings with Graduate Career Liaison begin									Career Center
Purchase Beyond the Professoriate									Career Center
Students begin using Beyond the Professoriate									Career Center
Teaching Preparation									
Hiring of Instructional Specialist									Center for the Advancement of Teaching (CAT)
Planning for TA Professional Development program									CAT
Activities begin (workshops, reading groups, etc.)									CAT



TIMELINE FOR RESOURCES

FSU's QEP commits resources to initiate, implement, and complete the QEP. The plan is funded from the Office of the Provost. President McCullough announced in his State of the University address on November 29, 2023, that the university was making a \$10 million investment over the next five years in the QEP to support doctoral students across campus. There will be major investments in Research and Creative Activity grants, the Graduate Student Resource Center, the Career Center, the Center for the Advancement of Teaching, University Libraries, and GradPhile. The five-year QEP budget is outlined below in Table 8.

Table 8: QEP Five-Year Budget	Year 1	Year 2	Year 3	Year 4	Year 5	5-year
C 0	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Totals
PERSONNEL						
Instructional Specialist/Graduate Career Liaison (Career Center)	\$42,977	\$85,954	\$85,954	\$85,954	\$85,954	\$386,793
Instructional Specialist (Center for the Advancement of Teaching)	\$54,698	\$109,396	\$109,396	\$109,396	\$109,396	\$492,282
Instructional Specialist/Statistician (University Libraries)	\$46,884	\$93,768	\$93,768	\$93,768	\$93,768	\$421,956
Software Developer, GradPhile (ITS/Office of the Provost)	\$54,698	\$109,396	\$109,396	\$109,396	\$109,396	\$492,282
Business Analyst, GradPhile (The Graduate School)	\$32,819	\$65,637	\$65,637	\$65,637	\$65,637	\$295,367
Consultant, GradPhile	\$5,000	\$10,000	\$10,000	\$10,000	\$10,000	\$45,000
Project Lead Coordinator, GradPhile (The Graduate School)	\$4,985	\$9,970	\$10,469	\$10,992	\$11,542	\$47,958
Project Lead Coordinator, GradPhile	\$12,951	\$25,901	\$27,196	\$28,556	\$29,984	\$124,588
Director, Graduate Student Resource Center (Office of the Provost)	\$58,605	\$117,210	\$117,210	\$117,210	\$117,210	\$527,445
Student Success Analyst, Graduate Student Resource Center (Office of the Provost)	\$46,884	\$93,768	\$93,768	\$93,768	\$93,768	\$421,956
Program Manager, Graduate Student Resource Center (Office of the Provost)	\$46,884	\$93,768	\$93,768	\$93,768	\$93,768	\$421,956
Administrative Associate, Graduate Student Resource Center (Office of the Provost)	\$0	\$70,326	\$70,326	\$70,326	\$70,326	\$281,304
EQUIPMENT						
Phone (Career Center)	\$500	\$0	\$0	\$0	\$0	\$500
Computer (Career Center)	\$2,000	\$0	\$0	\$0	\$2,000	\$4,000
Computer (Center for the Advancement of Teaching)	\$2,000	\$0	\$0	\$0	\$2,000	\$4,000
Phone (Center for the Advancement of Teaching)	\$500	\$0	\$0	\$0	\$0	\$500
Computer (University Libraries)	\$2,000	\$0	\$0	\$0	\$2,000	\$4,000
Phone (University Libraries)	\$500	\$0	\$0	\$0	\$0	\$500
Computers, GradPhile (3)	\$10,000	\$0	\$0	\$0	\$0	\$10,000
Computers, Graduate Student Resource Center (4)	\$8,000	\$0	\$0	\$0	\$8,000	\$16,000
Copier/printer, Graduate Student Resource Center	\$10,000	\$0	\$0	\$0	\$0	\$10,000
Phones, Graduate Student Resource Center (4)	\$2,000	\$0	\$0	\$0	\$0	\$2,000
Desks/files/chairs (6)	\$3,000	\$0	\$0	\$0	\$0	\$3,000
ASSESSMENT SUPPORT						
Beyond the Professoriate (Career Center)	\$15,200	\$15,200	\$19,000	\$19,000	\$19,000	\$87,400
Quinncia (Career Center)	\$3,610	\$3,610	\$3,610	\$3,610	\$3,610	\$18,050
OPERATIONAL FUNDS						
Supplies (Career Center)	\$250	\$250	\$250	\$250	\$250	\$1,250
Books (Center for the Advancement of Teaching)	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000
Supplies (Center for the Advancement of Teaching)	\$250	\$250	\$250	\$250	\$250	\$1,250
Supplies (University Libraries)	\$250	\$250	\$250	\$250	\$250	\$1,250
Grant funds to allocate, Research and Creative Activity Grants	\$0	\$1,300,000	\$1,300,000	\$1,300,00	\$1,300,000	\$5,200,00
Supplies, Research and Creative Activity Grants	\$250	\$250	\$250	\$250	\$250	\$1,250
Supplies, Graduate Student Resource Center	\$250	\$250	\$250	\$250	\$250	\$1,250
MARKETING						
Promotional Materials (Career Center)	\$250	\$250	\$250	\$250	\$250	\$1,250
Promotional Materials (Center for the Advancement of Teaching)						.,
		\$250	\$250	\$250	\$250	\$1,250
· · · · ·	\$250	\$250 \$250	\$250 \$250	\$250 \$250	\$250 \$250	\$1,250 \$1,250
Promotional Materials (University Libraries)	\$250 \$250	\$250	\$250	\$250	\$250	\$1,250
· · · · ·	\$250					

ASSESSMENT

The FSU QEP focuses on improving student learning outcomes and student success. Multiple meetings were held with the Graduate School, University Libraries, the Career Center, the Center for the Advancement of Teaching, and the Reading-Writing Center to develop the assessment plan for the initiatives. There is a range of related measures and initial targets for improvement in the assessment plan. Table 9 presents the outcomes, assessment process, results, and improvement plan for the QEP.

OUTCOME(S)	ASSESSMENT PROCESS	RESULTS	IMPROVEMENT PLAN
After implementation of the Graduate Student Resource Center (GSRC) website, doctoral student satisfaction with the referred academic and support services that they used will increase by 5% each year (baseline will be established once the new website is implemented).	Student satisfaction with academic and support services will be measured on a doctoral student survey developed by the GSRC director and administered annually to all doctoral students. Questions will include: did the student use the GSRC website to identify services? what was their satisfaction level with the individual referred services?	Survey responses will be collected and analyzed annually (beginning July 1, 2024-June 30, 2025) by GSRC staff to determine whether doctoral students are satisfied with the academic and support services they have used.	The director of the GSRC will use the annual analyses of student satisfaction to develop improved academic and support services and more refined links to such services.
After completion of two Graduate Skills Workshops, median time from candidacy to degree completion will improve from 2.62 years (baseline associated with 2018-19 through 2022-23 cohorts) by 5% (or 2 weeks to 1.5 months).	The time between candidacy and degree completion for students who participate in the work sessions (measured by a scholarly engagement index as compiled by the University Libraries staff) will be compared to the time between candidacy and degree completion for non-participants.	Results will be compiled and analyzed annually (beginning Fall 2024-Summer 2025) by GSRC staff to determine whether time between candidacy and degree completion is decreasing.	The director of the GSRC will use the annual analyses to improve or add workshops and to determine ways to decrease time between candidacy and degree completion. The director will also examine whether an alternative measure regarding degree completion should be used following the first year of workshops.
After implementation of the research and creative activity grant program and Graduate Skills Workshops, the number of research or creative works presented by doctoral students at conferences or performance venues (regional, state, national, and international) will increase by 5% each year (over baseline of 43% who strongly agreed on the QEP doctoral student survey that they are able to present).	The relationship between the attendance and number of presentations with the graduate skills work sessions attended (measured by a scholarly engagement index as compiled by the University Libraries staff) will be examined. In addition, the relationship involving advisor evaluated writing and research skills (measured on the mandatory annual evaluation) with presentations will be examined once GradPhile has been fully	Results will be compiled and analyzed annually (beginning July 1, 2024-June 30, 2025) by GSRC staff to determine whether the number of research or creative works is increasing. The use of faculty evaluations will await full implementation of GradPhile in Spring 2026.	The director of the GSRC will use workshop completion and the annual analyses to determine ways to improve or add workshops and to increase scholarly engagement of doctoral students.

implemented in Spring 2026.

Table 9: QEP Assessment

OUTCOME(S)	ASSESSMENT PROCESS	RESULTS	IMPROVEMENT PLAN
After completing virtual mock job interviews using Al software with structured feedback, the score in <i>Quinncia</i> on interview skills will improve by 3% (baseline will be established once <i>Quinncia</i> is implemented).	Interview skills will be evaluated using the difference between the score from <i>Quinncia</i> on the mock interview conducted before structured feedback and the score for the mock interview conducted after structured feedback.	Results will be compiled and analyzed annually (beginning Spring 2024-Fall 2024) by Career Center staff to determine whether interview skills are improving and which facets of the process are most subject to improvement.	The Career Center will use the annual analyses to improve interview skills of doctoral students and the advice of career liaison.
After completing targeted virtual skills modules in <i>Beyond the</i> <i>Professoriate</i> , opportunities for employment of doctoral students will improve from 58.9% (baseline associated with the 2021 <i>Survey</i> <i>of Earned Doctorates</i> question about whether FSU students had an employment offer or were continuing predoctoral employment) by 5%.	Opportunities for employment recorded on the doctoral exit survey of students who complete targeted virtual skills will be compared to opportunities for employment of non-participants along with modules each student completes.	Results will be compiled and analyzed annually (beginning Spring 2024-Fall 2024) by GSRC staff to determine whether and which modules increase reported opportunities for employment.	The director of the GSRC will use the annual analyses to determine ways the software can be used to increase the career readiness of doctoral students.
After completion of two required elements of the TA teaching preparation program, TA's knowledge and practice of evidence-based approaches to college teaching will improve by 5% (baseline will be established once the TA teaching preparation program is implemented).	Assessment will occur at the beginning of the TA teaching preparation program and after the completion of two required elements. Participants will complete a pre- and post- assessment of their knowledge and practice of evidence-based approaches to teaching. The assessment is based on a model developed by Hurney et al.	The results of the pre- and post- assessment will be analyzed by Center for the Advancement of Teaching staff.	The results of the pre- and post- assessment will provide a measure of learning should the participants not continue.
After completing the TA teaching preparation program, TAs will demonstrate increased preparedness for teaching and effective teaching practices with 85% earning a score of 4 or higher (of 5) on their teaching portfolio scored by the Center for the Advancement of Teaching (baseline will be established once the TA teaching preparation program is implemented).	Portfolios from students will be scored using a rubric developed by Center for the Advancement of Teaching. Criteria will address learning-centered, evidence- informed, and inclusive approaches to college-level teaching. Each criterion will be graded on a 1-5 scale, and the final score will average the scores on each criterion.	Results will be compiled and analyzed annually (beginning Summer 2025-Spring 2026) by the Center for the Advancement of Teaching staff to determine whether students are demonstrating effective teaching practices.	The Center for the Advancement of Teaching will use the annual analyses of portfolios to improve learning-centered, evidence-informed, and inclusive approaches to teaching.
After completing the TA teaching preparation program, opportunities for placement (interviews, offers, and positions accepted) in faculty positions will improve from 32.4% (baseline associated with the FSU manuscript clearance survey from 2015-2023) by 5%.	Opportunities for placement in faculty positions recorded on the doctoral exit survey for students who participate in the TA professional development program will be compared to opportunities for placement in faculty positions for non-participants.	Results will be compiled and analyzed annually (beginning Summer 2025-Spring 2026) by Center for the Advancement of Teaching staff to determine whether students report opportunities for placement in faculty positions are improving.	The Center for the Advancement of Teaching will use the annual analyses of portfolios to improve teaching in ways designed to increase opportunities for placement in faculty positions.

The impact of the Graduate Student Resource Center (GSRC) will be measured using satisfaction as an outcome, specifically self-reported doctoral student satisfaction with the academic and student support services that they use. An annual doctoral student satisfaction survey (sent to all doctoral students) will ask if the student had used the GSRC website to identify and participate in academic and student support services in the last year, their satisfaction level with the GSRC website, and their satisfaction level with the referred academic and student support services. After implementation of the GSRC website, satisfaction among all FSU doctoral students with the referred academic and support services that they used will increase by 5% each year. Baseline will be established once the new website is implemented.

To measure the effect of the Graduate Skills Workshops offered by University Libraries, we will analyze the relationship between a scholarly engagement index and changing time from candidacy to degree completion. The scholarly engagement index will be based on the number and type of workshops the student attends. A scholarly engagement index will be developed by the GSRC and will be used to test various hypotheses. The workshops will be evaluated by examining the relationship between the time between candidacy and degree completion for students who participate in the workshops and the time between candidacy and degree completion for non-participants. Baseline data for time between candidacy and degree completion is available in the existing FSU doctoral dashboard. After completion of two Graduate Skills Workshops, median time from candidacy to degree completion will improve from 2.62 years (baseline associated with 2018-19 through 2022-23 cohorts) by 5% (or 2 weeks to 1.5 months). The data will be analyzed to determine which of the workshops have the largest effect.

To measure the impact of the Research and Creative Activity Grant Program and the associated Graduate Skills Workshops, we will use the increase in the number of research or creative works presented at conferences or performance venues (regional, state, national, and international). We will analyze the relationship between workshop attendance (measured by a scholarly engagement index described above) and presentations at conferences or performance venues as a way to measure doctoral outcomes. In addition, the relationship involving advisor evaluated writing and research skills

(measured on the mandatory annual evaluation) with presentations will be examined once GradPhile has been fully implemented in Spring 2026. Data for the attendance and the number of research or creative works presented at conferences or performance venues (regional, state, national, and international) by doctoral students between July 1, 2022, and June 30, 2023, will be collected by the GSRC. Data on the research and creative activity grant program will be compiled and analyzed annually by the director of the GSRC. After implementation of the research and creative activity grant program and Graduate Skills Workshops, the number of research or creative works presented by doctoral students at conferences or performance venues (regional, state, national, and international) will increase by 5% each year (over baseline of 43% who strongly agreed on the QEP doctoral student survey that they are able to present).

Two outcome measures will be associated with the career readiness activities: interview performance and placement status. We will use pre-test and post-test scores from *Quinncia* to measure interview performance. Interview skills will be evaluated based on the difference between the *Quinncia* score from the mock interview conducted before the individual meeting with the Graduate Career Liaison and the *Quinncia* score for the mock interview conducted after the individual meeting with the Graduate Career Liaison. After completing virtual mock job interviews using AI software with structured feedback, the score in *Quinncia* on interview skills will improve by 3%. Baseline will be established once *Quinncia* is implemented.

We will use self-reported data from the *Survey of Earned Doctorates* to measure placement status. The first doctoral exit survey will be conducted in Spring 2024. After completing targeted virtual skills modules in Beyond the Professoriate, opportunities for employment for doctoral students will improve from 58.9% (baseline associated with the 2021 *Survey of Earned Doctorates* question about whether FSU students had an employment offer or were continuing predoctoral employment) by 5%.

Three outcomes will be measured for the teaching preparation activities: pre- and post-assessment of knowledge and practice of evidence-based approaches to college teaching, scores on the teaching portfolios, and opportunities for placement in faculty positions. We will use a pre- and post-assessment based on a model



developed by Hurney et al. (2020) to evaluate knowledge and practice of evidence-based approaches to teaching. Assessment will occur at the beginning of the TA teaching preparation program and after the completion of two required elements. The results of the pre- and postassessment will be analyzed by CAT staff and will provide a measure of learning should the participants not continue. After completion of two required elements of the TA teaching preparation program, TA's knowledge and practice of evidence-based approaches to college teaching will improve by 5%. Baseline will be established once the TA teaching preparation program is implemented.

We will use the scores on a rubric employed by the CAT on the teaching portfolios to measure preparation for teaching. The teaching portfolio will be comprised of participants' work throughout the program. The portfolio will include a teaching statement, sample syllabus, teaching observation, revised assignments, and related assessments. Teaching portfolios are widely accepted as the most effective and inclusive method of collecting evidence of preparation to teach, and most graduate students will expect to provide one to prospective employers (Benton & Young, 2018; Kreitzer & Sweet-Cushman, 2021; Seldin, 2010). The rubric for scoring these portfolios and its constituent criteria will address important facets of learning-centered, evidenceinformed, and inclusive approaches to teaching at a college level. Each criterion will be graded on a 1-5 scale,

and the final score will average the scores on each criterion. CAT staff will use the rubric to score portfolios in norming sessions to ensure inter-rater reliability. The program will be evaluated by comparing the percentage of participants who earn a score of four or higher on their teaching portfolio to the desired outcome, which is at least 85%. After completing the TA teaching preparation program, doctoral student TAs will demonstrate increased preparedness for teaching and effective teaching practices with 85% earning a score of 4 or higher (of 5) on their teaching portfolio. Baseline will be established once the TA teaching preparation program is implemented.

We will use self-reported data from the doctoral exit survey conducted by the GSRC on interviews, offers, and positions accepted to measure opportunities for placement in faculty positions. Baseline data for opportunities for placement in faculty positions will be collected from the doctoral exit surveys conducted in Spring 2024. Data analysis for participants in the TA professional development program will be conducted in Summer 2025 (to allow time for students to complete the program). After completing the TA teaching preparation program, doctoral students' opportunities for placement (interviews, offers, and positions accepted) in faculty positions will improve from 32.4% (baseline associated with the FSU manuscript clearance survey from 2015-2023) by 5%.

REFERENCES

- Allum, J.R., Kent, J.D. and McCarthy, M.T. (2014). Understanding Ph.D. career pathways for program improvement. Council of Graduate Schools.
- Bagaka's, J. G., Badillo, N., Bransteter, I., & Rispinto, S. (2015). Exploring student success in a doctoral program: The power of mentorship and research engagement. *International Journal of Doctoral Studies*, 10, 323-342.
- Balleisen, E., & Lozier, S. (2018). Final report of the Provost's committee on reimagining doctoral education. Duke University.
- Benton, S. L., & Young, S. (2018). *Best practices in the evaluation of teaching* (IDEA Paper# 69). IDEA Center, Inc.
- Boice, R. (1992). The new faculty member: Supporting and fostering professional development. Jossey-Bass.
- Boyer 2030 Commission (2022). The equity-excellence imperative: A 2030 blueprint for undergraduate education at U.S. research universities. The Association for Undergraduate Education at Research Universities.
- Busby, B.D., & Harshman, J. (2021). Program elements' impact on chemistry doctoral students' professional development: A longitudinal study. *Chemistry Education Research and Practice*, 22(2), 347-363.
- Campbell, S. P., Fuller, A. K., & Patrick, D. A. (2005). Looking beyond research in doctoral education. *Frontiers in Ecology and the Environment*, 3(3), 153-160.
- Cardoso, S., Santos, S., Diogo, S., Soares, D., & Carvalho, T. (2022). The transformation of doctoral education: a systematic literature review. *Higher Education*, 84(4), 885–908.
- Carter-Veale, W. Y., Tull, R. G., Rutledge, J. C., & Joseph, L. N. (2016). The dissertation house model: Doctoral student experiences coping and writing in a shared knowledge community. *CBE—Life Sciences Education*, 15(34), 1-12.
- Castello, M., Pardo, M., Sala-Bubare, A., & Sune-Soler, N. (2017). Why do students consider dropping out of doctoral degrees? Institutional and personal

factors. Higher Education, 74, 1053-1068.

- Connolly, M., Savoy, J., Lee, Y.G., & Hill, L. (2016). Building a better future STEM faculty: How doctoral teaching programs can improve undergraduate education. Wisconsin Center for Education Research, University of Wisconsin-Madison.
- Connolly, M., Lee, Y., & Savoy, J. (2018). The effects of doctoral teaching development on early-career STEM scholars' college teaching self-efficacy. *CBE—Life Sciences Education*, 17(14), 1-15.
- Council of Graduate Schools (2004). Ph. D. completion and attrition: Policy, numbers, leadership, and next steps. Council of Graduate Schools.
- Denecke, D., Feaster, K., & Stone, K. (2017). Professional development: Shaping effective programs for STEM graduate students. Council of Graduate Schools.
- Duke, D., & Denicolo, P. (2017). What supervisors and universities can do to enhance doctoral student experience (and how they can help themselves). *Fems Microbiology Letters*, 364(9), 1-7.
- Feldon, D., Wofford, A., & Blaney, J. (2023). Ph.D. pathways to the professoriate: Affordances and constraints of institutional structures, individual agency, and social systems. *Higher Education Handbook of Theory and Research*, (38), 325–414.
- Gardner, S. K. (2009). The development of doctoral students: Phases of challenge and support. *ASHE Higher Education Report*, 34(6), 1-127.
- Gittings, G., Bergman, M., Shuck, B., & Rose, K. (2018). The impact of student attributes and program characteristics on doctoral degree completion. *New Horizons in Adult Education and Human Resource Development*, 30(3), 3-22.
- Golde, C.M., & Dore, T.M. (2001). At cross purposes: What the experiences of today's doctoral students reveal about doctoral education. Pew Charitable Trusts.
- Hill, L. H., & Conceição, S. C. O. (2019). Program and instructional strategies supportive of doctoral students' degree completion. *Adult Learning*, 31(1), 36–44.
- Hurney, C. A., Troisi, J. D., & Leaman, L. H. (2020).

Development of a faculty appreciation of pedagogy scale. *To Improve the Academy: A Journal of Educational Development*, 39(2), 27-50.

- Kelley, M. J., & Salisbury-Glennon, J. D. (2016). The role of self-regulation in doctoral students' status of all but dissertation (ABD). *Innovative Higher Education*, 41, 87-100.
- Kreitzer, R. J., & Sweet-Cushman, J. (2021). Evaluating student evaluations of teaching: A review of measurement and equity bias in SETs and recommendations for ethical reform. *Journal of Academic Ethics*, 1-12.
- Locke, L. A., & Boyle, M. (2016). Avoiding the ABD abyss: A grounded theory study of a dissertationfocused course for doctoral students in an educational leadership program. *Qualitative Report*, 21(9), 1574-1593.
- Meyer, S. (1985) Maximizing the conference experience for first-time participants. In P.J. Ilsley (Ed.), *Improving conference design and outcomes* (pp. 57-68). Jossey-Bass.
- Mitic, R.R., & Okahana, H. (2021). *Ph.D. professional development: Value, timing, and participation.* Council of Graduate Schools.
- National Science Foundation. (2020) *Survey of Earned Doctorates, Table 46.* https://ncses.nsf.gov/pubs/ nsf22300/data-tables#group6.
- Nettles, M.T., & Millett, C.M. (2006). *Three magic letters: Getting to the Ph.D.* Johns Hopkins University Press.
- Schunk, D.H., & Zimmerman, B.J. (2013). Selfregulation and learning. In I.B. Weiner, W.M. Reynolds, & G.E. Miller (Eds.), *Handbook of psychology: Educational psychology* (pp. 45-68). John Wiley & Sons, Inc.
- Seldin, P., Miller, J. E., & Seldin, C. A. (2010). *The teaching portfolio: A practical guide to improved performance and promotion/tenure decisions* (4th Ed.). Jossey-Bass.
- Sowell, R. S., Bell, N. E., & Kirby, S. N. (2010). *Ph. D. completion and attrition: Policies and practices to promote student success.* Council of Graduate Schools.
- Sowell, R. S., Zhang, T., & Redd, K. (2008). Ph. D.

completion and attrition: Analysis of baseline program data from the Ph. D. Completion Project. Council of Graduate Schools.

- Sverdlik, A., Hall, N. C., McAlpine, L., & Hubbard, K. (2018). The Ph.D. experience: A review of the factors influencing doctoral students' completion, achievement, and well-being. *International Journal* of Doctoral Studies, 13, 361–388.
- Thomas, G. B., Clewell, B., & Pearson, W. (1987). Case study of major doctoral producing institutions in recruiting, enrolling, and retaining Black and Hispanic graduate students. Graduate Record Examination Board.
- Thomas, G. E., Clewell, B. C., & Pearson, W., Jr. (1992). The role and activities of American graduate schools in recruitment, enrollment and retaining U.S. Black and Hispanic students. Educational Testing Service.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*, 2nd edition. The University of Chicago Press.
- Walsh, K.P., Pottmeyer, L.O., Meizlish, D., & Hershock, C. (2022). How search committees assess teaching: Lessons for CTLs. *To Improve the Academy*, 41(2), 46-77.
- Weidman, J.C. (2010). Doctoral student socialization for research. In S.K. Gardner & P. Mendoza (Eds.), On becoming a scholar: Socialization and development in doctoral education (pp. 45-55). Taylor and Francis Group.
- Weidman, J.C., Twale, D.J., & Stein, E.L. (2001). Socialization of graduate and professional students in higher education: A perilous passage? ASHE-ERIC Higher Education Report, 28(3), 1-137.
- Weidman, J.C., & Stein, E.L. (2003). Socialization of doctoral students to academic norms. *Research in Higher Education*, 44, 641-656.
- Yale University. (2011). *Best practices in Yale graduate programs.* Yale University.
- Yale University. (2014). *Doctoral student survey: Results and follow up.* Graduate School of Arts and Sciences, Yale University.
- Zimmerman, B.J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25, 82-91.

APPENDIX A

QEP Committee Members and Staff

MEMBERS	AREA	COMMITTEE ROLE
John "Piers" Rawling	Philosophy	Chair
Ashley Bush	Business	Faculty
Beth Hodges	Research	Administrator
Cathy Levenson	Biomedical Sciences	Faculty
Dawn Carr	Sociology	Faculty
Athanasios "Ethan" Vouzas (Fall 2022–Spring 2023)	Biological Science	Doctoral Student
Savoya Joyner (Fall 2023-)	Psychology	Doctoral Student
Gale Etschmaier	University Libraries	Dean
James "Jim" Whyte	Nursing	Faculty
Jayne Standley	Music	Faculty
Jorge Galeano Cabral	Mechanical Engineering	Doctoral Student
Jorge Piekarewicz	Physics	Faculty
Justin Kennemur	Chemistry & Biochemistry	Faculty
Latika Young	Education Policy & Evaluation	Doctoral Student
Mark Riley	Graduate School	Dean
Maxine Jones	History	Faculty
Michelle Rambo-Roddenberry	Engineering	Administrator
Sindy Chapa	Communication	Faculty
Stephen Tripodi	Social Work	Faculty
Toby Park-Gaghan	Educational Leadership & Policy Studies	Faculty
V. Casey Dozier	Career Center	Administrator
STAFF	AREA	TITLE
Galiya Tabulda	Institutional Performance and Assessment	Director
James Beck	Graduate School	Senior Graduate Policy Program Coordinator
James Hunt	Institutional Research	Director
Leslie Richardson	Center for the Advancement of Teaching	Director
Robert Bradley	Office of the Provost	Academic Affairs Administrator
Ruth Storm	Office of the Provost	Associate Provost and AVP for Academic Affairs
Sara Hamon	Office of the Provost	Director of Accreditation Analytics
Monoka Venters	Office of the Provost	Chief Report Writer
wonoka venters		

APPENDIX B

TABLE A1	
Promising Practices for Mentoring and Advising	Supporting Literature
Provide a comprehensive student orientation	Balleisen & Lozier, 2018 Gardner, 2009 Gardner & Barker, 2019 Sowell et al., 2010
Ensure that there are transparent expectations on departmental websites with academic milestones	Gardner, 2009 Sowell et al., 2010 Yale University, 2011
Provide online student resources such as milestone tracking systems, dissertation checklists, electronic portfolios, and annual progress reports	Sowell et al., 2010 Yale University, 2011
Ensure that there are regular advisor/advisee meetings	Gardner, 2009 Main, 2014 Sowell et al., 2010 Yale University, 2011
Require annual student performance reviews	Sowell et al., 2010 Yale University, 2011
Create an ombuds position to support doctoral students	Balleisen & Lozier, 2018 Sowell et al., 2010
Develop faculty workshops on mentoring, including at new faculty orientation	Sowell et al., 2010
Provide materials/handbooks and online resources for faculty about mentoring	Sowell et al., 2010
Award mini-grants for faculty to develop initiatives to improve the quality of mentoring	Sowell et al., 2010
Include explicit attention to doctoral advising and mentoring in evaluation for tenure and promotion	Balleisen & Lozier, 2018 Sowell et al., 2010
Require heightened accountability for effective, student-centered advising and mentoring	Balleisen & Lozier, 2018
Offer peer mentors	Bagaka's et al., 2015 Balleisen & Lozier, 2018 Carter-Veale et al., 2016 Sowell et al., 2010
Provide external and/or supplemental mentors	Balleisen & Lozier, 2018 Sowell et al., 2010

TABLE A2	
Promising Practices for Administration and Support	Supporting Literature
Create/enhance institutional database on doctoral students	Balleisen & Lozier, 2018 Sowell et al., 2010
Track all students who leave, determine reasons for not enrolling, and ask about plans for future enrollment	Sowell et al., 2010
Study data from the past ten years to assess patterns of attrition versus short-term enrollment gaps	Sowell et al., 2010
Conduct exit survey for doctoral recipients and students who do not complete doctoral work then use feedback to develop solutions to reduce attrition	Sowell et al., 2010
Track and report doctoral student progress	Balleisen & Lozier, 2018 Sowell et al., 2010
Post completion figures for programs on graduate school website	Sowell et al., 2010
Offer a writing assistance program (courses, workshops, and individual consultations) using trained writing coaches	Sowell et al., 2010
Offer a dissertation retreat or a summer dissertation writing residency fellowship	Carter-Veale et al., 2016 Gardner, 2009 Gittings et al., 2018 Kelley et al., 2016 Locke & Boyle, 2016 Sowell et al., 2010
Establish a doctoral student writing room	Sowell et al., 2010
Offer workshops on time management	Gardner, 2009 Kelley et al., 2016 Sowell et al., 2010
Partner with graduate student organizations to offer dissertation writing workshops	Sowell et al., 2010
Increase stipend levels to median of university's peer group	Balleisen & Lozier, 2018 Sowell et al., 2010
Increase stipend support for summers	Balleisen & Lozier, 2018 Sowell et al., 2010
Provide releases from assistantship duties for students at the dissertation stage	Sowell et al., 2010
Provide health insurance coverage, including mental health and family coverage	Balleisen & Lozier, 2018 Sowell et al., 2010
Provide affordable housing	Balleisen & Lozier, 2018 Perez-Felkner et al., 2020
Provide support for doctoral students with families, such as affordable childcare	Sowell et al., 2010

TABLE A3	
Promising Practices for Career and Professional Development	Supporting Literature
Publicize the Preparing Future Faculty program	Sowell et al., 2010
Offer a space for students to do micro-teaching activities, videotape themselves teaching, and engage in peer review of teaching	Sowell et al., 2010
Offer professional development workshops tailored to students at the beginning, in the middle, or at dissertation stage	Sowell et al., 2010
Offer a graduate teaching fellowship to provide mentored teaching experiences	Sowell et al., 2010
Offer a graduate certification in college teaching	Sowell et al., 2010
Provide travel funds for attending conferences	Feldon et al., 2022
Sowell et al., 2010	Sowell et al., 2010
Provide opportunities for students to present a progress report (paper or dissertation chapter) to faculty and peers annually	Bagaka's et al, 2015
Yale University, 2011	Sowell et al., 2010
Offer events to prepare students for job applications and interviews in the academy	Balleisen & Lozier, 2018
Sowell et al., 2010	Balleisen & Lozier, 2018
Yale University, 2011	Bagaka's et al., 2015 Balleisen & Lozier, 2018 Carter-Veale et al., 2016 Sowell et al., 2010
Prepare students for careers in sectors outside the academy	Balleisen & Lozier, 2018 Gardner, 2009
	Sowell et al., 2010
Provide a placement team to help with job search	Yale University, 2011
Coordinate professional development activities with individual schools, the Graduate School, and the Career Center	Balleisen & Lozier, 2018

QEP Doctoral Student Survey - Spring 2023

Florida State University has initiated a quality enhancement plan that is focused on improving doctoral education. As we seek to narrow the focus on the most critical aspects of the student experience, please take the time to share feedback about your academic program and related campus resources. Your response will remain confidential with results reported at the aggregate level only.

Background characteristics to be pulled into the data from student information system.

- D Program, race/ethnicity, gender, residency status (in state, out of state, international)
- □ Credit hours taking (average fall/spring), doctoral candidate status (Y/N), hours in program, hours taken to the point of doctoral candidate status
- □ Number of courses/sections and course numbers they are teaching (TA or IOR)
- GA or TA or Research or Adjunct/Visiting appointment terms: amount, 9-month/12-month, FTE

Background Questions:

- 1. Which ONE of the following milestones best represents your status in your doctoral program as of today?
 - □ Completing master's degree prior to doctoral coursework
 - □ Completing required doctoral coursework
 - □ Preliminary or qualifying examination completed or underway
 - □ Writing dissertation
 - □ Required dissertation hours nearing completion
 - Dissertation defense scheduled

2. What type of career are you planning to pursue after completion of your doctoral degree? [select ONE answer that fits best]

- □ Faculty, teaching intensive position
- □ Faculty, research intensive position
- □ Non-faculty position at a college or university (i.e., administration or staff)
- □ Non-academic position (i.e., private sector, non-profit, think tank)
- □ I am open to career plans that include both academic and non-academic organizations
- □ I have not determined my career plans at this time

Section 1: Academic Program

For this section, please use the following scale to respond to each item:

Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Not Applicable

- 1. Upon initial enrollment as a doctoral student, I received effective orientation to my academic program.
- 2. I have access to a comprehensive doctoral program handbook that clearly details academic requirements, milestones, and expectations.
- 3. I have received effective academic advising during my doctoral studies.

If disagree or strongly disagree, what would have made your academic advising more effective?

4. I have received effective mentoring during my doctoral studies.

If disagree or strongly disagree, what would have made your academic advising more effective?

5. I have received an annual written evaluation that provides useful feedback about my academic progress, scholarly engagement, and professional development.

If disagree or strongly disagree, how could the annual evaluation be improved?

- 6. I have received adequate feedback on my performance in doctoral coursework.
- 7. I have received adequate feedback on my dissertation drafts.
- 8. I have been provided opportunities to work on research grants.
- 9. I have been provided opportunities to work with faculty on publications or creative works.

If agree or strongly agree, how many times have you presented off campus at a professional meeting or conference?

- None: please explain why not _____
- \Box 1 to 2 times
- \Box 3 to 5 times
- □ 6 or more times
- 10. I have had opportunities to present my research and/or creative work to faculty and other students.
- 11. I have had opportunities to present my research and/or creative work at professional meetings or conferences.
- 12. My doctoral program or academic department has provided me with funding to offset the cost of presenting my research and/or creative work at a professional meeting or conference. [Note: Please do not factor in funding from student organizations such as the Congress of Graduate Students.]
- 13. My doctoral program is effective at preparing me for my career.
- 14. Overall, I am satisfied with my academic program.

Section 2: Campus Resources

For this section, please use the following scale to respond to each item: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Not Applicable

- 15. I have adequate access to lab space.
- 16. I have adequate access to work space.
- 17. I have adequate access to equipment.
- 18. I have adequate access to library materials.
- 19. I have adequate access to software.
- 20. I have received adequate training in public speaking skills.
- 21. I have received adequate training in time management skills.
- 22. I have received adequate training in writing skills.
- 23. I have received adequate training in research skills.
- 24. I have received adequate training in quantitative data collection and analysis.
- 25. I have received adequate training in qualitative data collection and analysis.
- 26. I have received adequate training in publication skills.

If disagree or strongly disagree, what is lacking? [open text box]

- 27. I have had adequate opportunities for communication and personal interaction with other students in my program.
- 28. I have received effective career guidance and planning services during my doctoral program.
- 29. I have received effective job search or job placement assistance.
- 30. I have participated in a practice job interview and received feedback.

Section 3: Teaching Assistant (TA) Training

For this section, please use the following scale to respond to each item:

Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Not Applicable

- 31. I have received appropriate training and preparation for my instructional role(s) at FSU.
- 32. I have received appropriate supervision to help improve my teaching and/or grading skills.
- 33. I have been assigned reasonable instructional loads that do not detract from timely completion of the doctoral degree.

Section 4: Potential Difficulties Experienced

For this section, please use the following scale to respond to each item:

Significant Difficulty Some Difficulty No Difficulty Not Applicable

- 34. Please indicate the degree of difficulty you have experienced during your doctoral program with the following issues. You will have the opportunity to make related suggestions in the final survey question.
 - □ Application and acceptance process
 - □ Onboarding (i.e., matriculating into the university and its systems/processes)
 - □ Academic advising
 - □ Academic mentoring
 - □ Childcare
 - Coursework
 - Developing dissertation topic
 - □ Financial constraints
 - Graduate student health insurance
 - **D** Housing issues
 - □ Meeting milestones in my program
 - □ Relationship with major professor
 - **D** Time management
 - □ Summer funding
 - □ Summer course availability
 - □ Summer feedback from dissertation chair/committee
 - □ Statistical skills
 - □ Writing Skills
 - □ Other (please specify): _____

35. What else could your program or FSU do to enhance doctoral education? [open text box]

QEP Faculty and Advisor Survey – Spring 2023

Florida State University has initiated a quality enhancement plan that is focused on improving doctoral education. As we seek to narrow the focus on the most critical aspects of the student experience, please take the time to share feedback on various components of the academic program and related campus resources available to students. Your response will remain confidential with results reported at the aggregate level only.

Background Questions:

What is your primary role with doctoral education at FSU? [check all that apply]

- □ Faculty member who works with doctoral students: teaching, advising, supervising assistantships, or serving on dissertation supervisory committees
- □ Staff member who works with doctoral students: advising and academic support
- □ None of the above I do not work with doctoral students [end of survey]

How long have you worked with doctoral students at FSU?

- Less than one year
- □ 1-3 years
- □ More than three years

Section 1: Academic Program

- 1. What do you think the career aspirations are for most incoming FSU doctoral students in your program? [select one]
 - □ Faculty, teaching intensive positions
 - □ Faculty, research intensive positions
 - □ Non-faculty positions in an academic organization (i.e., administration or staff)
 - □ Non-academic position (e.g., private sector, non-profit, think tank)
- 2. How effective do you believe your program is at preparing students for the career goal you previously identified?
 - **D** Effective
 - Neutral
 - □ Ineffective
- 3. Which ONE of the following milestones best represents where doctoral students in your program are held up from timely completion?
 - □ Completing master's degree prior to doctoral coursework
 - □ Completing required doctoral coursework
 - □ Preliminary or qualifying examination
 - □ Writing dissertation
 - □ Dissertation defense through manuscript clearance
 - **Other:** (please explain)

For this section, please use the following scale to respond to each item:

Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Not Applicable

- 1. Upon initial enrollment as a doctoral student, students receive effective orientation to academic programs in my department.
- 2. Doctoral students in my program have access to a comprehensive doctoral program handbook that clearly

details academic requirements, milestones, and expectations.

3. Doctoral students in my program receive effective academic advising.

If disagree or strongly disagree, what would make academic advising more effective?

4. Doctoral students in my program receive effective mentoring.

If disagree or strongly disagree, what would make mentoring more effective?

5. Doctoral students in my program receive an annual written evaluation that provides useful feedback about their academic progress, scholarly engagement, and professional development.

If disagree or strongly disagree, how could the annual evaluation be improved?

- 6. Doctoral students in my program receive adequate feedback on their performance in doctoral coursework.
- 7. Doctoral students in my program receive adequate feedback on their research and dissertation drafts.
- 8. Doctoral students in my program are provided opportunities to work with faculty on publications or creative works.
- 9. Doctoral students in my program have opportunities to present research and/or creative activities off campus at professional meetings or conferences.
- 10. Doctoral students in my program have opportunities to present research and/or creative work to faculty and students.
- 11. Doctoral students in my program have opportunities to present research and/or creative work at professional meetings or conferences.
- 12. Doctoral students in my program can request program or department funding to offset the cost of presenting their research and/or creative work at a professional meeting or conference. [Note: Please do not factor in funding from student organizations such as the Congress of Graduate Students]
- 13. Doctoral students in my program receive effective career preparation.

If disagree or strongly disagree, what could be improved?

14. Doctoral students in my program talk with faculty about the full range of career trajectories available to them.

If disagree or strongly disagree, what limits faculty willingness/ability to discuss the full range of career trajectories available to students?

Section 2: Campus Resources

For this section, please use the following scale to respond to each item:

Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, Not Applicable

- 15. Doctoral students in my program have access to adequate lab space.
- 16. Doctoral students in my program have access to adequate work space.
- 17. Doctoral students in my program have access to adequate equipment.
- 18. Doctoral students in my program have access to adequate library materials.
- 19. Doctoral students in my program have access to adequate software.

If disagree or strongly disagree, what is lacking? [open text box]

- 20. Doctoral students in my program have received adequate training in public speaking skills.
- 21. Doctoral students in my program have received adequate training in time management skills.
- 22. Doctoral students in my program have received adequate training in writing skills.
- 23. Doctoral students in my program have received adequate training in research skills.

- 24. Doctoral students in my program have received adequate training in quantitative data collection and analysis.
- 25. Doctoral students in my program have received adequate training in qualitative data collection and analysis.
- 26. Doctoral students in my program have received adequate training in publication skills.
- 27. Doctoral students in my program have adequate opportunities for communication and personal interaction with other students in their program.
- 28. Doctoral students in my program receive effective career guidance and planning services.
- 29. Doctoral students in my program receive effective job search and placement assistance.
- 30. Doctoral students in my program have opportunities to participate in a practice interview and receive feedback.

If agree or strongly agree, who conducts most of the practice interviews and critiques with students in your program?

- □ Career Center program
- **D**epartment faculty
- **Other students**
- 🛛 Alumni
- **Other:** explain
- 31. Doctoral students in my program receive appropriate training and preparation for their instructional (Teaching Assistant) roles at FSU.
- 32. Doctoral students in my program receive appropriate supervision to help improve their teaching and/or grading skills.
- 33. Doctoral students in my program are assigned reasonable instructional loads that do not detract from timely completion of the doctoral degree.

Section 3: Potential Difficulties Experienced

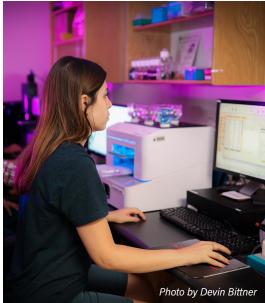
For this section, please use the following scale to respond to each item:

Significant Difficulty Some Difficulty No Difficulty Not Applicable

- 34. Please indicate the degree of difficulty you have observed doctoral students experience by the following issues. You will have the opportunity to make related suggestions in the final survey question.
 - □ Application and acceptance process
 - □ Onboarding (i.e., matriculating into the university and its systems/processes)
 - □ Academic advising
 - □ Academic mentoring
 - □ Childcare
 - Coursework
 - Developing dissertation topic
 - Financial constraints
 - Graduate student health insurance
 - □ Housing
 - □ Meeting milestones in the program
 - □ Relationship with major professor

- **D** Time management
- □ Summer funding
- □ Summer course availability
- □ Summer feedback from dissertation chair or committee
- □ Statistical skills
- □ Writing Skills
- □ Other (please specify): _____
- 35. What else could your program or FSU do to enhance the academic experience and professional preparation of doctoral students? [open text box]











FSU.EDU