

## **Enriching PhD Education through Professor Assistantships and Research Collaborations-Insights from Columbia Teachers College and Drawing Parallels with PhD Programs in Georgian Universities**

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### **Abstract**

Postgraduate education has always been a vital component of academic development, delivering specific expertise and knowledge and advancing innovation throughout different sectors of science and industry. In the context of an ever-changing environment, universities seek to improve their postgraduate programs by embracing successful models from different parts of the world. This endeavor of improvement necessitates an integrating approach to forward-looking postgraduate studies, designed to equip learners with the knowledge and competencies needed to thrive not only in conventional scholarly careers but also in a broader spectrum of positions within non-academic circles. All earnest efforts should be made to nurture the competencies of doctoral students to become applicable for diverse fields, such as industry, public or private sectors, non-profit institutions, and business organizations, therefore facilitating graduates to find their way in a competitive labor market successfully. To this end, higher education institutions should adjust the curricula of their postgraduate programs to support doctoral students in utilizing the instructions and knowledge they receive in real-life situations beyond their academic surroundings. The paper explores the substantial role of university programs for professor assistantships and

research collaborations, which aim to merge the academic and professional development of doctoral students, therefore leading to sustainable change in postgraduate education. Through qualitative methodology, the article examines the benefits of integrating practical teaching-learning experiences and collaborative research into doctoral studies. By examining the institutional policy papers and primary documents, including the curricula and policies for teaching/learning in postgraduate studies of Columbia Teachers College, NYU, and the latest changes to institutional regulations at International Black Sea University (IBSU), this paper demonstrates the benefits of professor assistantships and research collaborations for both PhD students and university staff. In addition, the paper aims to provide applicable recommendations for Georgian universities to focus on how these policies could be translated into practice to enhance the quality of postdoctoral education at the national level.

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**Keywords:** Postgraduate education, professor assistantship, research collaboration, academic and non-academic community, labor market

## Introduction

The Professor Assistantship program offers teaching (Teaching Assistantship: TA) and research (Research Assistantship: RA) opportunities for graduate students, typically those pursuing their doctoral degrees. The specifics of professor assistantship programs may vary by institution and field of study; however, their key components are generally similar. An assistantship with a faculty member involves a range of activities, including observing the professor's teaching methods, reading and grading assignments or exam papers, conducting seminars and practical lab sessions, facilitating discussions, and proctoring exams. Under the research assistantship, they supervise BA and MA students' work on conference papers and consult with them on their thesis. These programs provide valuable experience to PhD students in educational settings, as they promote partnerships between doctoral students and faculty members, scholars, researchers, and education specialists intended to enrich the research process. This partnership has a wide range of forms, including joint project initiatives, co-authored papers, collective resources, and cross-organizational research programs. Since research is a complex area, collaboration among researchers is fundamental, permitting individuals to leverage their deep knowledge, expertise, and strong skills, thus creating a valuable synergetic effect that in most instances results in greater outcomes than an individual researcher could yield alone (Lee & Bozeman, 2005). In many instances, research collaboration tends to be a major tool for mentoring graduate students (Bozeman & Corley, 2004) and stimulating their productivity as future

academics. Besides, assistantships serve as a bridge between theoretical and practical knowledge. By leveraging acquired theories in real-life educational environments-observing, grading, proctoring, and leading the process-the PhD students gain an understanding of teaching/learning practices that will benefit them in their educational journey.

Apart from the above-mentioned factors, assistantship programs oftentimes are paid employment opportunities for doctoral students. They work for predetermined hours per week, and in exchange, they get a tuition waiver and a monthly stipend. The United States is widely regarded as one of the key destinations for pursuing an academic degree; however, this comes at a considerable expense. According to the National Center for Education Statistics (NCES) for the academic year 2023-24, full-time graduate students at public postsecondary institutions in the U.S. following an academic year calendar faced an average tuition and required fees of \$11,827. This figure originated from data gathered from 1,598 institutions. The expenses associated with tuition and living costs are significantly higher for international students. Although there are different sources of financial aid, including scholarships and student grants or loans, these resources are often limited and primarily grounded on academic merits. To alleviate this financial burden, a lot of U.S. universities offer paid assistantships for graduate students, especially for teaching assistantships (TAs) and research assistantships (RAs); alternatively, it may include a monthly stipend or tuition remission. Hence, pursuing a degree in the U.S. is more affordable and accessible.

Students engaged in their teaching assistantships can enhance their understanding of their field of study, as this process involves explaining and conveying complex concepts to others. Therefore, teaching assistantships offer numerous advantages to graduate students that go beyond mere financial aid. Through active participation in the instructional process, teaching assistants can get a profound understanding of the subject matter they support, hardening their own knowledge through preparation, explanation, and responding to student questions (Simmons, N.; Korte, R., & Nelson, T.). Furthermore, they are well-positioned to seize invaluable opportunities to fine-tune substantial pedagogical skills. Teaching assistants enhance their grasp of how to plan lessons effectively, manage classroom communications, measure student learning, and deliver helpful feedback-skills essential for successful teaching (Shannon & Twale, 2009). Acquiring these practical skills improves their performance and prepares them for future academic careers, equipping them with comparative advantages in a competitive labor market (Austin, 2002). Furthermore, the mentorship and management skills obtained during teaching assistantships also prove to be beneficial experiences for roles outside the academic community, where

strong leadership and communication skills are highly valued and appreciated (Nyquist & Woodford, 2000).

Additionally, along with offering teaching hands-on experience, research collaborations connect PhD students with faculty members and fellow researchers. Through collaborative research works, students become familiar with innovative and contemporary research methodologies (Wiggins & McTighe, 2005). Besides, throughout working on various joint research projects, doctoral students get direct access to primary resources and collaborate with skilled scholars. These experienced researchers can provide helpful guidance during various academic activities, such as grant writing and research paper publishing in peer-reviewed journals. Provided that fostering a professional network is an essential part of career development, doctoral students devotedly participate in various assistantship and research collaboration programs, positioning themselves favorably for postdoctoral career advancement prospects (Gardner, 2009).

## **Methodology**

As professor assistantships and research collaboration programs can vary widely, this section of the paper outlines comprehensive frameworks to evaluate the impact and effectiveness of these programs. To this end, two case studies will be presented, one from the internationally recognized Columbia Teachers College (the U.S.) and another from the International Black Sea University (Georgia). Based on both qualitative and quantitative data, this comparative analysis captures the peculiarities of these universities' programs, explores the varied experiences, and presents an overall perspective on the opportunities and challenges faced by the doctoral candidates involved in these programs. Additionally, visual aids, including charts and tables, will illustrate key points.

Data was collected using primary sources such as syllabi, institutional policies, and frameworks, as well as surveys and interviews. Respondents were faculty members, authors of programs/program coordinators, and doctoral students engaged in assistantship and research collaboration programs. Moreover, the semi-structured interviews were designed to grasp the views of the program's target group, to identify the programs' strengths and weaknesses, to explore the gained skills, professional development opportunities, support mechanisms, and overall impact of these programs on students' academic journeys as well as the academic institution itself.

The combination of qualitative and quantitative results proved to be a valuable basis for illustrating the current state of these programs for PhD students and offers some recommendations for IBSU to share the experience from Columbia University, with the purpose of enhancing these programs for better outcomes. This paper seeks to deepen understanding of robust

professor assistantship and research collaboration programs in an ever-evolving educational setting, encouraging discourse on best practices that benefit both prospective doctoral candidates and higher educational institutions.

### **Results of case studies**

For this research, two case studies-Columbia Teachers College and International Black Sea University-have been selected to dig deeper into the peculiarities of the assistantship programs, uncover both common and uncommon elements between these two educational institutions, outline the expected academic and time commitments, share valuable experiences from the U.S., and contribute to honing the assistantship programs in Georgian higher educational institutions.

To begin with, there are various assistantships available at Columbia Teachers College having specific obligations, commitments, and compensation measures depending on the program offered. Assistantship types include Research Assistantships (RAs), Teaching Assistantships (TAs), Administrative Fellowships (AFs), and Course Assistantships (CAs). At Columbia Teachers College, assistantship programs offer graduate students both professional growth and financial aid. While peculiarities of assistantships may differ linked with each role, there are shared aspects that most programs have in common. With assistantship roles, graduate students get different types of compensation, including a mix of salary, hourly wage, and/or tuition credits in exchange for their work on teaching, research, or administrative projects.

Firstly, students involved in assistantships are permitted to work up to 27 hours per week across their assistantship roles. Along with hourly wages, some programs offer tuition credits as part of their compensation. Additionally, students may receive paychecks on a regular basis in agreement with the Teachers College payroll scheme, ensuring that students manage their funds easily while striving for academic excellence. It is also important to note that any earnings students receive across assistantship positions are considered taxable income, meaning they have a responsibility to ensure compliance with tax regulations. Students can gain a thorough understanding of all necessary details to make informed choices regarding their assistantship options at Columbia Teachers College. These assistantships serve two primary goals: to support graduate students in alleviating financial burdens while helping them develop the academic and professional skills crucial for future success. Moreover, students involved in RA and/or TA have a chance to earn credit points and enhance their academic performance as PhD students.

Please find the charts below to have a better understanding of the types, duties, and compensation ranges of assistantships at Columbia Teachers College:

**Figure 1:** Types of Assistantships, Their Compensation and Time Commitment

Assistantship Type	Duties	Work Hours per Week (by Semester)	Compensation Range	Tuition Credit
Research Assistant (RA)	Perform academically relevant research.	15-20 (Fall/Spring); 18.75-25 (Summer)	\$3,375 - \$9,000 per semester	Up to 9 points/year
Teaching Assistant (TA)	Assist professors with instructional activities.	15-20 (Fall/Spring); 18.75-25 (Summer)	\$3,375 - \$9,000 per semester	Up to 9 points/year
Administrative Fellow (AF)	Perform administrative services.	15-20 (Fall/Spring); 18.75-25 (Summer)	\$18 per hour	Up to 9 points/year
Course Assistant (CA)	Work closely with a faculty member to perform academically relevant tasks.	4.5 (Fall/Spring); 10 (Summer)	\$18 per hour	None

The case study results exemplify that the assistantship programs at Columbia Teachers College serve as a bridge for integrating theoretical knowledge with practice in graduate studies. Moreover, it is obvious that the robust structures and different types of assistantships are available, along with the diverse set of duties and responsibilities assigned to graduate students. The compensation provided (such as wage and/or tuition credit) and rigorous assessment criteria, collectively prepare students to acquire essential competencies to become well-versed and successful academics in the future.

Another case study examined was the syllabus of the IBSU doctoral assistantship program in American Studies. The assistantship program proves to be a robust framework at a school of social sciences, humanities, and education at the International Black Sea University. The main objective of a course designed for doctoral students in American Studies is to closely connect theoretical knowledge with hands-on experience in higher education, engaging the students in various activities at the BA and MA levels. The qualitative analysis of the syllabus demonstrates a strong alignment between theory and practice, equipping doctoral students with a deeper understanding

of pedagogy. Moreover, the students are exposed to different activities, such as observation, grading the assignments, and running the discussions, which promote a favorable learning environment, preparing the doctoral students for their future academic paths. In addition, the focus has been made on communication skills enhancement, including verbal and non-verbal presentation skills that are critical for PhD students. The program supervised by any professor involved in the program is elective; however, it is mandatory for those who lack university teaching experience. The key activities of the course that includes 10 ECTS (250 hrs.) encompass observing lectures, assisting in planning and carrying out classes, holding seminars and lab works, assessing homework and exam papers, proctoring at exams, designing educational materials, supervising student research, and consulting students working on their thesis consultation (all at BA and MA levels). As for the learning outcomes, upon completion of the doctoral assistantship program, students are equipped with a mix of knowledge, including critical thinking, verbal and non-verbal presentation skills, collaborative techniques, and planning abilities. Furthermore, it should be noted that as part of this analysis, an interview was conducted with Prof. Dr. Ekaterine Pipia, the Head of Education Sciences PhD (in English) and Education Administration MA Programs, who has highlighted that IBSU acknowledged the importance of practical work for postdoctoral students. Accordingly, it has become mandatory for potential doctoral candidates to have experience in writing grant proposals and participating in international conferences, eventually leading to the publication of research papers.

### Comparative Analysis

To have a better understanding of the similarities and dissimilarities between the educational institutions' assistantships examined, a thorough comparative analysis has been conducted. The table presented below highlights the features of compared programs.

**Table 2:** Comparison of Assistantship Program Features

	<b>Program Structure</b>	<b>Mentorship</b>	<b>Scope of Activities</b>	<b>Learning Objectives</b>	<b>Assessment</b>
<b>Columbia Teachers College</b>	Departmental Supervision	Dedicated Faculty Member	Academic, Instructional and Administrative Roles	Research and Teaching Skills Development, Professional Networking	Performance Evaluation, Portfolio Assessment
<b>IBSU</b>	Individual Supervision	Dedicated Professor	Focus on Teaching Support Only	Pedagogical Skills	Reports and Presentations



Based on this comparative analysis, it is evident that IBSU can learn some lessons from the Columbia Teachers College methods renowned for their comprehensive and student-driven structure of assistantships. Here are some basic areas for improvement:

1. **Mentorship:** The assistantship program serves as a bridge between theory and practice, it would be better to shift from individual supervision to a department-centered structure aimed at supporting students in navigating their academic paths, allowing for a wider range of opportunities beyond the research work.
2. **Diversified Assistantship Roles:** When the emphasis is primarily placed on teaching support at BA and MA levels, it somehow limits the scope of activities for doctoral students. Once the assistantship expands on curriculum development, planning mandatory workshop/lab work, writing grant proposals, and providing administrative assistance not only to the dedicated professor but for other staff as well, it broadens the set of competencies, uncovers different aspects of academic life, and diversifies the future employment areas for doctoral students.
3. **Assessment:** A multifaceted assessment approach is fundamental for enhancing student performance. Diverse assessment methods that go beyond presentations or reports, including progress monitoring, constructive professional growth, and feedback made by both faculty and BA/MA students, are instrumental in better identifying areas for improvement. This assessment approach aligns with the primary goal of preparing doctoral students for various academic positions and promotes their professional development.
4. **Compensation:** Considering that the assistantship responsibilities require high participation and time commitment from doctoral students, providing some compensation possibilities would be a valuable help to alleviate the financial burden of pursuing an academic degree for students.

To conclude, the examined professor assistantship syllabus for doctoral students in American Studies at IBSU proves to provide a strong framework; however, it can be significantly improved by sharing the Columbia Teachers College Assistantships experience. By integrating more effective mentorship and doctoral student-centered methods, diversified roles, and robust assessment criteria, IBSU can ensure that doctoral students get the support necessary for their diverse career roles as researchers, professors, educators, mentors, and other related positions. The proposed recommendations should be viewed as a roadmap for facilitating institutional changes at IBSU.



## **Obstacles on the way**

Given that assistantships encompass a wide range of duties, they can be very demanding for doctoral students. Some barriers are presented below:

### ***Lack of funding***

One of the key obstacles to successful assistantships and research collaborations is a deficiency in adequate funds. Graduate research, especially in fields requiring intensive resources, can be hindered by a lack of financial support (Baker & Ghosh, 2020). Without sufficient funding, the scope and quality of research initiatives are limited, leading to scattered efforts, that make it challenging to attain clearly defined goals (Pfeffer & Salancik, 2003). For example, insufficient financial backing can restrict access to necessary tools, software, and data, which are crucial for conducting reliable and thorough studies (National Academies of Sciences, Engineering, and Medicine, 2019). Moreover, inadequate funding can impede the ability to attract and retain talented and skilled researchers and constrain collaboration possibilities within the research community (Stephan, 2012). This situation also stays the same for IBSU, where the finances allotted for postgraduate studies are inadequate and often hardly meet the research needs of students. For this reason, students may find it difficult to pursue research projects, participate in conferences, or access the resources they need on this journey. Overcoming these financial barriers is crucial for fostering the potential of graduate students at IBSU and beyond.

### ***Time constraints***

PhD students oftentimes handle multiple tasks simultaneously, including coursework, training, teaching responsibilities, and research activities. The time allocated for assistantships can be considerably compromised by these conflicting priorities (Halse & Thomas, 2007). This time shortage can contribute to heightened levels of anxiety, loss of emotional resilience, and eventually make a negative impact on the quality of efforts both in assistantship programs and research collaboration (Steinert, 2012). Most students are involved in employment in parallel with their tertiary education. One potential solution to this critical issue is to encourage participation through financial backing, performance-related bonuses, or other incentives. Tackling this prevalent challenge requires a multifaceted strategy, including organizational adjustments, policy and structural changes, and social transformations (Pyhälto, 2011). Earning money is necessary to cover education expenses. More efforts should be made by the university and government to provide financial support to tertiary-level students. More resources should be allocated for postgraduate students having high academic achievements but in need of financial aid from the university

administration, including scholarships, grants, part-time jobs, awards, or fellowships.

### ***Mentorship quality***

The mentorship quality under professor assistantships can differ significantly. Effective mentorship is vital to promote the growth of the student's professional competencies (Mason et al., 2009), resulting in motivating the students and richer academic performance (Allen et al., 2013). Robust guidance and support can also boost the student's research abilities, critical thinking skills, and profound understanding of their discipline (Barnes & Austin, 2009). Thus, there is a greater opportunity to engage PhD students in multidisciplinary projects and further involve them in group work as part of their assistantships and research activities at IBSU. There is a well-established practice to encourage students to take part in the American Studies Annual International Research Conference, the Annual International Silk Road Conference, where students can make their presentations and publish their papers in Research Journal and International Scientific Conference proceedings in American Studies. This is a valuable tool for them to gain credibility, build a professional portfolio, and get recognition within the academic community. For this purpose, PhD student presentations of the doctoral dissertation blueprint at the end of each semester and scientific presentations at annual conferences are good examples. However, given that publishing the papers in peer-reviewed and indexed journals is rather costly, the universities may consider providing at least partial funding for publication costs, especially for graduate students with high academic achievements, as an incentive.

It is noteworthy that the establishment of a scientific board is critical to guiding academic endeavors in the modern research community. Given that the Scientific Board is composed of experienced scholars in different fields, through collective mentorship they guarantee each research project follows rigid quality standards, including data collection and analysis and scientific integrity, thus mitigating the risk of biases, as well as ensuring the reliability of findings (Thompson, 2018).

To conclude, universities and national educational institutions can make valuable contributions to equip tertiary education students with the necessary competencies, provide support to navigate in the complex world better, cope with contemporary challenges, and embark on thrilling new professional adventures. To this end, it is advisable to provide numerous opportunities for doctoral students to attend annual national and international conferences, seminars, and workshops. This networking can facilitate building up strong connections with peer researchers and industry

professionals, resulting in more job offers and collaborations beyond graduation.

## **Conclusion**

In conclusion, the enhancement of tertiary education through professor assistantships and research collaboration is an outstanding opportunity for Georgian universities. An in-depth analysis of the Columbia Teachers College Assistantships demonstrates that establishing a student-centered framework and actively engaging students both in pedagogical and administrative activities can significantly enrich graduate students' teaching skills and better prepare them for future academic or non-academic careers. By adopting similar strategies while keeping the national context in mind, Georgian higher educational institutions can support doctoral students to improve their academic output, expand network opportunities, build up connections with industry professionals and employers, and eventually contribute to scientific advancement and socio-economic development in the country. Additionally, it is advisable for Georgian universities to consider paid assistantship opportunities for doctoral students with the purpose of alleviating financial burden and preventing burnout associated with handling multiple academic and job-related responsibilities.

It is evident that doctoral students can get many benefits from professor assistantships and research collaboration programs. They can develop their pedagogical, analytical, critical thinking, verbal and nonverbal communication, and research skills through real-life experience. PhD students can have career guidance from experienced faculty members, build up strong networking with researchers and industry professionals, practice hands-on application of theoretical knowledge during teaching responsibilities, boost their confidence through active engagement in research and teaching works, become more competitive, explore various academic and non-academic employment opportunities during research projects at the national and international level, and eventually make valuable contributions in response to the global challenges.

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