EXPLORING COLLABORATION AMONG HISTORICALLY BLACK UNIVERSITIES & DOCTORAL/RESEARCH UNIVERSITIES IN THE USA
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Abstract: In the USA, historically black colleges and universities (HBCUs) seldom have sufficient resources and infrastructure to support faculty and student research or doctoral education. In contrast, doctoral/research universities (DRUs) have extensive resources and infrastructure to support research and doctoral education. Both HBCUs and DRUs have talented faculty and students, and collaboration between faculty and students and HBCUs and DRUs has the potential of increasing the physical and intellectual resources brought to bear in research and student education. However, not all collaborations are successful. We studied four instances of collaboration among HBCUs and DRUs to investigate points of tension, identify successful practices, and gather suggestions for improving existing and future collaborations between institutions with different cultural heritages and organizational priorities. Keywords: Collaboration, historically black colleges, historically minority institutions, research universities, intercultural communication, program evaluation

Introduction
There are several categories of universities in the USA. The most prestigious category is the Doctoral/Research Universities—Extensive, or DRU (Carnegie Foundation for the Advancement of Teaching, 2001). There are 151 DRUs, including Harvard, Yale, and the University of North Carolina. DRUs have a long tradition of having sufficient resources and infrastructure to support a variety of world-class research and doctoral education programs. In contrast, the 103 historically black colleges and universities (HBCUs) in the USA were founded in the mid-to-late 19th century "during a period of legal segregation to aid a population that lived under severe legal, economic, educational, political, and social restrictions" (Trent & Hill, 1994, p.69). To this day, HBCUs often have minimal resources and infrastructure to support research as well as doctoral education programs.

To help address the lack of resources found at many HBCUs, federal and private agencies have encouraged collaboration among HBCUs and DRUs. A database and Internet search yielded evidence of 18 past and ongoing collaborations between HBCUs and DRUs. However, no studies were found that investigated the success of these partnerships. A literature review yielded two potential issues that may promote or inhibit success in collaborations between HBCUs and DRUs: resource discrepancies (Bennof, 1999; Christovich, 2000) and the development of a shared language among collaborators (Crow, Adessa, C., & Sonnenwald, D.H. (2003). Exploring collaboration among historically black universities and doctoral/research universities in the USA. UNESCO Conference on Teaching and Learning for Intercultural Understanding. Human Rights and a Culture of Peace. Jyväskylä, Finland.)
Levine, & Nager, 1992; DuRussel & Derry, 1996). These issues were examined in the context of four research projects involving faculty and students at both DRUs and HBCUs.

Research Methods

We conducted qualitative interviews with faculty and postdoctoral fellows of different ethnic backgrounds who participated in collaborative research projects between DRUs and HBCUs in the southeastern USA (Table 1). All members of a project were interviewed when possible; a total of nine interviews were conducted. Most project team members, and all study participants, except one, were male.¹

Table 1. Study Participant Demographics

<table>
<thead>
<tr>
<th>Case</th>
<th>Participant’s Background</th>
<th>University Affiliation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Ethnicity</td>
<td>Professional Rank</td>
</tr>
<tr>
<td>A</td>
<td>Latino</td>
<td>Professor</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Assistant Prof.</td>
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<tr>
<td></td>
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<td>Postdoc</td>
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<tr>
<td></td>
<td>Caucasian</td>
<td>Postdoc</td>
</tr>
<tr>
<td>B</td>
<td>Caucasian²</td>
<td>Assistant Prof.</td>
</tr>
<tr>
<td></td>
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<td>Associate Prof.</td>
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<tr>
<td>C</td>
<td>Caucasian</td>
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<td>Associate Prof.</td>
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Projects A, C and D focused on natural science research, and project B focused on social science research in a natural science context. All projects were either associated with a larger research and development (R&D) centre, funded primarily by a national scientific agency, or an educational centre, funded primarily by a private philanthropic agency. The participants were strongly encouraged by the funding sources to collaborate with their colleagues at participating HBCUs and DRUs, but were not required to do so on these specific projects.

The semi-structured interview protocol was designed to elicit responses about the issues uncovered during the literature search, and to allow respondents to raise and discuss issues that they personally found relevant to the success or failure of their collaborations. The interviews averaged 46 minutes in length, with a range of 23 minutes to 99 minutes. All interview sessions were digitally recorded and later transcribed. The interview data were
analysed using both open and axial coding (Berg, 1989). First, during open coding, the data were read thoroughly and carefully, and patterns and themes regarding collaboration were identified. The patterns and themes were further used in the following stage of axial coding, in which the data were reread and organized according to the patterns and themes. In addition, relationships among patterns and themes within and across projects and contexts were analysed.

**Limitations of the current study**

Because only four projects, all associated with natural science, were investigated, comparisons among projects are limited and tentative. Furthermore, all projects took place in the same geographic area that may or may not be representative of the country as a whole. These limitations reduce the external validity and reliability of our results. However, we believe that the cases constitute an effective pilot study, and that our findings indicate theoretical directions that can be tested in future work.

**Analysis and discussion**

When investigating resource discrepancies and shared language, the broader concepts of resource alignment and communication alignment emerged. Resource alignment is an appropriate, not necessarily equal, allocation of resources needed to complete the collaborative work. Communication alignment is a shared understanding of the progress of collaboration, as evidenced by similar descriptions of the situation among participants. Achieving or failing to achieve alignment in these two areas controls a feedback cycle, whereby initial success at alignment increases personal rapport among the researchers. This rapport, in turn, can increase motivation and work output and, ultimately, the likelihood of overall success. Due to space constraints, this paper focuses on resource alignment.

**Resource alignment**

At the start of collaboration, each participant has access to a set of resources provided by his university, the agency sponsoring the collaboration, or, most often, both. The resources that emerged from our analysis as impacting collaboration between faculty at HBCUs and DRUs include tangible goods and services, time available, human resources and existing knowledge.
**Tangible goods and services** represent items that can be purchased, sold, or exchanged, such as money, lab equipment and services, including infrastructure services such as purchasing support. **Time available** refers to the amount of time that a principal investigator can devote to research-related activities, as opposed to the time needed for teaching, committee service, or administrative work. **Human resources** are people contributing to the research work of the project, such as undergraduate lab assistants, postdoctoral researchers, or tenured co-investigators. **Existing knowledge** is what each participant already knows about the particular field of inquiry for the collaboration. This ranges from minimal background reading to extensive prior independent work on the topic.

In the projects we studied, resources were initially out of alignment in every case. Participants explained:

*We’re on a different time scale...[my teaching load is] 300% more...than [my colleagues at DRUs]*

*We have not been able to get the reactor built here like [the DRU has]. It's hard to build my lab. I build it from ground zero. Every little thing I have to ship out to get it done.*

*HBCUs] have no postdocs.... The postdocs [in our DRU labs] have sort of become...like a sub-professor...A graduate student will...get training from a postdoc, and they'll continue working with them...until the graduate students are ready on their own to do things.*

HBCU faculty work with ill-equipped labs, schedules crammed with teaching duties, and inexperienced student research assistants. All of these resource shortages, in turn, tended to limit the existing knowledge base of HBCU faculty and produce feelings of frustration.

**The impact of resource alignment on successful outcomes**

Faced with an imbalance of resources between the parties, collaborators in our study made a crucial choice, whether consciously or unconsciously. They explicitly created a plan to
address resource alignment at the start, began their work without a plan but addressed resource alignment during the project, or never addressed resource alignment (Table 2).

Table 2. The impact of resource alignment on successful outcomes

<table>
<thead>
<tr>
<th>Case</th>
<th>Initial Alignment</th>
<th>Explicit Alignment Planning</th>
<th>Alignment Achieved</th>
<th>Perceived Success</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<tr>
<td>B</td>
<td>N</td>
<td>Y</td>
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<td>D</td>
<td>N</td>
<td>N</td>
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The strongest evidence that planning to align resources can improve outcomes occurred in Case B. It was decided from the outset that the DRU, which had information science expertise, would provide software, technical support, and theoretical direction—tangible goods, human resources, and knowledge—that the HBCU lacked. The HBCU researcher applauded his DRU co-investigator for acknowledging and addressing the extensive demands that teaching placed on his time:

*We were able to work it out … [to] try not to overburden me and fit into my schedule…*

*The success of our project was due to] good prior planning.*

Not all resources come into play for every collaboration. In Case C, for example, the goal was brainstorming and idea sharing between faculty, and the only factors that needed to be aligned were time and existing knowledge. Knowledge was aligned because both researchers had been working in the field for over a decade, and the practice of idea sharing via email required minimal time. Although the collaboration ended without producing original research, both participants felt they had met their goal.

In perhaps the least successful project we studied, participants in Case A took an approach to planning that they called "bottom-up" and "grassroots". Each professor originally wrote proposals for individual projects and was encouraged by centre management to collaborate based on their similar interests. Although the HBCU faculty member was able to use laboratory equipment he lacked by travelling to the DRU, the differences between the participants' teaching loads and postdoctoral support (and, therefore, on their time and human resource constraints) were never directly addressed. Further, the field of inquiry was new to
the HBCU researcher, who neither asked for nor received help in reviewing the literature and getting up to speed, as the DRU researcher explains below.

*We thought that ... given support we would take it upon ourselves to learn a lot about the area, figure out how we could contribute, and without too much additional help. I mean, we'd just go ahead and get the thing done. And that was a bad assumption.*

Several months into the collaboration, remedial planning sessions were held to address perceived problems in the quality and timeliness of the research at the HCBU. The late planning sessions were not enough to overcome the inertia of the initial and continued resource imbalance, and all participants judged the groups' research a failure.

The participants in Case D encountered very similar problems but did not attempt remedial planning at any point. The researcher from the HBCU was working without a fully equipped lab or a postdoctoral assistant, an imbalance that was not immediately addressed by either his co-collaborator or by the funding agency. Rather than ending in a public and dramatic failure, their work simply ended.

Planning seems to be necessary to align resources, but several HBCU researchers stated that they were reluctant to assume a planning role because they had less experience than their DRU counterparts. The DRU participants, on the other hand, assume that the collaborative work is an "equal partnership" and that, therefore, work will progress as it does with their colleagues at the same or similar institutions, with the assumption that similar resources exist and/or are required for the research. It may be that, while planning is necessary, it is actually less likely to happen in collaborations between faculty at dissimilar institutions because of these cultural differences.

**Conclusions**

Our findings corroborate the issues initially suggested by the literature. Resource alignment is an extension of the well-documented historical fact that HBCUs have fewer resources to support research than DRUs. Resources that were not in alignment and had an impact on collaboration in the cases we studied were: tangible goods and services, time, human resources and existing knowledge. This systemic resource imbalance appears to require
explicit planning before the project begins, or at least sometime during the collaborative process. However, resource alignment does not simply imply equal distribution of resources, but rather distribution aligned with the institutional cultures and project goals.

While the resources for a particular successful collaboration may be more balanced at the end than they were at the outset, it appears that only rarely are resources permanently allocated to the HBCU in a way that fundamentally changes their research capabilities. It has been our experience that, while collaborations may have a high impact on the personal and professional experience of the individual researchers, such collaborations are unlikely to immediately effect changes in the wider community because the collaborations are infrequent and their contributions may be little recognized. Trying to change centuries of higher educational practice two or three researchers at a time, while a beginning, may take decades to achieve. It would be interesting to investigate whether the exploratory results reported here apply to collaboration among dissimilar academic institutions globally.

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1 Male pronouns are used generically throughout the paper, since all participants in the study were male.
2 This participant did not complete the interview protocol but described her experiences on the record with the first author.

References


