



Using Humanities PhD Alumni Data to Promote Program Improvement and Cultural Change

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Takeaways from this Presentation

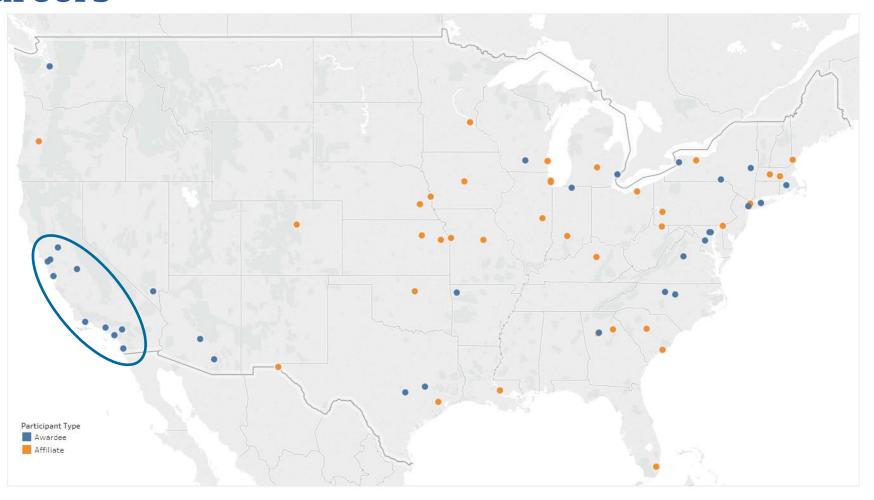
- PhD alumni are engaged in meaningful work across diverse employment sectors
- Recent PhDs especially those working outside the academy, feel their degree prepared them less well for current job demand
- Humanities PhDs do not feel well prepared for leadership team work and grant writing BUT there are disciplinary differences
- Professional development can make a difference
- Career pathways data can catalyze program development and change





Good News: 70 universities are collecting and using data on PhD careers

Based on work supported by the Andrew W. Mellon Foundation and National Science Foundation (#1661272).









Closing Gaps in our Knowledge of PhD Career Pathways: How Them? a Humanities PhD Prepare Them?

CGS Research in Brief, October 2018 A jarse majority of survey respondents believe that the translation of survey respondents believe that to their translations and education prepared them well for their translations are described from the differences were not statistically that the following the differences were not statistically that the differences were not statistically the difference By Hronao Okahana 6 Timothy Knoshia their burnanties pho education prepared them well to by their jobs Although the differences before not distinct and many and many and and an applications are also and applications are also and applications are also applicated to the property of the prope their late lattroogs the differences were prevailed by seminary to their lates and their lates Key Findings colleges and universities terminally feet that their correct studies and better properly them to their correct studies had better properly and advantages and part them them universities are accordingly

The vast majority of humanities phOs still work studies had better prepared them for their current, the propared them to the them the took them to the in Felds related to their doctoral education and in news related to their observations to the are satisfied with their jobs. According to the who were three years peer graduation, (Figure 1)

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they had to start over again. Humanities for employers other

years port graduation and working for employers of the

years port graduation. omforence was statistically significant coly, among whom you have a statistically significant coly, among who were three years process granduation. (Figure 1) are sausneo with their jobs, according to the National Survey of College Graduates by the National Science Foundation (NSF), 92% of National Science Foundation they had to start over seein. Humanities PHDs there years out to entirely exist over seein. Humanities of entirely exist of the start over seein. Humanities of the entirely exist over the start over th National Science Foundation (NSF), 42% of humanities PhOs working in 2015 held lobs least point graduation and working for employers other than colleges are described were less, likely than their than colleges are described were less, likely than their than colleges are described were less, likely than their than colleges are described with their described or in the scale environment would be about the scale environment of the numarities in 2012 more your hat are closely or somewhat related to their that are closely or somewhat related to their mar are closely or somewhat related to their PhDs Furthermore, 85% of humanities PhDs vnus. Furnermore, sope or numanuse vnus.
who are employed are satisfied or very satis

wno are employed are satisfied or very sate: fied with their current work. This percentage is neawith their current work. The percentage is consistent for the 92% who work in related those eight and littlers years post-probablisher the verses were not statistically significant. (Figure 2) connectent for the 42% who work in fields fields as well as the 8% who work in fields differences were not statistically significant. Figure 2)

Between humanities phDs. working in academia and
Between humanities phDs. working the thon differences
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Proces of skills, there were no statistically admitisant of the statistical of the statis Graduite actions (CG3) Find Lorest Farmers, project, this brief provides new insight into project. The prier provides new insisting into how humanities phDs apply their doctoral

PhD Career Pathways

PhD Career Pathways: Preparing Future Faculty Closing Gaps in our Knowledge of for All Types of Colleges and Universities

CGS Research in Brief, December 2018

By Hironao Okahana & Timothy Kinoshita According to the National Science Foundation's (NSF) National Survey of College Graduates, 49% of doctoral degree holders employed in 2015 worked for colleges and universities in some capacity. For over two-thirds of the PhDs employed by colleges and universities, teaching is their primary or secondary work activity. In fact, 43,8% of

the postsecondary teaching workforce, including those employed at community colleges, hold a doctoral degree (U.S. Bureau of Labor Statistics, 2018). Though the Vast majority of research doctorates are conferred by Doctoral Universities, these ineff tutions only make up 7.1% (311 of 4,360) of degree-granting postsecondary institutions in the United States (National Center for Education Sta Histics INCESI, 2018a) and enroll Just over one-quar-

ter of the approximately 20 million undergraduate students (NCES, 2018b). Using survey data from the Council of Graduate Schools (CGS) PhD Career Pathways project, this brief provides new insight into how phDs feel about their preparation to work

at different types of institutions.

 The vast majority of PhDs in this study who worked in The vast majority of PhDs in this study who worked in non-research universities viewed teaching as their properties. non-research universities wewed teaching as their prior many responsibility. A large shart of PhDs working for programmed teachers their share the same of the sam Key Findings: many responsibility. A large share of PNDs working for "Research Universities" identified basic research as their

Research Universities' identified basic research as their primary responsibility; however, the majority (55%) also market and transfer primary responsibility; however, the majority (55%) also considered teaching as other an important primary or considered teaching as other an important primary or considered teaching as other as important primary or considered teaching as importan Across the sixteen skills measured in the survey, there

 Across the sixteen skills measured in the survey, mere
 were variations in the perceived importance by institution. were variations in the perceived importance by institu-tional sector. Those working at "Research Universities" tional sector. Those working at "Research Universities" placed higher importance on the traits of innovation, and the sector of the sec placed higher importance on the traits of innovation, and alvied thinking, persistence, and initiative compared to alvied thinking, persistence, and initiative compared to the second the second thinking to the second the second thinking to the second thinking the second the second thinking the second the second thinking the second the second thinking the second the second thinking the second thinking the second thinking the second the second thinking the second the second thinking the second thinking the second think alytical thinking, persistence, and initiative compared to those with teaching as their secondary responsibility. In those with teaching as their secondary responsibility. In contrast, dependability, concern for others, and social contrast, dependability, concern for others, and social contrasts. contrast, dependability, concern for others, and social orientation were all perceived as more important for orientation were all perceived as more important. onentation were all perceived as more important for those working in other postsecondary sectors outside of

nessanch universities. Wigere of

Doctorate holders in the study who were working at Doctorate holders in the study who were working at egesearch Universities overwhelmingly responded that Research Universities' overwheimingly responded that their PhD prepared them well for their current job, retheir Phu prepared them well for their current job, re-gardless of work responsibility. When asked how well what part over amount them, for their current of the more than a second gardies of work responsibility. When asked how well their PhD prepared them for their current, job at "gas the control of the current of the their PhD prepared them for their current job at the search Universities, 9,3% of those with primary teaching. search Universities, 83% of those with primary teaching responsibilities and 87% of those with secondary teach in proposibilities and 87% of those with secondary teaching responsibilities responded. "Extremely Well" or "Very the secondary teaching the ing responsibilities responded. "Extremely Well" or "Very Well". In contrast, just over half of respondents wording to "Foreman or "Foreman or "Foreman".

Well* In contrast, just over half of respondents working for "Community or Two-year Colleges" areasysted Fixfor "Community or Two-year Colleges" answered "Ex-tremely Well" or "Very Well" to the same question. (Fig. PhD Career Pathways

PhD Career Pathways: How Well Did a STEM PhD

Train Degree Recipients for Their Careers Closing Gaps in our Knowledge of Train Degree Recipients for Their Careers?

CGS Research in Brief, April 2019

By Hironao Okahana, Enyu Zhou, 6 Timothy Kinoshita The vast majority of STEM PNDs work in fields related to their doctoral education and are satisfied with

their fobs. According to the National Science Foundations (NSF) Survey of Doctoral Recipients, 92% or employed doctoral scientists and engineers in or employed doctoral sciences and engineers in 2017 held Jobs that are closely or somewhat related 2017 held your that are closely or somewhat related to their PhDs (NSF, 2019). Using data from the Courted of Graduate Schools (CGS) PhD Career

Pattways project, this brief provides new insight rausweys trugelier that order between new transpire into how STEM PhDs apply their doctoral training in

 A large majority of survey respondents in various stages of A large majority of survey respondents in various stages of their postdoctoral careers believe that titler STEM PMD edu-mental authority and account as a second state. their postsoctoral careers believe that their STEM PhD edu-cation prepared them well for their jobs. However, there are cation prepared them well for their jobs, however, more are some differences between those employed by colleges and

some afferences between those employed by colle, universities and those who are employed elsewhere. Among those who earned their PRDs in Life Sciences, physi- Among those who earned their PhDs in Life sciences, Prival-ian Sciences, or Engineering, fewer graduates who worked and sciences, or Engineering, fewer graduates who worked which are also accompany to the state of the science of the state of the science of the state of the science of the sci cal Sciences, or Engineering, fewer graduates who worked outside of the academy felt that their PhD education preoutside of the academy felt that their PRO education pre-pared them extremely well or well for their current jobs There pared then extremely well or well for their current lobs. There was no difference by sector of employment to between those was no difference by sector of employment to be a sector of employm was no difference by sector of employment between mose who who carried a Phio in the Social Sciences and those who carried a Phio in the Social Sciences (Companies VI)

wno earned a ymu in the Jocus Jocennes and chose earned a PhD in the Behavloral Sciences. (See Table 1) A large majority of survey respondents report that they define A large majority of survey respondents report that they definitely or "grobably" would still pursue a phot in seneral and their or "grobably" would still pursue a repeat Legal and the seneral and the s nitely or probably would still pursue a PhD in general and in the same field again. Across different STEM broad fields in the same field again. Across different STEM broad fields and different PhD cohorts, alumni in both employment sec. and different phD cohorts, alumn in both employment sectors were equally (fleely to say that they would pursue a phD tors were equally likely to say that they would pursue a faul be again. Notable exceptions are for engineering and physical by again. Notable exceptions are for engineering and physical & earth sciences alumni 15 years out. Although more than a half earth sciences alumni 15 years out. Although more than a half of them would still pursue PnDs again, fewer graduates in them would still pursue pnDs again.

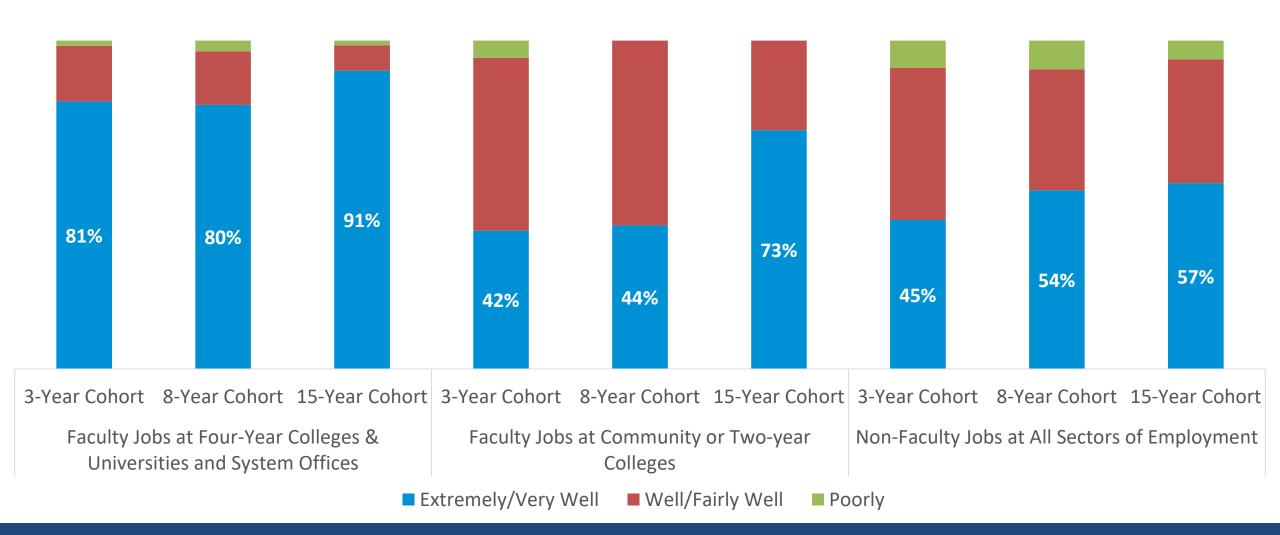
of them would still pursue PhDs again, fewer graduates in lobs outside of the academy, compared to those working for lobs outside of the academy. Jobs outside of the academy, compared to those working for colleges and universities, indicated that they would definitely colleges and universities, indicated that they would definitely colleges and universities. or promony up 30, pres name 4)

• PhD graduates within and outside of academia identify simi-

 PhD graduates within and outside of academia identify sinitiate lob skills and attributes as important. Across different for Job skills and attributes as important. Across different STEM broad fields and employment sectors, there are many combarities to become of attributions and studies consider to recover. STEM broad fields and employment sectors, there are many similarities in terms of attributes and skills crudal to success similarities in terms of attributes and skills crucial to success-fully perform work. Persistence was one of the most imporfully perform work. Persistence was one of the most important for any attributes across fields, but was particularly important. On the most important for any attributes across fields, but was particularly important. ant attributes across fields, but was particularly important for those who work at colleges and universities. On the other those who work at colleges and universities. On the other hand, cooperation was particularly important for those work nano, cooperanon was particularly important for outside of the academy. (See Figure 1.6 Table 3)



% of Arts & Humanities PhDs Who Feel That Their PhD Education Extremely or Very Well Prepared for Their Current Jobs by Cohort and Institutional Sector of Current Employment.







Arts & Humanities PhDs 3-Year Cohort: How well did your graduate program prepare you in the following knowledge, attributes, and behaviors?

Critically analyzing and evaluating findings and results 85% Applying research methodologies, tools, and techniques 82% appropriately Demonstrating a theoretical and practical understanding of **76%** your subject area and its wider research context Communicating ideas clearly and persuasively in writing such 74% as in journal articles, grant proposals, or reports Developing new ideas, processes, or products, which are **72%** rooted in research Influencing others, providing direction and encouraging their 56% contribution Working constructively with colleagues, acknowledging their 53% contribution **Grant writing** 23% ■ Good + Excellent Poor + Fair Average





Arts & Humanities PhDs 3-Year Cohort by Field: How well did your graduate program prepare you in the following knowledge, attributes, and behaviors? Influencing others, providing direction and encouraging their contribution







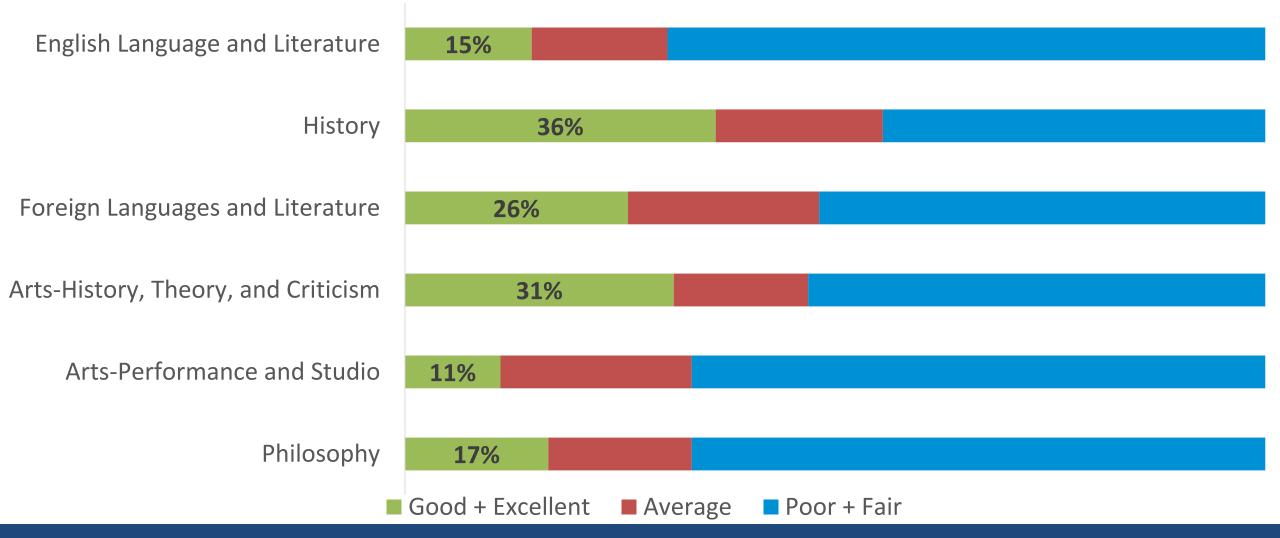
Arts & Humanities PhDs 3-Year Cohort by Field: How well did your graduate program prepare you in the following knowledge, attributes, and behaviors? Working constructively with colleagues, acknowledging their contribution







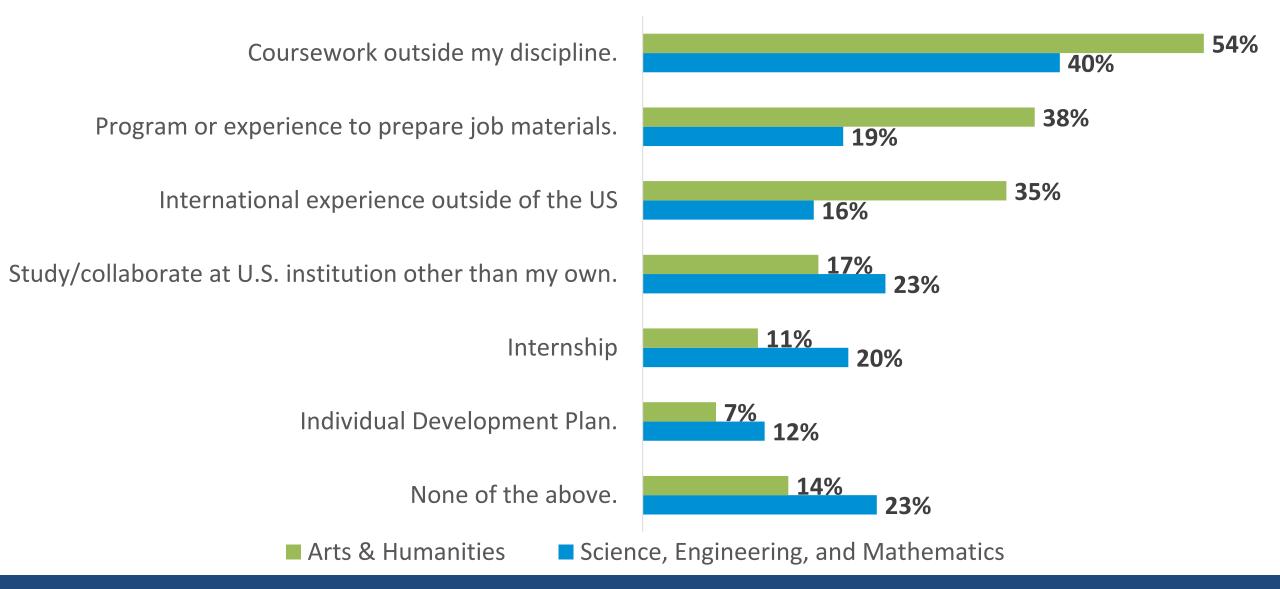
Arts & Humanities PhDs 3-Year Cohort by Field: How well did your graduate program prepare you in the following knowledge, attributes, and behaviors? Grant writing







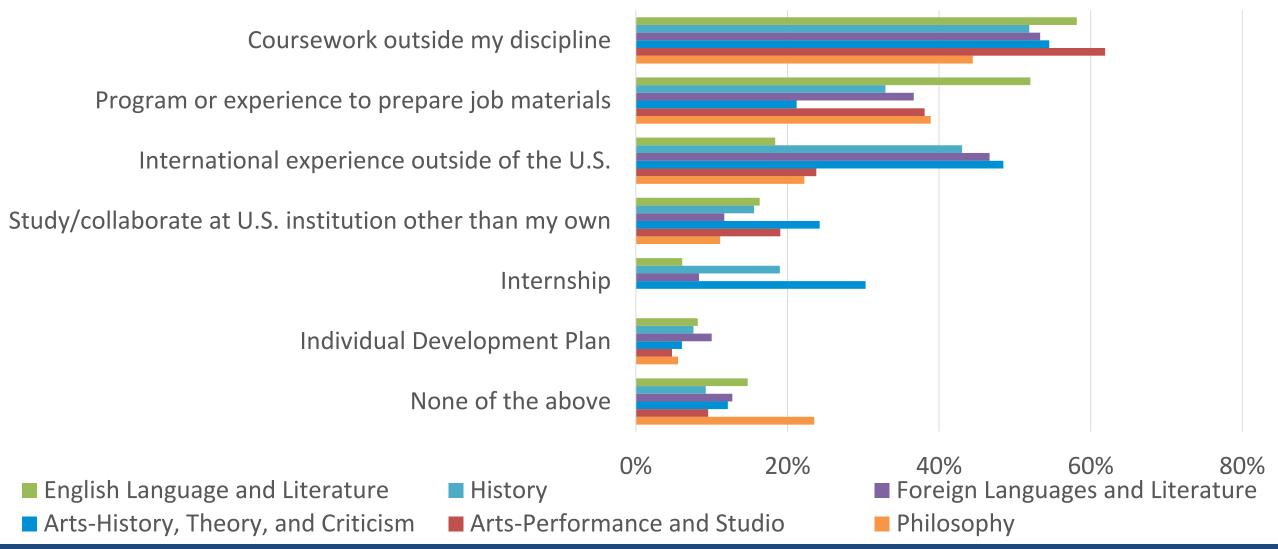
Arts & Humanities & SEM PhDs 3-Year Cohort: Participation in Various Types of PhD Experience







Arts & Humanities PhDs 3-Year Cohort by Field: Participation in Various Types of PhD Experience







The Graduate School at the University of Notre Dame PhD Career Pathways Project

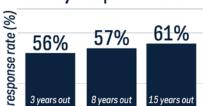
Communiqué #1: Wave 1 Humanities PhD Alumni





MNOTRE DAME, THE GRADUATE SCHOOL

ND Survey Response Rate





surveyed alums report ND prepared them "very well" or "extremely well" for their current jobs

Career Preparation for Diverse Job Sectors











Career Skills and Attributes

PhD Career Pathways consortium data suggest that the skills humanities PhD alumni use in academic and non-academic careers are more similar than different.

At ND, our findings were consistent, with ND alumni in both academic and non-academic careers citing the following top 5 skills they use in their current jobs:



understanding the broader significance of one's research



written communication



tools and techniques



critical analysis



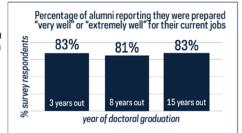
oral communication

Career Preparation Adaptability

PhD Career Pathways consortium data suggest alumni from 3 years out felt less prepared for their jobs than those 8 and 15 years out.

At ND, this was not the case, with 83% of alumni from 3 years out reporting they were prepared "very well" or "extremely well" for their current jobs.

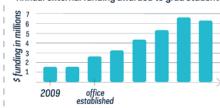
These findings suggest ND's career preparation approach has adapted well with changing career trends.



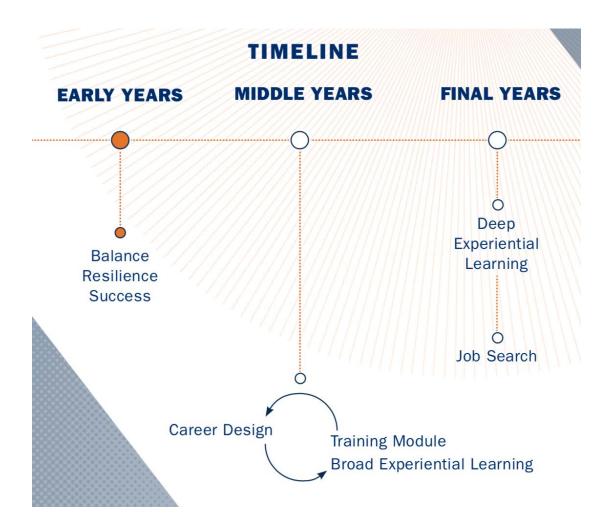
Room to Improve: Grant Writing

ND alumni felt least prepared for grant writing.
This feedback challenges us to raise awareness
for internal grant-writing resources, like the
Office of Grants and Fellowships which has helped
students raise millions in external funding.

Annual external funding awarded to grad students









PhDPlus

- Foundations (teamwork, design thinking)
- Science Policy
- Communicating research
- Data literacy
- Praxis
- Career design
- Startup
- Tomorrow's Professor Today (TPT)





"The PhD Careers Pathway project is, for the first time, providing us with actionable data that graduate programs can use to support flexible career outcomes. For example, an overwhelming majority of the UNC-Chapel Hill alumni from the three, eight, and 15 year cohorts indicate that networking opportunities with former students who pursued careers outside academia would be valuable. In addition, a significant majority indicate that internship opportunities would be a useful resource."

Steven Matson
Dean of the Graduate School
UNC Chapel Hill



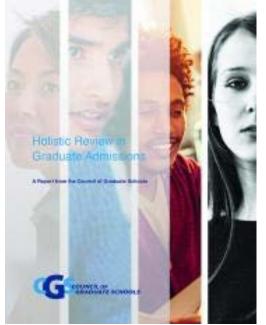
What Do We Mean by Professional Skills and Professional Development?











MY INDIVIDUAL DEVELOPMENT

Science Careers



Resources

