

**Title:** High Value Outcomes in International Education: The Case of HEA Title VI at Yale University

**Summary**

This paper explores the value proposition of federal international higher education policy in HEA Title VI with a special focus on the National Resource Center (NRC) program drawing on a deep case study of Yale University.<sup>1</sup> As an NRC grantee university since the 1960s with multiple grants for many world regions and also international affairs, the case study focuses on 2001-2015 drawing on five Title VI NRC grants for Africa, East Asia, Europe, Latin America and the Middle East.<sup>2</sup> We will reprise the International and Foreign Language Education (IFLE) goals of the Title VI programs, with an emphasis on curriculum building and developing expertise among students and faculty. We used two different methods to test the links between curriculum and student outcomes at the time of graduation and also longer term impact among alumni and their utilization of international and foreign language (IFL) skills in their work and lives. Focusing on undergraduates primarily, method #1 used ten years of course and enrollment data, transcript analysis and surveys of alumni 5 & 10 years post-graduation. Focusing on graduate level students, including PhD, MA and professional schools, method #2 used surveys at time of graduation over four years.

The analytic results on outcomes indicate that the Title VI NRC value proposition is strong. If you build it for the specialists, others will come. While not suggesting causality, our findings suggest that the Title VI investment in building specialist IFL degree programs was rewarded with evidence of the desired results and beyond. The IFL-specialist degree graduates clearly focused their studies on the target material and critical languages, developed advanced skills and planned to and actually used their IFL skills in their work and lives. Beyond the relatively small cluster of these IFL-degree graduates, the study also revealed a large group of students who, though not explicitly IFL-focused, also tapped the IFLE curriculum and developed strong IFL skills while enrolled in a wide range of disciplinary and professional degrees. These strong IFL-generalists also planned to and actually used the IFL skills in their lives and work, in effect revealing a large bloom of engagement and expertise deployed in society well beyond the Title VI-targeted and supported IFL-specialist degree programs and their graduates.

We conclude by reprising the role of Title VI in sustaining advanced levels in the IFLE curriculum to enable mastery and high levels of expertise among graduates especially in foreign languages. The focus on ensuring curricular pathways from elementary through the most advanced IFL subjects is a useful model for campus internationalization efforts, i.e., going beyond mobility and “back to the future” of building strong global and international knowledge and skills into the curriculum. Though small in funding, Title VI-NRC produced the catalytic effect with unwavering focus on three consistent themes: producing IFL mastery for expertise along with developing “global citizens;” firm priority on foreign language mastery at the core of IFLE; and clear priority on graduates deploying their IFL skills in the workforce, especially government and higher education sectors. Though not a separate policy focus, we would highlight the importance of these IFLE resources at the graduate level particularly for PhD’s who are crucial in sustaining the HE system’s capacity to provide IFLE for undergraduates and professional degrees and innovative internationalization efforts. And finally, the assessment design may be useful for non-T6 campus internationalization efforts in its frame and toolset to connect curriculum and outcomes, revealing key parts of the IFLE picture on any campus.

**Background policy context**

With the shift in focus from public benefits of higher education (HE) to the private benefits, we first step back to consider an historic view of the policy arena and federal-HE interaction. In the overview of the American Society for Higher Education annual conference 2016, they summarized the need (paraphrasing)<sup>3</sup>:

- In the US, two principles of support were established in these years around the ratification of the US

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Constitution: 1) that the federal government would grant support for the development of education, and 2) that education would be used to achieve other federal policy objectives.

- Public HE policy has been part of nation building including state-federal partnerships in Land Grants, the GI Bill, the Community College system, National Science Foundation and other research funding, and the Higher Education Act of 1965.

In foreign affairs and the international HE arena, there were also key laws and programs.<sup>4</sup> The Truman era with the Point 4 program in 1949 started to boost overseas development aid with strong participation of HE building on lessons of the Tennessee Valley Authority and similar federal-state efforts spawning campus institutions like the Wisconsin Land Tenure Center or the Harvard Institute for International Develop. In the same era, The Fulbright Act was launched. On the heels of the Sputnik launch in 1957, the National Defense Education Act was passed in 1958 including Title VI on Area Studies and Foreign Languages to directly enable the HE system to build international, area and foreign language education (IFLE) resources. In 1964-66, this policy arena coalesced around a grand vision with the International Education Act with Higher Education (HE) and overseas development interests pulling together with Congress and the Johnson White House. Sadly, it collapsed and was never funded under the pressures of the Vietnam War and domestic civil rights movements. Yet the NDEA's Title VI, with its focus on ensuring IFLE capacity across the HE system, continued into the HEA right through today.

Combined as the HEA Title VI and Fulbright Hays (T6/FH) family of programs administered by the Department of Education, its funding has been on a roller coaster, mirroring the larger public-private, domestic-international debates of all HE funding. It was nearly zeroed out in 1971 but was salvaged and re-built. After the 9/11/2001 attacks, its funding returned to 1960s levels in real terms and then was cut by 47% in 2012. In the 2016-17 Congressional reauthorization of the HEA legislation, the case for rebuilding and renewing Title VI funding is again being made. The two key policy arguments are that the country needs international and foreign language expertise more than ever and the HE system is the best set of institutions to provide these IFLE resources in the person of faculty experts and curricular resources and degree programs at advanced levels. Over these 60 years of T6/FH, the larger HE system has been internationalizing, dwarfing the small T6/FH in funding and institutional participation and relying largely on traditional campus funding sources of tuition and fees plus market approaches such as revenue centers in study abroad, TESL or international student recruitment. Much of the focus is on training global citizens, building a strong base of international awareness and cross-cultural competence and the largest population is undergraduates.<sup>5</sup> The author argues that the HE system still requires federal support to motivate and ensure that campuses will be able to provide the specialist IFL degrees, often with low-enrollment courses that enable students to pursue advanced skills in upper level language and upper level or graduate courses with deep coverage of international issues, regional and even country-level material. This advanced training capacity and deep faculty expertise has been the main aim of the Title VI National Resource Centers (NRC) and Foreign Language and Area Studies (FLAS) Fellowship programs, both originating in the 1958 law and continuing through today.<sup>6</sup> The NRC program is the main focus of this paper.

In the shift to more managerial approaches to public policy, outcomes and metrics have been a key policy mechanism to validate the value of federal support, e.g. GPRA of 1988<sup>7</sup>. This is also where the market approach faces off with the public good approach. Congress and the Department of Education focus increasingly on narrow skills acquisition rather than institutional capacity-building; graduate language skills and employment instead of preserving and building the reservoir of capacity across the HE system as in the T6-FH policy. In pursuit of direct employment results tied to IFL training, Congress created the National Security Program based in the Department of Defense in 1989<sup>8</sup>(?) and went further with NSEP's Flagship program for critical languages in 2004(?). In the National Academy of Science review of HEA Title VI and Fulbright Hays (T6/FH) family of programs in 1998(?), the lack of data on the programs was

cited as a key challenge to substantiating the strong anecdotal evidence of T6/FH positive impacts. The Department of Education in the 2010 competition cycle for T6/FH grants initiated systematic outcomes assessment for both NRC and FLAS programs. The first results of the FLAS fellowships assessment in 2016 were positive.<sup>9</sup> For the NRC program, each grantee was required to develop outcome measures for its four-year program under successful grants but there was no requirement for a systematic, common approach or data set that could be compared across the entire set of NRC-FLAS grantees.<sup>10</sup> Yale's response to this requirement provided the impetus for the research underlying this paper.

## **CONCEPTUAL FRAMEWORK: The federal policy goals and programs**

In many ways federal Title VI and Fulbright-Hays (T6-FH) program was the earliest promoter of interdisciplinary internationalization in the US higher education system. Since 1958, the T6-FH program family has served two main policy goals: 1) creating and sustaining institutional capacity, both curricular and faculty resources, across the US higher education system, with a special focus on languages critical to US international affairs needs; and 2) to produce international, foreign language and world area experts and global citizens as the core human capital for the United States in all fields of endeavor, government, business, education and civil society.<sup>11</sup> While there have been as many as 16 different programs in the T6-FH ecosystem over the years, the National Resource Centers and their accompanying Foreign Language and Area Studies (FLAS) Fellowships have been in constant operation with the clear mandate to provide the highest levels of expertise, sustain the deepest curricular resources from BA through professional and PhD degrees and a diverse and deep array of library and language resources and overseas links. Until 1971 and a near-death experience in T6-FH funding, NRC-FLAS grantees were a mix of 4 year and Masters-degree colleges as well as major research universities. After the cut, major research universities were virtually the only ones that could continue to compete, partly by sharing central support for multiple world area NRC's to lower administrative costs or by forming consortia focused on a single region. Yale's MacMillan Center, and its predecessor units, has served as this coordinating hub for multiple NRC-FLAS grants and a few consortia NRC-FLAS grants since the late 1960s. Other universities followed suit creating a set of super-hubs within the T6-FH cyclical competitions including Columbia, Wisconsin, Indiana, Harvard, Ohio State, among others.<sup>1</sup>

The policy focused on results. The program focused on inputs. The program logic, if in oversimplified form, was that the NRC funds supported the educational "inputs" (along with a strong matching requirement from the university grantee) and the FLAS Fellowships supported the "outputs" or graduates with the desired language and area expertise.<sup>12</sup> The Dept. of Education has missed the opportunity to systematically test the program logic and understand their own strengths and weaknesses or develop benchmarks across grantees in each cycle and over time. The NRC-FLAS grantees also could have formed a better advocacy and benchmarking base despite the inherent competitive forces.<sup>13</sup> With GPRA (a government accountability act) passed in 1989(?), Congress began to insist on outcome measures for all programs.<sup>14</sup> When the National Academy of Sciences conducted a thorough assessment of the T6-FH programs in 200x, they concluded that the programs served their purpose well but that the grantee data did not permit a systematic outcomes assessment of any of the programs including NRC and FLAS.<sup>15</sup> Despite years of collecting the same data from NRC-FLAS applicants and grantees on course strength, enrollments and faculty in each multi-year grant competition and updated annually in grantee reports, the Dept. had not produced a systematic analysis or a way to tap the data for feedback to the participating NRC-FLAS grantees or Congress. It was in 2008 that the Dept. of Education funded and conducted the first true outcome survey of FLAS Fellows to understand the impact of the FLAS program on their lives

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<sup>1</sup> Note for further consideration. This makes the case study a little more replicable? It's not just Yale but these other "super-hubs" that could run a similar research project. When to mention this? In the analytic section?

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and careers. Happily, the results confirmed the largely anecdotal evidence of strong, positive impact in terms of graduates using their language and area skills in their work and lives.<sup>16</sup> It was in 2012, for the first time, that the Dept. of Education required all NRC grant applications to include an outcomes assessment design as an absolute priority in the competition. For the NRC program, each applicant was required to develop outcome measures as part of its proposal for a four-year program but there was no requirement for a systematic, common approach or data set that could be compared across the entire set of NRC grantees (get the number of grants awarded, number of universities with grants.)<sup>17</sup>

Yale's response to the "outcomes assessment" competitive priority for the 2012 NRC-FLAS 4 year grants is summarized in this case study. The *de minimis* requirement was to assess outcomes narrowly defined around numbers of graduates in IFL specialist degrees or with advanced skills in languages identified as critical in the competitive priorities for the grants.<sup>18</sup> In applying for five regional NRC grants and related FLAS Fellowship grants, the MacMillan Center was able to combine funding to attempt a more comprehensive approach, closer to the full logic of the NRC-FLAS program priorities and policy goals. Effectively, we used the five NRC grants at Yale to provide a "test in concept" of the larger program logic. Did the inputs (language and area courses) directly required to receive grant funding result in the desired student outcomes (students enrolling in IFL courses and intentionally pursuing IFL skill sets through IFL-specialist degrees or as part of other degrees) and contribute to the desired societal impact (graduates using their IFL skills broadly and specifically in the employment sectors of high priority for the grants, i.e. government and education.)

A case study of T6 has a "back to the future" quality. The T6 program pre-dates internationalization as a major and well accepted campus strategy and provides a mirror and challenge to campuses pursuing IFLE with in-depth training strategies and at advanced levels. T6 pre-dates the expansion of study abroad and international students prevalent on campuses today yet it capitalizes on them and provides specialized overseas research centers and group study grants. T6 was created in an era without the focus on outcomes yet T6 policy has always set a priority on workforce-ready graduates, a very contemporary notion. Internationalization as a campus strategy has become well accepted and widely adopted with strong academic, strategic, management and institutional assessment tools.<sup>19</sup> At the student level, especially for undergraduates, international educators have developed strong set of outcome assessment tools, particularly around cross-cultural competence.<sup>20</sup> These have largely emphasized cross-cultural attitude as an outcome of study abroad programs or other immersion experiences. More recent research has focused on students global and international knowledge and skills as outcomes more related to curriculum and on-campus international activities and peers.<sup>21</sup> That vein of research is particularly useful in providing a context of other research universities, non-T6, for this case study and approach to assessment.<sup>2</sup>

We recognize that a single campus case study, even with five NRC grantees, limits generalizability and Yale's institutional context may also present unique elements. We also recognize that we cannot claim causality but we share a strong circumstantial case. It would be possible to add the other "super-hub" NRC campuses to the research for a very robust data set but costs would be high. If we considered a counterfactual of "what would the IFL curriculum have been at Yale without T6-NRC funding in 2000-2015 or over the full sixty years", it would likely show a much weaker program, especially in the critical languages and advanced level courses. For several reasons, the Yale assessment approach could be replicated by other T6-NRC campuses or, indeed, non-grantee campuses. The data for the courses and enrollment was standardized in all the T6-NRC grant proposals and annual reports fitting the Dept. of Education standards and guidelines for all NRC grantees. The course identification work is tedious but not overly complicated. The analysis of transcripts or enrollments used registrar and institutional research

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<sup>2</sup> Need to know more about the student outcomes literature to frame this. KSA are the basics. Does x-cult focus on Attitude over Knowledge and Skills? Fair to say? What else to highlight or discuss

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tools commonly used across US campuses. Survey instruments also used common software. Yale's alumni database was particularly robust compared to other campuses. It figured in a portion of the design phase and was used in the alumni surveys of graduates 5 and 10 years out and that portion might not be possible on other campuses.

### **CONCEPTUAL FRAMEWORK: International education and outcomes assessment**

IFLE is a challenge to HE assessment in two key ways. First, the traditional university organizes by discipline and profession while IFLE necessarily draws on courses and faculty from many fields, interdisciplinary and often crossing departments and schools. Second, the span of fields, languages and geographic coverage for IFLE in its fullest is nearly infinite in its resource requirements. Virtually any field of study can have an international or comparative component. As with HE overall, IFLE is *sui generis* to the historic and current resources and internationalization strategy of each university. Still, there are two basic categories of IFLE resources. Curricular resources include specialized courses organized in varying structures including IFL-specialist degrees or certificates and general IFL-resources such as languages or general courses.<sup>22</sup> For extracurricular resources, the mix is quite varied including IFL focused service learning, field work, international exchanges, internships, non-credit studies, etc. Study abroad takes many forms and could fall into both categories. For assessment, there is a varied set and range of rubrics, metrics and tools for understanding individual student cross-cultural competence and helping instructors target such skills, knowledge and attitudes in their courses.<sup>23</sup> There are institutional rankings of research production on a global level and strategic assessments of individual campuses' international programming.<sup>24</sup> Increasingly, there is more pressure to specify how these IFL resources link to workforce and larger societal interests.

At the national and state level, there is another vector into IFLE assessment with external stakeholders' policies, grant requirements, funding interests and accreditation or quality standards. In this case study, the federal Title VI NRC-FLAS program goals set the basic assessment parameters with priority on graduates going into priority employment sectors (government and education), students studying critical languages and pursuing foreign languages and related area studies to advanced levels and mastery. The overall policy goals have been to develop and sustain training capacity for IFLE across the HE system. To compete and win a T6-NRC, each proposal must demonstrate depth of faculty and courses and have clear curricular pathways from elementary through advanced levels for the target region or international issue of focus. An NRC grant may provide some funding to rebuild or initiate a new language or curricular endeavor but the substantial IFLE capacity is a competitive requirement. Within each funded campus, the NRC grantee was expected to produce a specific set of outcomes. Instrumental outcomes included providing faculty expertise, robust target area curriculum, specialist degrees and strong IFL enrollments across all levels and fields. Final outcomes or impacts included IFL expertise such as publications, conferences, policy briefs plus graduating students and graduates with advanced knowledge of world areas and field or issue expertise, advanced ability in less and least commonly taught languages. The longer term impact included graduates, especially Masters level, pursuing careers using those skills in government and education as top priority. And for good measure, contribute to developing globally capable citizens across the entire university.

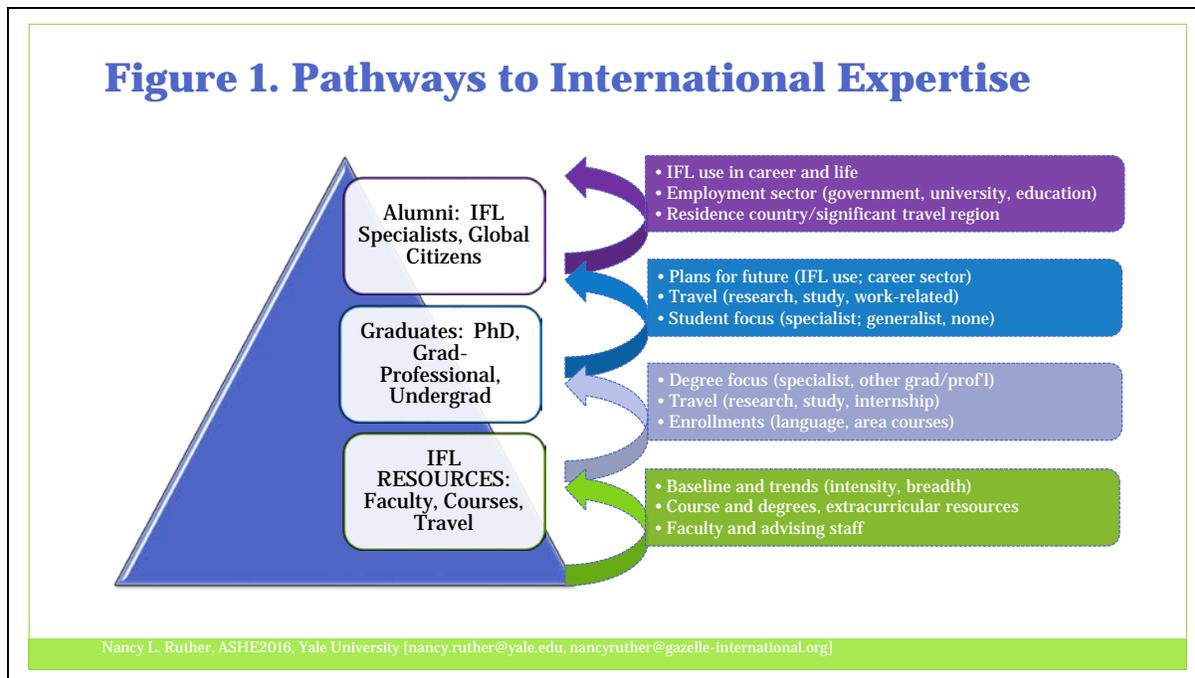
### **ANALYTIC FRAMEWORK**

Over five years, we developed a robust approach to meet these challenges. It was based on the T6-NRC program logic and, hopefully also useful to the IFLE efforts of non-T6 campuses. The "Pathways to International Expertise" (Figure 1) depicts the conceptual links from educational resources to student outcomes to alumni impact for IFLE around four questions:

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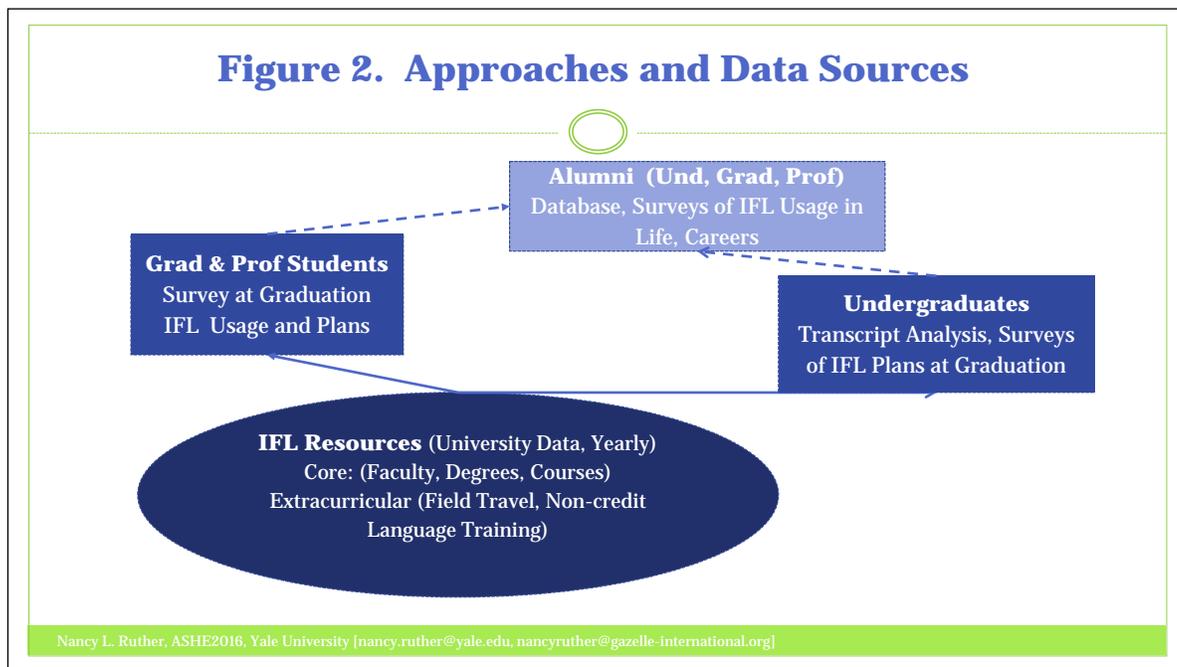
- The resource question. How well do Yale's IFLE resources support students' development of IFL skills and expertise?
- The engagement question. How do students engage Yale's IFLE resources?
- The outcome question. What proportion of Yale students graduate with IFL skills and expertise?
- The utilization/impact question. How do graduates plan to and actually use IFL skills over time?

The paper shows the results and the relationships between the four component parts for Yale's core IFLE resources related to the Title VI NRC grants and major outcomes and impacts.



As illustrated in Figure 2, we planned to use of mix of three approaches (below). We succeeded with (a), partially with (b) and developed the design for (c).

- a) Longitudinal, to see the relationships over time in courses, enrollment, outcomes at graduation, and impact 5 & 10 years out with alumni;
- b) Cross-sectional to compare across participating schools and degrees, world areas, and between Title VI NRC funded regions (Africa, East Asia, Europe, Latin America, Middle East) and non-Title VI areas (South Asia, Southeast Asia, International/Global Affairs); and,
- c) Benchmarking with peers by institution, e.g. COFHE<sup>25</sup> for Yale College or by school associations, e.g. Council of Graduate Schools or Law Schools.



**Variable selection and limits.** We translated this framework into a set of variables for which we could reliably collect good data as summarized in Table 1, “Key Variable and Data Sources.” The resource variable included data from university systems on curriculum, courses (both area and foreign language focused) and extracurricular resources, specifically field travel for study and research. In determining IFL-value, we analyzed courses for IFLE value, e.g. IFL course content density of 25% or more. For student engagement or utilization of the IFL resources, we drew on enrollments, transcript analysis and applications for competitive travel support. We identified the IFL-specialist degree groups, e.g. Spanish Literature or African Studies versus all other fields of study that were not specifically IFL-focused, e.g. History or Environmental Studies. The transcript analysis allowed us to identify “shadow IFL-majors”, i.e. undergraduates with 10+ courses focused on IFL content, without including the first four semesters of foreign language courses which were a general requirement at the time of the study.<sup>26</sup>



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or education. These were two of the mainstays of Title VI NRC program goals. In their utilization of and demand for IFL resources during studies, the IFL specialist degree students start with more and higher levels of FL proficiency, gain more and lose less and they are most likely to pursue the federally designated critical and least commonly taught languages. They also exercise greater demand for international travel resources to support their studies. Yale's IFL curricular resources were stable over 12 years which meets the sustainability goal of the Title VI NRC program though the variation by region and in high-content courses over the years raises a "yellow flag" of caution.

For each area of detailed results, we can provide additional charts and graphs and data. For the paper, we have provided a set focused on impact (post-graduate use of IFL skills) and details on foreign language. We begin with a quick view of the curricular resource and the identification of "specialists" and "shadow majors" or strong IFL-interested students majoring in other fields, not necessarily IFL-focused such as History or Economics.

Resources and Engagement. Faculty and courses were the key resource for developing international and area expertise under the T6 NRC program. Curricular design was also crucial in the T6 NRC priorities for providing serious pathways for students to engage the course resources productively. Within Yale, the MacMillan Center (MCMC) was the interdisciplinary faculty led hub that developed, oversaw and sustained the multi-disciplinary majors and Masters degrees and graduate certificates in Area Studies and International Affairs (with issues foci of development, security, and global health) with roughly 300-350 students in these IFL-specialist degrees each year. Yale also had the traditional departmental degrees (BA, MA, and PhD) in IFL-specific fields such as Languages and Literatures (French, Slavic, Near Eastern, Spanish & Portuguese, and East Asian). Other departments and professional schools had robust IFL-focused curriculum within their discipline-specific degrees, e.g. a History degree with a focus on Africa or Latin America. For the case study, we have used courses as a proxy for faculty strength.<sup>27</sup> Enrollments would be a simple indicator of student engagement in the IFL-focused curriculum.<sup>3</sup>

The two sided-chart below endeavors to illustrate the IFL curricular resource at Yale for the case study. The left side of the chart below shows IFL-content courses relative to all courses across all fields and departments at Yale University from academic year 2001-02 through AY 2012-13.<sup>28</sup> A course qualified as IFL-focused if its content was at least 25% of the entire course using analysis of full syllabi and consulting the instructor when it was ambiguous. Over the twelve years, IFL content courses were fairly consistent, making up 33% on average of all courses, roughly 2000 of 6000 annually. International Affairs and Europe dominated with 16-22% of the total IFL-content courses over the period.<sup>4</sup> The "Rest of World" offerings were quite variable including area studies groupings of the T6 NRC centers focused on Africa, East Asia, Latin America and Middle East as well as areas not funded at Yale by T6 NRC of South East and South Asia. The right side shows the density information of the IFL-content courses, an analysis that was done every four years for the T6 NRC competitions.<sup>5</sup> All foreign language courses were classified as 100% content for this analysis. With language courses as the cap of the high density column, some 45-50% of the area courses were "high density" with 75% or more content on the region or international field. Note that all advanced literature courses taught in the language were counted as "area courses" along with many other fields such as Economics, History of Art, Philosophy, Sociology, etc.

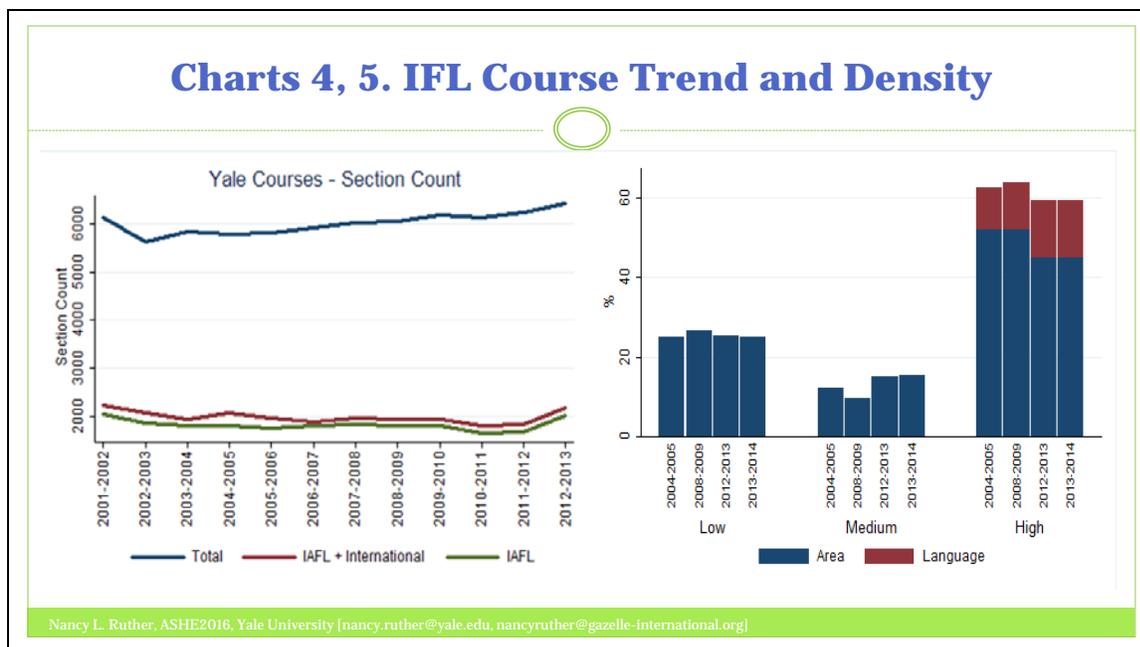
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<sup>3</sup> Need to what enrollment data to use. Maybe one chart on the regional variation among undergraduates where the volume of data was sufficient to be useful. The Grad-professional enrollment data was too small and we did not have access to course-specific data as we had with undergraduates.

<sup>4</sup> Need to combine the bottom two lines into one. It was the whole set of all intl and area and FL courses and they are not sufficiently different to warrant discussion

<sup>5</sup> The fourth year 2013-14 very closely parallels the 2012-13 data so will be dropped from the final presentation. The in-depth course-content analysis was performed in 4 year cycles which provided enough time to reveal changes in the curriculum overall coverage of major world regions.

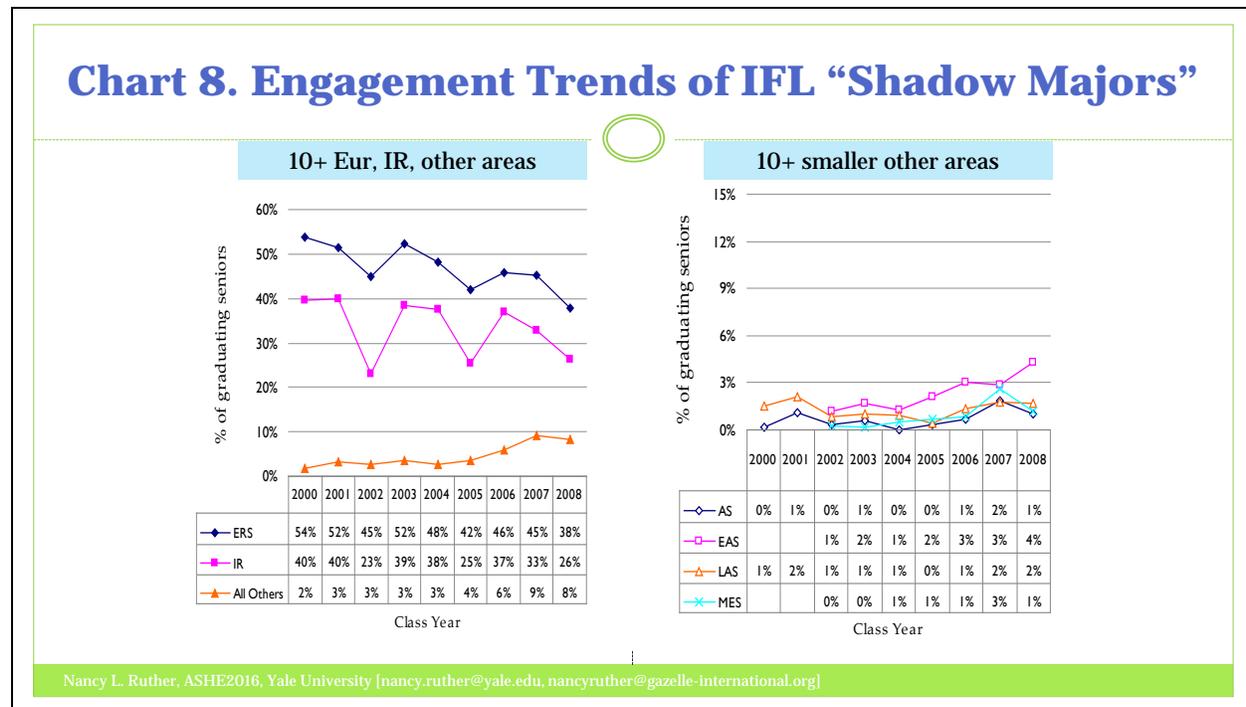
We did not present the enrollment patterns since they were quite stable with the largest proportion in undergraduates as would be natural. One trend that warrants mention was that it seemed that graduate Professional school enrollments in IFL courses were increasing but it was too small a group to be susceptible to statistical insight<sup>29</sup>. The survey results of the professional schools, discussed below, confirmed student interest in IFL during their programs of study. Again, due to time pressures, we were not able to interrogate the 12 year enrollment patterns fully though there was a question of whether IFL enrollments were growing at the same pace as overall course enrollment growth.



Linking courses to IFL outcomes: Transcript analysis. Beyond the known IFL-specialist majors and simple enrollment patterns, the actual transcript would provide the most robust indicator of serious engagement in IFL-focused courses. Using the gold standard method of transcript analysis with a ten year baseline of the IFL-specialist MA graduates from the MacMillan Center plus all Yale College BA graduates, we identified the IFL specialist graduates by major, e.g. Spanish Literature or African Studies, as well as the IFL-shadow BA's, i.e. those with 10+ courses in a world area but with a History, Economics or other official major.<sup>30</sup> Notably, the European shadow majors accounted for 40-55% of all Yale College graduating seniors over the period; the International shadow majors slightly lower from 25-40% and the four smaller regional majors combined to represent 3-10% (East Asia, Middle East, Africa and Latin America). This suggests that the outcomes were greater than the simple proportion of courses in the overall curriculum would have warranted. It is a robust indicator of very strong IFL-engagement for undergraduates given the conservative course count. We barred the first 4 courses in beginning FL sequence since they were a curricular requirement for all undergraduates during the timespan.

In developing the transcript analysis, we also charted the detailed enrollment patterns of the IFL-specializing undergraduates, the shadow majors, over the ten years AY 2001-02 through AY 2010-11. In the two-part chart below, the figure on the left shows the largest clusters in International Affairs and European Studies trending downward while the “rest of world” or other four smaller regional clusters were trending upward overall. On the right, the “shadow majors” in the four smaller regional clusters of East Asia, Middle East, Africa and Latina America represent very small percentages of total enrollments

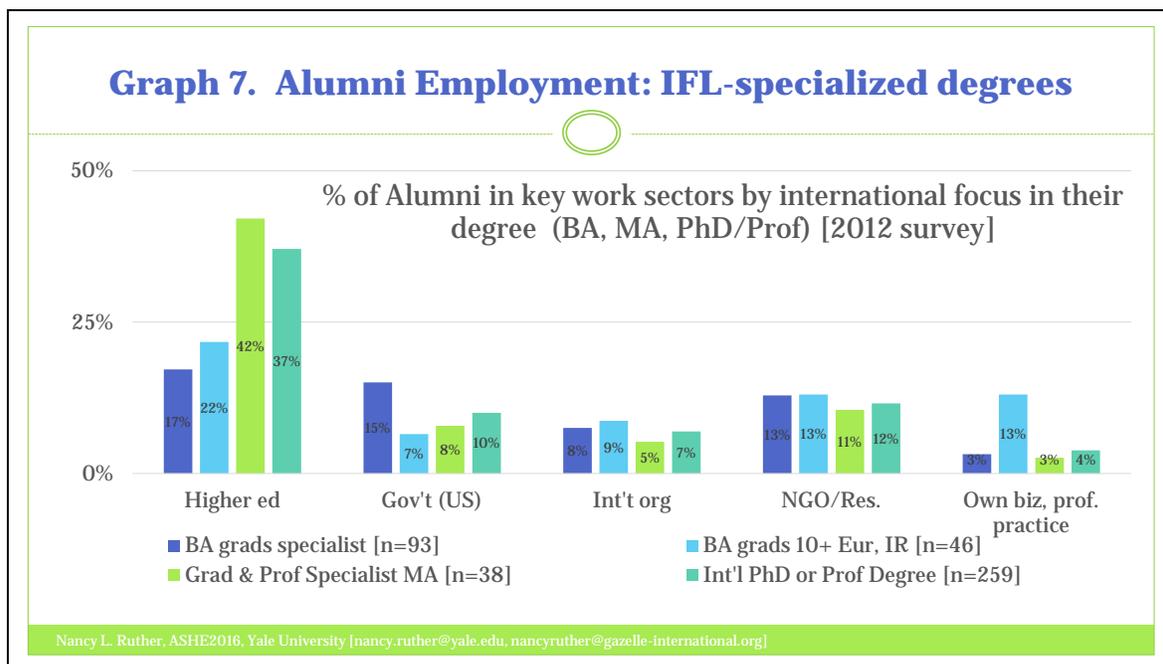
but clearly trended upward, albeit along a jerky path. This pattern tracked fairly closely a larger trend in the decline of the most commonly taught foreign languages, e.g., German and French, with a growth path in Chinese and Arabic. The smaller regions were also four of the five T6 NRC funded regions within the MacMillan Center along with Europe. In the European data, we were not able to segregate the West European (French, German, Spanish) from the rest of the countries included in that cluster, e.g. Russia, Poland, Ukraine, Croatia and other Central and East European countries whose patterns would more likely have followed the smaller regions. Overall, this conforms to the T6 NRC priority on attracting and training students in the less-studies, higher priority regions of the world while sustaining students engaged in the Europe and International Affairs.



**Alumni impact survey.** Beyond the strong outcomes at time of graduation evidenced in the IFL-shadow major analysis and their enrollment patterns during their studies, we wanted to understand the longer term impact of this IFL training. In T6 NRC terms, did they use their training in their work and lives? Or in larger parlance, did they act as true global citizens, exercising their skills and knowledge from this IFL training? Building on the detailed identification of the IFL-specialist or “shadow” majors in the undergraduate graduating classes, we surveyed alumni five and ten years post-degree. We also included a cluster of MCMC IFL-specialist MA graduates and PhD and graduate professional students identified from an earlier test survey used in the process of designing and refining our final survey instruments.

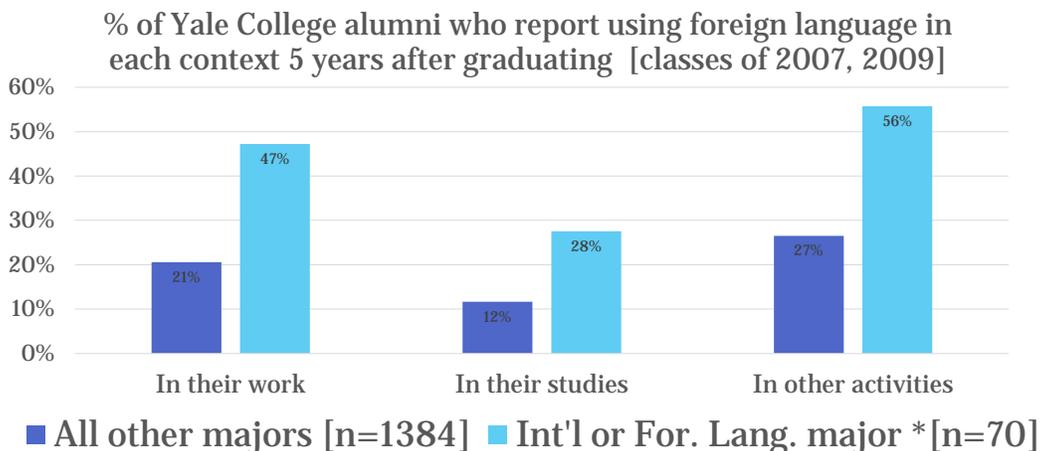
The graph below shows a statistically significant greater portion of IFL-focused graduates 5 & 10 years post-graduation were working in Title VI priority sectors. Among undergrad alumni, IFL-specialists, those with a specific IFL degree like African Studies or Spanish, were more likely to be using their foreign language skills at work and in their lives. They were also most likely to be working in government and then in NGO’s with an international focus. The IFL-shadow majors (10+ courses in the graph) also were statistically significantly more likely to use their FL skills in their careers than their counterparts in their major who did not focus their coursework on IFL content.<sup>31</sup> While less likely to work for the federal

government than the IFL-specialist BA alumni, they were equally likely to work in the international NGO sector. The IFL-focused PhD alumni clearly were in higher education, a T6 NRC priority endeavor. There was a caveat that the higher education question was not reliable because the phrasing allowed for different interpretations as pursuing further education or actually working in higher education. The MCMC MA alumni group was small and seemed to be focused on higher education which was likely not as an employer. We also assume that the BA-alumni also were pursuing further higher education rather than working in the sector.



Given the T6 NRC priority for foreign language expertise, it is worth highlighting the language utilization results of the undergraduate impact survey. As seen in the graph below, the formal IFL majors were significantly more likely to report using foreign language in their work, studies and other activities. This survey was conducted separately from the T6 NRC assessment project but used the questions from our alumni impact instrument. Unfortunately, they were not able to use the IFL shadow majors in their survey so we only have the formal IFL major alumni. Due to changes in the core analytic staff at Yale, we were not able to access the detailed language usage data from the original alumni impact survey with both formal and IFL-shadow majors.

## Graph 8. Alumni Language Use: IFL vs non-IFL Majors



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For undergraduates, happily, we had access to transcript information so the “gold standard” method of tracking their use of the curriculum was possible. With it, we were able to link the undergraduate logic model through the entire cycle from curriculum engagement to outcome in identifying true and shadow IFL majors and on to impact with the alumni survey on using their skills in their work as well as their specific use of foreign languages in their post-graduate lives and work. For the graduate and professional students, we did not have access to transcript information so the “gold standard” method of tracking their use of the curriculum was not available. Instead, we used a survey at the time of graduation to test the logic model. Effectively, we attempted to mirror the undergraduate information by asking graduating students to indicate the outcome, i.e., how had they used the IFL curriculum and how intensively especially with foreign languages. Then, for impact, how they planned to use the IFL skills and knowledge gained during their program of studies at Yale.

Graduate and professional student outcomes. The results show that both the IFL-specialist and the non-specialist students who focused on IFL in their coursework at Yale, fulfilled the Title VI NRC goals of engaging the IFL curriculum, developing specialized IFL skill sets and being more likely to work in government or education. The IFL-specialists and the PhD students who focused on IFL-topics were significantly more likely to pursue critical languages, i.e., those deemed particularly high priority for national interests by the Dept. of Education and the federal Interagency Roundtable on Languages. We produced 4 years of solid outcome results using a simple, effective survey instrument at time of graduation. We can differentiate the way the student groups engaged Yale resources and plan to use their IFL skills and networks in the future. We were able to separate populations of IFL-focused students by degree of specialization. And as serendipity, we gained insight into ways non-native English speakers enhanced their language skills, crucial to their long term success. A set of results are provided with key findings in the attached tables and charts regarding language proficiency gains/losses, career plans, travel

during studies and demand for travel support by different respondents.

Table 2 summarizes the “impact” question for the target graduate and professional school student survey respondents, i.e., what proportion of graduating students plan to use their IFL skills and international networks in their future work. The IFL specialist MA degrees in Area Studies, the Area/MCMC at the top of the table, are the direct target of T6 NRC grants and were largely created and sustained due to NRC support. They showed the highest expected utilization of their IFL skills and the very highest expected utilization of their foreign language skills. In other studies, this MA group is the most likely to pursue careers in government, one of the T6 NRC priorities.<sup>32</sup> The PhD students are the second highest group in expecting to use their foreign language skills and the most likely to pursue collegiate teaching careers, helping to serve a key goal of T6 NRC of continuing to build IFL teaching capacity. The other professional schools are all graduate level, Masters or JD, and show high levels of intention to use IFL skills in their future careers. Environment Studies and Management being the highest.

**Table 2. Expected Use of IFL Skills, Networks in Future Work**

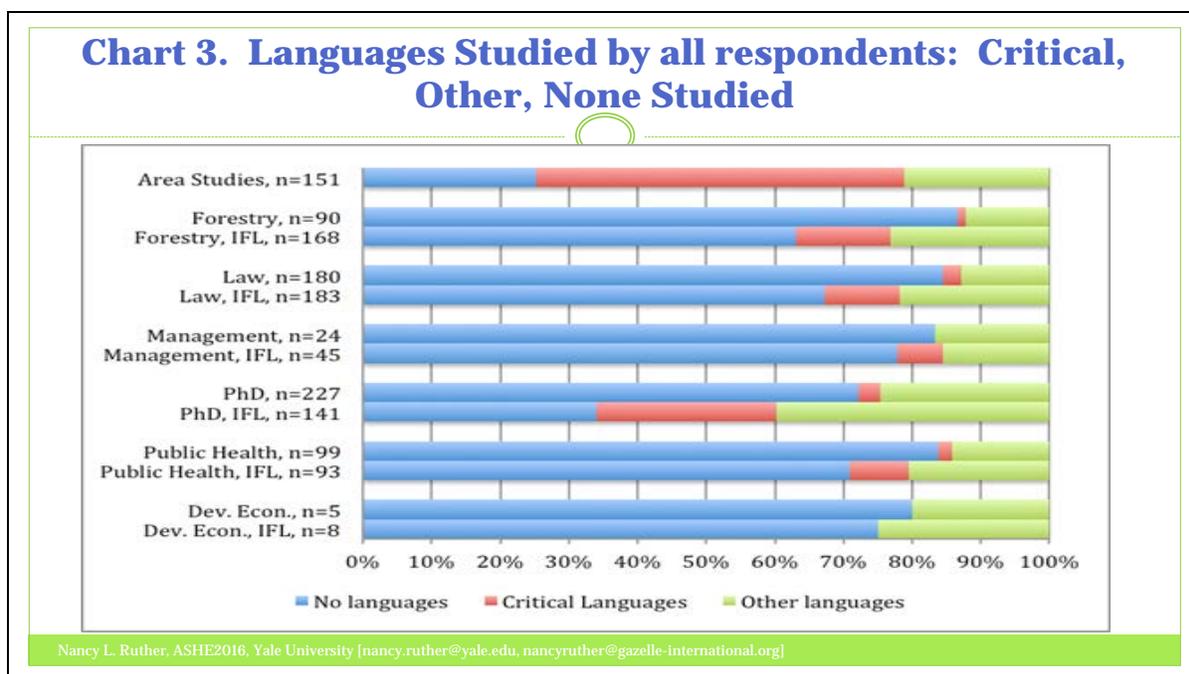
Program	International Area/Knowledge		International Networks
	Skills	Foreign Language Skills	
<b>Area/MCMC</b>	<b>86%</b>	<b>70%</b>	<b>65%</b>
<b>PHD</b>	<b>63%</b>	<b>55%</b>	<b>69%</b>
<b>LAW</b>	<b>75%</b>	<b>47%</b>	<b>51%</b>
<b>Env. Stds</b>	<b>86%</b>	<b>48%</b>	<b>64%</b>
<b>Public Health</b>	<b>77%</b>	<b>46%</b>	<b>77%</b>
<b>Management</b>	<b>86%</b>	<b>45%</b>	<b>77%</b>

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Among undergraduate alumni surveyed five years after graduation, the results were particularly strong. The IFL majors and “shadow” majors were significantly and robustly more likely to report using their foreign language in their work, i.e. the T6 NRC goal.<sup>6</sup> While self-reported, not measured with actual tests, it is also suggestive of a high level of confidence in their skill to use foreign language in employment settings. The other two contexts queried, namely “other activities” and “studies,” may be used as a proxy for “global citizenship”, which is a secondary goal of T6 NRC beyond the primary expertise goal. We focused on foreign language use in three areas of their lives as the hardest skill to develop and the one most likely to have required a high level of mastery to be able to use outside of their studies in their work and lives.

<sup>6</sup> Using the chi-test, <.001

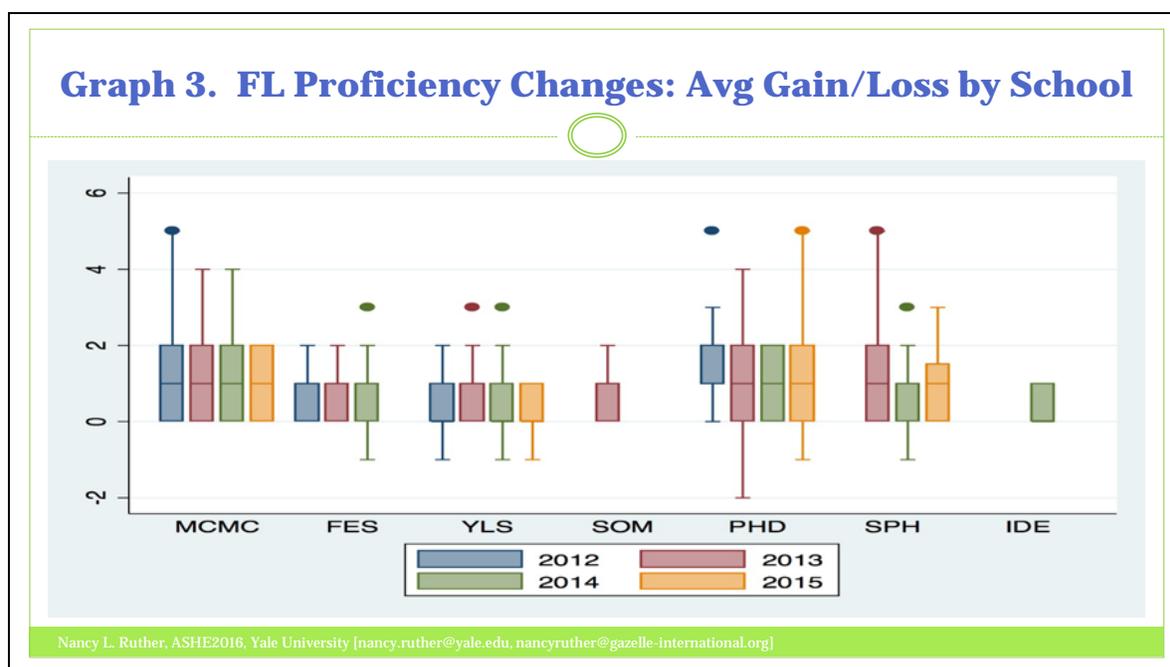
One of the hallmarks of the T6 NRC program is a competitive priority to provide training to advanced proficiency in languages deemed critical by the federal government.<sup>33</sup> In the survey of graduate level students, the respondents were asked to indicate which language(s) they studied and used during their programs of study. We organized the languages the respondents identified, grouping them as critical languages in the priority lists for T6 NRC grantees or other languages that are more commonly studied and used. Chart 3 breaks down their responses by IFL-specialists and non-specialists. The results are statistically significant that the IFL-specialists (in all but Public Health) were more likely to use and study a foreign language in their programs.<sup>7</sup> As expected, the core specialist group of Area/MCMC specialists in the T6 NRC target degrees were the most likely to incorporate languages in their programs, followed closely by the IFL-specializing PhD students. Of particular note was that the PhD respondents who identified as IFL-specialists, had the highest proportion of critical languages. The provides a robust indicator of fulfilling T6 NRC program goals when combined with the PhD respondents' intent to use their languages in their work and future studies as teachers and universities in college settings.



The study of language and critical languages is important to interrogate for this case study but it is not sufficient. Advanced language proficiency is a key goal of the T6 NRC program. How learning gains and ultimate proficiency differed between IFL-specialist and others is important as an outcome indicator.

<sup>7</sup> Get stat (<.001 or .01?). PH was too close to the same proportion of yes/no. Drop Dev Econ from the graph because the group is too small

What does it tell us about the value of the T6 NRC investment in providing language teaching resources from elementary through advanced levels, especially when enrollments are usually quite low at advanced levels? In the next graph, we see a simple box-tale graph of respondent language learning gains (and losses) by home program. The question asked them to identify where they started and where they ended with a particular language on a scale of 1-6 where 1 was virtually nothing to 6 which was highly proficient to fluent. We adjusted the scale to 0-5 to accommodate the statistical tools. The graph shows that the MCMC MA' had the most significant gains with the average moving two steps higher and a few outliers attaining high levels of proficiency. PhDs had similar gains and also admitted to a few losses, to be expected over a 5-6 year degree. While this box-tail plot illustrates the basic concept well, it ignores the geometric and accretive nature of the language learning process, it is not a simple additive process well described by building blocks. Let us turn to a more complex illustration.



To fully illustrate the distance travelled, full learning gain, we use a heat map illustration below. It compares the MCMC MA, the most clearly specialized with substantial focus on languages, with the respondents from the professional school of forestry and environmental studies (FES) as a robust comparison group. As background, FES respondents were the largest group, 70-77% identifying themselves as IFL-focused in their program of study. FES has no language requirement but, with proper justification, a student may earn credit in the three FES Masters degrees for language study. The MCMC MA degrees require and award credit toward the degree for languages related to their field of study. The MCMC MA's start higher as a group, which is a selection effect at admission. For those that start advanced or above in both groups, they tend to stay advanced and FES, perhaps even makes greater gains than the MCMC MA's. What is most notable is the difference with those that start with nothing or bare beginner level. A much higher proportion of the MCMC MA's will move to advanced from beginning or



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At the student level, the findings for undergraduates were strong in terms of engagement and longer term impact. Perhaps uniquely, we trained our sights on Graduate-Professional students, an under-studied yet important segment of IFLE. PhD programs with strong IFL focus are critical to provide the talent for the rest of the HE system but their home campuses find it difficult to provide the expensive advanced courses, upper level or rarer languages and field research opportunities required of true expertise. At the national level, this should be a target for support from the federal government to support the HE system nationwide since individual campuses are hard pressed to provide them. Another national target would be to ensure that the most diverse and under-served student populations, most prevalent in the least internationalized parts of the HE system such as community colleges. It is worth investigating ways that these curricular sounding tools can help target the weak rungs on the ladders of learning from lower, introductory to higher levels and target funding or the bright light of accreditation interests on these as key curriculum or enrollment targets.

By focusing on IFL student plans for career as national outcomes – at graduation and over time in careers – the case study suggests a way to provide objective, concrete indicators of accomplishment and basis for comparison across campuses and fields of endeavor. By aggregating substantive content at the course level, the IFL density indicator provides a cost-effective baseline of faculty and departmental priorities and capacity. It provides a mechanism for benchmarking IFLE strengths across universities at the course level, irrespective of curricular structures. It can help clarify how particular resources relate to student outcomes, it can help a campus target resources on the most important rung on the ladder to support. Career and skills-use plans indicators can help clarify the program development path for colleges that want to strengthen the early rungs of the IFLE ladder and enable their students to reach the next rungs successfully (build from Undergrad to MA...) and comparing across universities as a mark of excellence can help make the resource case. Providing high level courses needed for IFL expertise is expensive and can be hard to justify given competing priorities. Clarifying how particular resources relate to student outcomes can help target these precious resources.

For the policy arena,

- The T6-FH program remains viable and needed in both its goals and its underlying program logic of a family of programs to address the various needs and capacity of the entire higher education system. Its problems, beyond chronic underfunding and lack of high level policy attention, lie in its the archaic implementation approach including lack of modern assessment and benchmarking, and lack of imagination in ways modern technology could be harnessed to create the kind of reinforcing network connections across the family of programs built into the DNA of its program logic.
- Three strengths of the T6\_FH program are worth emulating and updating in our new power-focused international affairs policy environment -- consistent focus on curricular and faculty strength; creating pathways to expertise including priority to foreign languages from foundation to advanced levels; and a focus on longer term utilization of the IFL skills in the workforce.
- One of the perverse lessons of the chronic underfunding was that it forced campuses to partner with multiple units across campus to preserve the core focus on particular regions and issues deemed mission-critical to IFLE. Such a strategy, forcing the SIO to provide mortar rather than bricks, may actually help SIO's build a stronger more sustainable IFLE enterprise.

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<sup>1</sup> Glew, Robert S. and David Wiley, Editors. International and Language Education for a Global Future: Fifty Years of U.S. Title VI and Fulbright-Hays Programs Fifty Years of T6/FH (Michigan State University Press, August 2010). Dept. of Education competition guidelines for 2012 competition. The NRC grants along with Foreign Language and Area Studies (FLAS) Fellowships were among the original competitive programs in the Title VI legislation. See *briefing notes from Yale, Foltz, Sanneh et.al. (2000?) presentation to NAS review board on HEA*

*Title VI and Fulbright Hays programs.*

<sup>2</sup> Get the basic data from Dept. of Education website... count numbers of grantees in 2012-16 and numbers of universities funded. Each NRC grantee equals one area studies or international studies program, e.g. African Studies or Global Studies. A typical grantee would receive \$200-\$250,000 per year before the 2012 cut of 40%. At Yale, the five Area Studies NRC grantees pooled resources to support a common assessment design to provide consistent data and analytic approach.

<sup>3</sup> ASHE 2016 Conference website.... Web-link, viewed 4May2016

<sup>4</sup> Ruther, Nancy L. Barely There, Powerfully Present: Thirty Years of US Policy on International Higher Education (1958-1988) (New York: Routledge), October 2002. Focus on policy arena for international higher education and the legislative history and implementation path of NDEA-HEA Title VI and Fulbright Hayes 1958-88

<sup>5</sup> *ACE/CIGE framework and internationalization map; AACU intl educ rubrics and metrics; IIE on student flows of incoming international students and outgoing study-abroad students*

<sup>6</sup> Ruther, Nancy L. Barely There, Powerfully Present: Thirty Years of US Policy on International Higher Education (New York: Routledge, October 2002); Glew and Wiley, eds., op.cit.

<sup>7</sup> GPRA was a federal reporting and accountability law requiring each executive agency to provide clear outcome measures for its programs. Title VI provided FLAS award numbers as one of its main metrics.

<sup>8</sup> *NLR, the author served on a working group guiding the NSEP in its early days and a chapter in my book (Routledge 2002) addressed its beginnings. I will find other sources on this to cite.*

<sup>9</sup> FLAS Fellowships survey results, Dept. of Education report (March 2016)... *get full citation*

<sup>10</sup> *Dept. of Education website... count numbers of grantees in 2012-16 and numbers of universities funded*

<sup>11</sup> *NLRuther, Routledge 2002; Glew and Wiley, editors, Michigan State 2010; cite legislation? Get some kind of funding picture... total in NRC's/FLAS? Or # of NRC's/FLAS universities? Miriam K as best source*

<sup>12</sup> The competition for NRC and FLAS funding have run in 3-4 year funding cycles and are normally conducted as "conjoined twin applications" even though they are funded by two separate parts of the legislation. To succeed in both, the applying campus must show the same robust course offerings in both the target languages and related world area courses at all levels from undergrad through PhD as well as in the professional schools.

<sup>13</sup> In the age of non-profits and associations, the alternative would have been for the NRC grantees to organize into their own "NRC association" following the example of the other two "center" programs in the T6-FH family for business (CIBER) and language (LSC). But the NRC's were larger in number, smaller in per-grant size and felt the competitive pressure more acutely than the collegial instinct. At Yale, we lost roughly 25% of the proposals we submitted, roughly 1 per competitive cycle.

<sup>14</sup> *GPRA... passed in 1988? 89? Ck what year it was passed; Get first year that T6 provided some output measure and I think it was only FLAS, nothing about NRC programs*

<sup>15</sup> O'Connell, Mary Ellen and Janet L. Norwood, Editors. International Education and Foreign Languages: Keys to Securing America's Future. Committee to Review the Title VI and Fulbright-Hays International Education Programs, Center for Education, Division of Behavioral and Social Sciences and Education, National Research Council for the National Academies. (The National Academies Press: Washington, D.C.) 2007.; also Yale working paper for the NAS review committee using African Studies and other Title VI and Fulbright Hays data from Yale archives.

<sup>16</sup> U.S. Department of Education, Office of Postsecondary Education, *FLAS Tracking Survey Results: 2010-12 Cohort International and Foreign Language Education*, Washington, DC, 2015. This report is available on the Department's website at: <http://www2.ed.gov/programs/iegpsflas/performance.html>. Viewed October 12, 2016.

<sup>17</sup> *Dept. of Education website... count numbers of grantees in 2012-16 and numbers of universities funded. Each NRC grantee equals one area studies or international studies program, e.g. African Studies or Global Studies. A typical grantee would receive \$200-\$250,000 per year before the 2012 cut of 40%. At Yale, the five Area Studies NRC grantees pooled resources to support a common assessment design to provide consistent data and analytic approach.*

<sup>18</sup> The Department of Education draws on the Interagency Language Roundtable that consults annually to produce the list of over languages deemed of critical importance to effective functioning of the US Government in its conduct of international affairs. [*ck the specific ILR process and get the number of languages or a reference to the full set of critical languages for the 2012 competition*].

<sup>19</sup> ACE, AACU and others on campus internationalization. Lots of references to put here.

<sup>20</sup> Deardorff and AACU and Chris Cartwright's x-cultural rubrics for undergrad intl ed; Claire Kramersch as "FL+" basis for fuller x-cultural literacy;

<sup>21</sup> Soria, Krista M. and Jordan Troisi, (2014), *Internationalization at Home Alternatives to Study Abroad*:

Implications for Students' Development of Global, International, and Intercultural Competencies. Journal of Studies in International Education, Vol.18(3) 261-280

<sup>22</sup> *Get the MLA study on languages and enrollments; the NCES on degree fields and graduation rates.*

<sup>23</sup> *Deardorff and AACU and Chris Cartwright's x-cultural rubrics for undergrad intl ed; Claire Kramsch as "FL+" basis for fuller x-cultural literacy;*

<sup>24</sup> *ACE-CIGE, AACU, other higher education associations that provide guidance, research, on intlzn and intl edu; See particularly, ACE-CIGE "Mapping Campus Internationalization" five year survey. Also non-profit professional associations such as AIEA, NAFSA, IIE. Also, a growing set of for-profit groups providing campuses with support for international students, English language learning or developing overseas research partnerships and student exchanges.*

<sup>25</sup> *COFHE – Consortium on Funding Higher Education – 35 Private Universities and Colleges that share assessment information and benchmark their programs and activities against each other. Get website reference*

<sup>26</sup> *We used the NCES definition of a major as 10 or more courses in a given field for undergraduates; and 5-9 courses for a minor. Need to check when this was in force and it is still used. We did not pursue the impact questions for the "shadow minors" since the response rates to alumni surveys for that group were negligible. The response rates for alumni in the "shadow majors" was close to the response rate for the true IFL-specialist majors so they would be valuable to include in future impact surveys.*

<sup>27</sup> *In competing for T6 NRC-FLAS awards, MCMC provided detailed qualitative information on faculty strength including languages, recent publications focused on the region-language of the award, advising, public service, etc. Summary tables of faculty strength on key variables were developed in the early design of the assessment project but were not developed for analytic use due to time constraints.*

<sup>28</sup> *We used "section counts" to have a comparable class size across different types of classes. For example a foundations lecture course might be one course with total enrollment of 150 students but be broken into sections of 15-20 for study groups and review with teaching assistants. Similarly, large introductory language courses such as Spanish 101 could have total enrollment of 300+ but actually be taught in sections of 15-20 students each. Seminars for upper-class students or graduate and professional students typically have enrollments of 15-25 so one seminar was counted as one section for our analysis. We did not include certain outlier classes, e.g. individual performance classes such as violin or individual tutorials with a professor, which were not uncommon but far outside the content definition we used for IFL content or non-IFL content fields and subjects.*

<sup>29</sup> *Yale's Professional Schools are graduate-only traditionally. Roughly since 2010, there have been special honors tracks where undergraduates may be admitted to do a 5 year degree, eg. The Silver Scholars BA-MBA with the School of Management.*

<sup>30</sup> *The detailed report of the transcript analysis is available in a PDF report form. Internal Yale documents, Office of Institutional Research, Cyndi Langin to Nancy Ruther, January 2011.*

<sup>31</sup> *Yale, Office of Institutional Research, internal report from Yale College survey of alumni. Internal documents, see if there is a date and citation possible. The questions used in that report was same as the one used in the Title VI NRC assessment so the results are comparable to the alumni data from our alumni survey.*

<sup>32</sup> *Check the reference source. In the T6 NRC-FLAS competition, Dept. of Educ made the MA-degree a competitive priority because their research showed that this was the group most likely to go into government and other priority employment sectors for T6. I need to find that source? Who would have it?? Miriam? Someone else?*

<sup>33</sup> *Add details...see ref #17 and make sense of this as a reference. The Dept. of Education participates in and consults with the Interagency Foreign Language Roundtable to determine the priority languages for each T6 NRC-FLAS quadrennial competition and updates annually for NRC-FLAS grantees. A specific sub-set of languages is deemed critical for different federal needs within the priority list. This normally includes languages related to the region of focus, e.g. Arabic, Turkish, Persian, Hebrew for the Middle East Studies NRC's. Many are less and least commonly taught languages, e.g. Chinese as less commonly taught or Zulu as least commonly taught. More commonly taught languages, eg. French, German, Spanish, may also be eligible but normally for advance proficiency development or as a second, corollary language needed for in-depth understanding of a country or topic, e.g. Wolof for Senegal, West Africa, but French as a second language to understand colonial laws or contemporary trade agreements. .*