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Essays in academic intelligence and security education

Michael Landon-Murray  
*University at Albany, State University of New York*, mlandonm@uccs.edu

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ESSAYS IN ACADEMIC INTELLIGENCE
AND SECURITY EDUCATION

by

Michael Landon-Murray

A Dissertation
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ABSTRACT

This dissertation consists of four essays. These essays challenge and build on existing scholarly study, filling critical research gaps—normative, empirical, and practical. The dissertation’s critical literature review (Essay 1) identifies limits and needs in the field, also serving to situate the other three essays. Essay 2 urges a more precise dialogue on academic competencies for intelligence students, also discussing issues associated with designing and evaluating academic intelligence curricula on the basis of ODNI Core Competencies. It then offers a mechanism to help academic programs mitigate the narrow faculty expertise and “amateurism” issues noted in the literature. Essay 3 evaluates U.S. graduate programs in security and intelligence studies on the basis of advanced methodology and models. These are seen as critical but lacking knowledge sets in U.S. intelligence organizations, with some speculating that higher education is largely to blame. Essay 4 looks beyond the Anglo world to academic intelligence education in other parts of the globe. In addition to profiling these programs, tentative causal and comparative dimensions are explored in the final essay. The dissertation opens with a discussion of key study objectives and findings.
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Dissertation Overview and Key Findings

Following September 11, 2001, the function and quality of intelligence analysis has been the focus of government study and reform, scholarly attention, and higher education. In the United States, the Office of the Director of National Intelligence (ODNI) was established, as well as the Department of Homeland Security and the National Counterterrorism Center. The Central Intelligence Agency (CIA) commissioned studies on analytic process and problems in U.S. intelligence organizations (Cooper, 2005; Johnston, 2005), and the intelligence literature saw significant growth in the treatment of intelligence analysis (Varouhakis, 2013). With the intelligence hiring increases that came after 9/11, colleges and universities—chiefly in Anglo nations—established intelligence studies programs to help meet this demand.

More than a few have expressed worry that the need for these programs is not being adequately meet, qualitatively or quantitatively (Rudner, 2009; Spracher, 2009; Marrin, 2011). Martin Rudner (2009) expresses concern about faculty “amateurism,” and Stephen Marrin (2011) describes the development of these programs as something of an “Academic Wild West.” Some, including Arthur S. Hulnick and Carmen Medina, have opined that intelligence organizations do not want graduates who are already “intelligence specialists,” but rather individuals who have a solid substantive foundation (Spracher, 2009). Stephen Marrin (2011) noted that intelligence organizations and private sector companies are hiring these specialists, an indicator of their value and relevance. He adds, however, there is a continuing need to demonstrate the value-added academic intelligence curricula bring to the IC. William C. Spracher’s 2009 dissertation
sought to examine that value-added, a study that also included many non-intelligence studies programs and graduates.

Before the advent of intelligence studies programs, the teaching of intelligence had been largely couched in security studies, political science and international relations programs (some still is) and the corresponding literature was quite small. Scholars have increasingly studied these programs in the years since they began emerging. Much of this work has been descriptive or broadly normative in nature, not surprising given the nascent state of the programs themselves. Some has been more evaluative and even inferential. To a minimal extent, there is internationally comparative study noting differences in educational approach. For example, programs in the UK tend to teach intelligence using historical approaches, while their American counterparts are more likely to apply the policymaking framework (Goodman, 2006). On the normative side, the key issues and debates in the literature relate to the inclusion of training and tradecraft, substantive versus process knowledge, intelligence studies as a standalone degree or embedded specialization, intelligence faculty composition, and how intelligence is best taught. In general, the United States has been at the forefront of this research, a function of its comparatively large set of academic intelligence programs.

The four essays comprising this dissertation challenged and built on existing scholarly study, filling critical research gaps—normative, empirical, and practical. This was done along the following lines. The dissertation’s literature review is the most complete and up-to-date available. In addition to situating the other three essays, it represents the first critical and comprehensive look across the literature. Essay 2 urged a more precise dialogue on academic competencies for intelligence studies, also discussing
limits and issues associated with designing and evaluating academic intelligence curricula on the basis of ODNI Core Competencies. It then offered a mechanism to allow academic programs to mitigate the narrow faculty expertise and “amateurism” issues noted in the literature. Essay 3 evaluated U.S. graduate programs in security and intelligence studies on the basis of advanced methodology and models. These are seen as critical but lacking knowledge sets in U.S. intelligence organizations, with some speculating that higher education is largely to blame (Heuer, 1999; Collier, 2005; Miller, 2008). Essay 4 looked beyond the Anglo world to academic intelligence education in other parts of the globe.

In this section, the major points and findings from the four essays will be revisited and broader assessments that can be drawn from this research are discussed. It concludes with some thoughts on how this research can be extended as well as directions for intelligence education and training more generally.

The literature on academic intelligence education remains somewhat nascent and relatively small, in part a function of the recent emergence of those kinds of programs. The role of higher education, and contributions of specific program types, were not a scholarly focus before the 2000’s. This was despite the critical function colleges and universities played in the “external knowledge environments” of intelligence organizations. The first and necessary steps taken in the post-9/11 literature were to profile and map programs while discussing their appropriate role and content. The unit of analysis in studies on intelligence education has moved from individual courses to programs in their entirety. Further, research has grown more sophisticated in how academic intelligence education has been looked at, taking evaluative and inferential
approaches in some cases. Insights from educational psychology, newer learning technologies, and the changing mix of intelligence used by all-source analysts (80% or more being open source intelligence, or OSINT) have also led to innovative practices and ideas in some programs. These practices and ideas have been the focus of a number of scholarly articles (Wheaton, 2011; Jensen, 2011; Breckenridge, 2010).

One especially interesting innovation is the Brunel Analytical Simulation Exercise (BASE) at Brunel University in London. Master’s students are required to complete the exercise as part of their degree. They are tasked to provide concrete intelligence products relating to real-time, unfolding dynamics (using OSINT). This task not only mimics the requirements and intelligence sources of practicing analysts, but also the organizational and interagency dynamics they operate within. When students are enrolled in BASE, they take a concurrent course in social science research methods. Stephen Marrin (2011) has also suggested something similar for intelligence studies programs—a course where students are introduced to the social science foundations of the analytic methodologies used in intelligence contexts.

Despite the growth of intelligence studies programs, it is important to remember that many of today’s intelligence analysts have not come from intelligence studies programs. Thus, to focus on only those programs means the educational backgrounds of a large segment of the intelligence workforce goes unstudied. In William C. Spracher’s (2009) sample of 77 recent U.S. intelligence hires, only one had completed an intelligence studies program. No doubt, more have entered the IC in the intervening years, but it is safe to bet most are still coming from other kinds of programs. The programs selected for essays three and four of this dissertation were selected with this in
mind, a practice that should be continued going forward. Put differently, the unit of analysis—at least in some studies—should become the network of programs that produce intelligence analysts. It will be important to also continue examining individual courses and programs, not to mention specific practices and pedagogies applied therein.

It has been argued in this dissertation that a key normative facet of the literature, parsing the role of training and tradecraft in the academic sphere, has moved forward with insufficient attention and detail. Some have endorsed this kind of instruction, some have rejected the idea, and some have voiced the need for caution in finding a balance (Spracher, 2009; Breckenridge, 2010; Rudner, 2009; Marrin, 2009). The specifics behind these differing views have not always been provided, and the practicalities and issues of incorporating content that falls under training and tradecraft have been largely unexplored. In any case, the “blurring” identified by Stephen Marrin (2009) is continuing, yet discussion around the issue has remained minimal.

The literature review for this dissertation outlined the various perspectives and statements that have been offered on the training/tradecraft issue, identifying a dialogic gap and need for more precision in defining key concepts (like “tradecraft” and “professional practice”). The second essay then takes up some issues that relate to incorporating training oriented material into academic curricula. More generally, the case is made for devising a separate set of specifically educational competencies. As was stressed in that essay, the author was not endorsing uniform, universal standards but rather a guiding framework that prioritizes education and training in intelligence studies programs. For example, the first major study on academic intelligence curricula measured selected programs on the basis of ODNI Core Competencies. Like Middleton’s
(2007) earlier study, Spracher’s did not “crosswalk” for some of the educational competencies Collier (2005) and others have stressed as critical but lacking in the U.S. Intelligence Community. Thus, applying ODNI and other professional competencies overlooks key educational skill sets.

Most broadly, the argument is made that academic programs need to retain a degree of insulation from intelligence organizations—and their competencies and cultures—for a couple important reasons. The core mission of these programs remains educational, and those foundations should not be displaced or eroded by overly “catering” to intelligence organizations. And as was discussed, some key voices have actually suggested that programs should be deferring altogether on tradecraft and professional practice (Rudner, 2009; Spracher, 2009). Incorporating the input and experiences of human capital officers and analytic managers would go along way toward resolving the seemingly conflicting views that have been reviewed in this set of essays. While Spracher (2009) included new intelligence hires and seasoned experts in his study, he did not collect data from human capital officers and analytic managers.

Others have offered the possibility that intelligence students take certain courses or workshops to get waivers from training modules in intelligence organizations (Breckenridge, 2010; Marrin, 2011). For such a construct to be workable, intelligence representatives will need to be intimately involved, and it is hard to think of two more knowledgeable, well positioned groups than human capital officers and analytic managers. Other similar fields, like homeland security, have seen studies of this kind, and research already commissioned by the CIA seems to have cleared the research space for this undertaking. Such an option or program would hone in on the appropriate
harmonizing of academic education and professional development. Focusing on this sort of “connective” content might also be a good way to bring about more specific, targeted discussion in the literature.

There is also the possibility of over-standardizing programs and injecting problematic Intelligence Community tendencies into curricular models and exercises. New intelligence hires should certainly meet a minimum educational threshold, but a key contribution of higher education is the production of diverse and differently skilled graduates. Moreover, while the mechanisms may be difficult to trace with precision, as academic programs respond to IC characteristics, practices and other signals, negative attributes of professional intelligence may be transmitted to university settings. The IC has been criticized for overemphasizing current intelligence at the expense of longer-term, strategic intelligence, and for promoting a tendency to speak in a falsely confident voice in analytic products and communiques.

Along these lines, higher education institutions must be cognizant of what kinds of skill sets and people they are (and are not) providing intelligence organizations. As Michael Collier (2005) speculated, and the third essay of this dissertation supports, the U.S. higher education system has graduated individuals with very limited foundations in advanced methodology and theoretical models. Collier also suggested there are literally hundreds of theoretical models from which political and military intelligence analysts can borrow to help them in their work. The literature has failed to produce much in the way of offerings in this area, and thus it remains important to populate an academic competency framework with applicable models. This was also taken up in essay three, which discussed the applicability of systems thinking, ethnography, and organization
theory to the work of intelligence analysts. These were selected because they were the most common advanced methods and models identified in the sampled programs. The essays also stressed the importance of regular environmental scanning—looking for methods, models and new knowledge that can have utility for intelligence organizations and analysts.

Teachability is another key consideration, and some of the ODNI Core Competencies seem beyond the reach of the classroom. Similarly, operationalizing these competencies in a way that makes “crosswalking” them with the content of academic programs is a very difficult task. ‘Personal integrity’ is no doubt an important characteristic for intelligence professionals. But, how faculty members develop that in students, and how researchers identify intelligence studies programs that are able to do that, is fairly difficult. Carl J. Jensen (2011) has outlined an approach to teaching these competencies, largely outside the classroom, terming the design the “Intelligence Officer Training Corps.”

Another important issue the second essay speaks to is the limited faculty expertise and “amateurism”—which are largely two separate issues—observed in the literature (Rudner, 2009; Spracher, 2009; Marrin, 2011). For example, if intelligence studies programs, in partnership with intelligence organizations, go forward with academic courses that can waive professional training, particular types of faculty expertise will be required. Not all schools and departments are likely to have the needed resources. There will also likely be some areas, topics and skills that intelligence organizations may like their prospective hires to focus on during academic study, but with their involvement or direction.
With these limits and issues in mind, the ODNI “Academic Intelligence Certificates” are recommended in the latter half of the second essay. Like Jensen’s OITC program, they offer a means of teaching in areas that might otherwise be a challenge for particular departments. This device would be driven through the use of cyber applications, and would give students access to a much larger menu of courses. This, for example, could be particularly useful for smaller schools and departments that may have more limited faculties than the larger graduate schools. It would also allow for more fluid and agile offerings than conventional departments and a means of establishing better, more purposive sequencing between academic education and professional development. E-learning has become more established in the professional sphere, though some online universities are offering intelligence studies as well (Campbell, 2011). The Certificate program would simply extend these dynamics to a broader audience, allowing departments and students access to a larger set of competency and content areas. This can also include more purely educational competencies, including those Michael Collier (2005) said should be a core part of the education process for anyone aspiring to be an advanced intelligence analyst.

Collier is not alone in his opinion that advanced social science foundations should be a part of the education received by future analysts. As noted above, Brunel University has made advanced social science methods a course requirement of all Master’s students (Davies, 2006). Stephen Marrin (2011) has opined the social science advent of analytic methodologies would be an important course for intelligence students. Others have also pointed to the importance of social science foundations for intelligence analysts, and the failure to bring those foundations to bear in intelligence organizations (Miller, 2008;
Heuer, 1999). Collier (2005) has speculated that methods requirements like those at Brunel University—which in fact might not meet the threshold he set out—are the exception, not the rule. He wrote that only more “progressive” graduate programs are meeting this fundamental obligation, a factor largely contributing to the absence of methodological and theory-based understanding in the U.S. Intelligence Community.

Since this empirical space had not yet been filled, but a choir of concern could be observed, the third essay applies the “crosswalking” methodology of William C. Spracher (2009) and Gregory Middleton (2007) to test for competencies that fit squarely into the mission of graduate level intelligence education—advance social science methods and modeling. These were not accounted for in the two studies just noted. And if these competencies are not developed in academic setting, they are not likely to be included in the professional development analysts receive once they are in intelligence organizations (Collier, 2005).

As noted above, Collier’s speculation about the emphasis placed on advanced methods and modeling was substantiated. For example, of the 19 programs sampled in the third essay, only one had a requirement in the category of advanced analytic or research methodology. More than half of the programs did require methods courses that touch on advanced material, but these “hybrid” classes are more geared toward foundational and basic methods. Only three programs required coursework in advanced theoretical modeling. None of the programs selected had requirements for both advanced methods and advanced modeling. To be sure, students could seek out electives in both categories in most (13 of 19) of the schools included in the study. Of the pertinent courses identified, the more common were ethnographic analysis (3 programs),
organizational theory or analysis (11), and systems approaches and modeling (9). An investigation of the applicability of each of these areas is offered in essay three. These are just three of what Collier suggests could be many useful tool sets for advanced intelligence analysts, so environmental scanning and new suggestions should be a sustained effort of those looking at academic intelligence education. Essay three also provides full and comparable maps of each of the 19 programs. This adds to the literature’s empirical base, broadening it to include the types of programs that many intelligence analysts graduate from (international affairs, international security, and so forth).

The findings in essay three support the causal relation Collier (2005) points to between a lack of advanced social science in graduate education and the “lack of U.S. intelligence analysts trained in the proper development of theoretical frameworks and research hypotheses and in advanced social-science analytic methods—the basic tools needed by analysts to do their jobs properly” (p. 21).

In addition to broadening the empirical base in the context of the United States, this dissertation represents the first study to look beyond Western and Anglo academic programs. As such, it is among the first efforts in the broader intelligence literature to do cross-national analysis in a way that allows for comparative understanding that is not only descriptive, but also tentatively causal. Some key voices have called for more causal and comparative approaches to the study of intelligence, and this essay moves into that space (Johnson and Shelton, 2012; O’Connell, 2004).

The sampling for the fourth essay was done in a purposive fashion, looking first to those nations that are likely to have more exigent or demanding human capital needs in
the intelligence sector. Five programs in different countries were selected in regions that have thus far been excluded from study. Two of the programs were standalone intelligence degrees (in Indonesia and India), one was an intelligence concentration embedded in an international relations degree (in South Korea), and two were security studies programs with intelligence courses and instruction (in South Africa and Israel). Thus, intelligence studies programs are not just an Anglo phenomenon, and the ways in which intelligence studies manifests in the selected academic programs largely maps to what is seen in those already examined.

The four conventional approaches to the teaching of intelligence are also observed in the selected programs, with the policy and functional variants being most common. This may suggest the influence of U.S. programs, as opposed to UK programs, for example, with the latter studying and teaching intelligence typically through the historical approach. More specifically, the case of the University of Indonesia suggests that programmatic diffusion is in fact at work. That program mapped in a rather comprehensive way to the one found at Mercyhurst University in the United States. Mercyhurst was the first program of its kind in the US. It is considered a sort of model program, which now appears to be being replicated abroad. Also, like in many programs in the United States, advanced social science methods and models were not found to be a common requirement.

In addition to national circumstances, international position, and diffusion of practices, we saw that departmental location explains some of the observed variation in program design and content. The standalone programs, for example, approach the teaching of intelligence from more angles, and have more specialized and practitioner-
oriented content. Broader trends in program specialization also likely fit into the causal framework (O’Neill, 2005). The dynamics outlined in the fourth essay are tentative to be sure, but do provide some direction for continuing study.

A Last Word

Each of the essays in this dissertation sought to fill an important need in the literature, starting with a critical review of that literature as it stands. It raised issues with the framework applied in the first major study of academic intelligence curricula, discussing the development of a separate set of academic competencies. It then tested program content for academic competencies that the Spracher study did not take into direct consideration. These competencies—advanced social science methods and models—were found to be lacking in the programs selected, supporting the assertions others had made but not investigated empirically. The dissertation also looked beyond the Anglo world of intelligence studies programs, contributing some comparative work in the broader intelligence studies literature.

Each of the four essays also offers some directions that can be taken up in the future study of academic intelligence education. This includes essentially repeating essays 3 and 4 down the road and extending a dialogue from essay 2. One of the chief recommendations is that the work of International Association for Intelligence Education (IAFIE) be more broadly shared. In September of 2013, the proceedings of a recent IAFIE conference were published in the Journal of Strategic Security, a positive step and one that should continue. The field may also think about a dedicated education journal, as the related disciplines of public affairs, political science and homeland security have
established. Human capital officers and analytic managers should also register their views in the literature. It has been argued that such an effort can be done without compromising intelligence organizations and operations.

It is also important to begin testing the efficacy of online approaches to intelligence education. This might include a pilot run of the device outlined in the second essay (the ODNI Academic Intelligence Certificate). If these modalities can be applied to positive ends, they should be used in greater frequency. Likewise, if some are found to be dubious in their effectiveness, they need to be revised or discarded.

Lastly, it is important to study the other contributions higher education can make in terms of educating intelligence practitioners and expanding the pool of knowledge from which intelligence studies programs teach. The Intelligence Studies Centers, which can be found at a number of universities in the Anglo world, have yet to be examined for their productivity and contributions. The devising (or not) of doctoral programs in intelligence studies should also be taken up with greater vigor. Establishing intelligence studies as a recognized and respected discipline may be helped tremendously by this, and the knowledge produced could pay tremendous dividends in the education of students and practitioners.

References


Essay 1: Moving U.S. Academic Intelligence Education Forward: A Literature Inventory and Agenda

Introduction

In the decade since September 11, 2001 intelligence curricula have cropped up at dozens of colleges and universities, largely in the United States, but also to a lesser extent in Western Europe, Canada and Australia. Accompanying this growth has been a growing literature that describes and examines various aspects of these programs. Compared to the pre-2001 literature, contemporary research and writing in this area has grown not only quantitatively but also in terms of sophistication. The unit of analysis has become entire programs rather than individual courses and the issues taken up are more advanced and dimensionalized, including comparative and inferential analyses. However, much of the work is descriptive in nature, not altogether a surprising thing given the newness of these programs and literature on them.

A critical mass of empirical and normative analysis has been reached, and this essay will be a full inventory of that work. Many of these programs, and the academic intelligence education “market” broadly, have been “mapped.” We have seen the emergence of myriad perspectives, often put forward without reference to or reconciliation with the perspectives of others. This essay maps research market, so to speak, and brings the views offered in the literature in closer contact with one another.

A robust dialogue and research agenda is necessary if we are to ensure that the world’s best higher education system is optimally serving the world’s largest intelligence system. This essay is being written at a time when U.S. higher education is facing criticisms that students are leaving colleges and universities not much different than when
they arrived (Arum and Roksa, 2010; Hacker and Dreifus, 2010). More specific to the intelligence context, a number of scholars have pointed to IC deficiencies—some general and some more specific—that seem partly to have their roots in higher education (Collier, 2005; Cooper, 2005; Johnston, 2005; Middleton, 2007). These scholars have identified difficulty with non-linear thinking and complexity, fundamental analytic pathologies and inadequate social science foundations, and problems with organizational adaptation and cultural understanding. Further, some key scholars and educators are quite skeptical of the newly emergent academic intelligence curricula in the U.S (Rudner, 2009; Spracher, 2009). Broadly, Bowman H. Miller (2008) has written:

“A key vulnerability of the U.S. Intelligence Community has its root causes in the overall reality of American higher education. Intelligence managers and agencies wrongly assume that their personnel, newly hired or ‘previously owned,’ bring the requisite basic, expert knowledge for their work with them—primarily from their university educations. Working from that false premise, the resources, time, and attention being paid to building more and new knowledge are vastly underrepresented compared with the emphasis on training in analytic skills and information handling.” (p. 338)

This literature review will not attempt any sort of proverbial grade for the literature on academic intelligence education, or the programs that literature examines. However, one key observation is that while there is an increasing sophistication demonstrated in the contemporary literature, some of its most important facets have unfolded along imprecise or unelaborated lines. Despite this relative imprecision—and really on the basis of it—strong and competing viewpoints have been advanced. This lack of specificity in language and explanation has impeded a more exacting, integrated literature.

The chief object of this essay is to review in a critical way the literature’s key
issues, competing perspectives, and empirical contours. It concludes by setting out some future agendas for constructive, knowledge advancing action.

The examination of the literature is divided by pre-2001 and post-2001 works. The pre-2001 literature is quite limited both in number and scope of inquiry when compared to what has come in the last decade. The post-2001 section is organized by normative versus empirical analysis. The normative portion includes the following topics: what should be taught, how it can be taught effectively, and who should be teaching. These are the issues that have largely driven conversation and research in the intelligence education literature.

Normative perspectives on academic intelligence education have clear implications for much of the empirical research that has been done. The research questions and designs used for evaluative analysis are often premised on largely normative suppositions. Some research—namely William C. Spracher’s (2009) dissertation, the largest empirical work to date—has been done in part to gather normative perspectives. In such cases, for the purposes of this essay, core research questions will be treated in the empirical section and the more ancillary questions in the normative section.

Before moving to the core of the essay, a brief history of the advent of academic intelligence curricula is presented. Some key issues specific to the emergence of these new programs—which marks a truly new era for intelligence education—are discussed and built upon in the section that follows.
The Emergence of Academic Intelligence Curricula in the U.S.

While intelligence has been studied and taught in America’s colleges and universities for decades, academic programs with the word “intelligence” in their name emerged only in the last several years (Spracher, 2010). These new intelligence-specific programs can take the form of entire degrees or concentrations within other degrees (namely liberal arts, such international affairs). They have emerged primarily at the Bachelor’s and Master’s levels (Campbell, 2011; Spracher, 2009).

Thus far, only a very small number of schools have begun or considered beginning a Ph.D. in intelligence studies (Campbell, 2011). There has been little in the way of detailed discussion on this matter, but opinion has varied on the merit of standalone intelligence doctorates (Marrin, 2011; Spracher, 2009). Carmen Medina, for example, suggested that intelligence organizations are not likely to hire intelligence studies Ph.D.’s (Spracher, 2009). Stephen Marrin (2011) believes doctoral work on intelligence should continue to be done within the parameters of other disciplines. Some experts interviewed in Spracher’s (2009) study supported the idea of intelligence doctorates, pointing to the benefits they may hold for advancing knowledge and teaching in the field.

Previously, students likely to pursue careers in the intelligence field completed liberal arts degrees—commonly political science and history at the undergraduate level and international relations at the graduate level (Campbell, 2011). These programs—with some now offering intelligence specializations—continue to produce the majority of new intelligence hires and are thus an important consideration for the intelligence education literature. To be sure, before the advent of intelligence programs, students
increasingly had the option to take classes in intelligence. In the 1980’s and 1990’s two reports identified such courses in U.S. colleges and universities (Cline, 1985; Fontaine, 1992). In 1985, a total of only 54 intelligence courses had been identified (Cline, 1985). That number grew to an estimated 200 to 300 by 1999 (Macartney, 2009). In 2009, following the emergence of the new academic intelligence curricula, the number of documented intelligence courses rose to at least 845 (Spracher, 2009).

By and large, both the new and already established academic programs are meant to prepare analytic professionals. While courses are offered on aspects of intelligence like operations and counterintelligence, the substantive and methods content of these programs speaks to an analytic bent. While there is some disagreement on what (if any) analytic training and tradecraft should be included in academic programs, providing operational training is simply beyond the purview of higher education for a number of obvious practical reasons. ‘Analyst’ is certainly the most significant occupational category that academic programs can cater to in an in-depth way. The job of analysts is not one dimensional, however. Increasingly, analysts take on a diversity of roles and tasks (Corpora, 2007). As we will see, some of the authors who have examined academic intelligence curricula have done so with this fact in mind.

Stephen H. Campbell (2011) counts the emergence of academic intelligence curricula among three contemporary trends in American intelligence education—the other two being the use of e-learning and the development of education standards primarily in the Intelligence Community (IC). Stephen Marrin (2011) views these intelligence programs as a new and distinct fifth dimension of higher education support to the IC—that dimension being the provision of ‘generalist’ analysts with strong
foundations in process-oriented knowledge. The four already established include: 1) the provision of (specialist) graduates, 2) a place to send professionals for additional education, 3) a source of expert input and 4) management guidance for intelligence organizations.

Generalists and specialists can be distinguished on the basis that the latter will be more reliant on substantive (i.e., Middle Eastern studies) and disciplinary (i.e., political science) knowledge. While Marrin does note that generalists also need some substantive and disciplinary background, they are trained largely in the methods and mechanics of intelligence analysis. These generalists are expected to be adaptable, able to deftly maneuver and analyze intelligence on changing targets and issues.

Marrin (2011) suggests an important distinction is emerging in academic intelligence curricula between intelligence studies programs and “Intelligence Schools.” The former focuses on the broad examination of the role and theory of intelligence while the latter emphasizes practitioner skill sets and analytic tradecraft. By and large, this is a differentiation that has not yet permeated the intelligence education literature. The number of each type of program is also unclear, and it is a relative unknown if intelligence organizations and managers discern a practical difference between the two when making hiring decisions.

Academic programs focusing on intelligence—and intelligence studies as an academic discipline—continue to face challenges in convincing higher education and intelligence circles of their merit (Rudner, 2009; Spracher, 2009; Marrin, 2011). Stephen Marrin (2009) has suggested that before going forward with anything like academic standards for intelligence curricula, educators need to define and develop intelligence
studies as an academic discipline with stated principles, purpose and value. In Spracher’s 2009 dissertation, Arthur Hulnick, Mark Lowenthal and Carmen Medina said intelligence should be taught in the context of the social sciences and liberal arts rather than in a standalone degree. In that same study, Robert Heibel described the intelligence program at Mercyhurst College as a liberal arts program, rejecting the distinction made by Hulnick, Lowenthal and Medina. Hulnick and Medina added that intelligence organizations like the Central Intelligence Agency (CIA) do not want graduates who have been educated to be “intelligence specialists” (they are speaking to the generalist program model). Ultimately, Marrin (2011) believes that while the IC and some private companies have shown they value these sorts of schools and programs through the hiring of graduates, it remains incumbent on academic intelligence curricula to demonstrate their value-added.

Marrin has characterized the development of the new intelligence programs as chaotic, a sort of “academic wild west” with programs reflecting the complexion of faculties that often have limited and specific expertise (Marrin, 2011). While the federal government has invested some in intelligence studies in higher education through programs like the Office of the Director of National Intelligence’s (ODNI) Centers For Academic Excellence (CAE) and the CIA’s Officers in Residence program, Marrin describes government involvement in this area as peripheral. Certainly, both of these program partnerships are rather limited in terms of participation in a given year. A number of scholars have suggested government and academe find additional ways to partner and guide investment and development in academic intelligence programs (Breckenridge, 2010; Jensen, 2011; Rudner, 2009).
Martin Rudner (2009) has judged that the demand for new intelligence curricula, and their graduates, has thus far exceeded supply. While not specifying in concrete terms the gap between supply and demand, Rudner suggests that supply has been limited by a lack of qualified faculty (and some “amateurism”) and an apprehension within higher education to offer instruction in the field of intelligence. Still, Rudner, Marrin and others worry that colleges and universities have initiated programs prematurely, fueled by pressure to attract students, fill classes and ultimately improve institutional fiscals (Marrin, 2011; Spracher, 2009; Rudner, 2009).

An organization named the International Association of Intelligence Education (IAFIE) has also been established to bring together key stakeholders in government, academe and the private sector. It has working groups for such things as the development of academic standards and also holds annual conferences. The work and findings of IAFIE have not really bled into the broader intelligence education literature, though much of its materials are available online. Jennifer Sims of Georgetown University has voiced concerns that the organization might be congealing too readily around ideas and initiatives (Spracher, 2009). Robert Heibel adds that IAFIE alone may not have sufficient energy to establish standards and suggested that IAFIE attract more (and younger) members (Spracher, 2009). In general, Mark Lowenthal, the organization’s Executive Director, worries that IAFIE may never achieve its very critical roles and objectives (Spracher, 2009).

Reporting IAFIE findings in a broader, more public forum would produce benefits for the literature and for IAFIE. It would bring a larger number of critical eyes to the ideas and research emanating from IAFIE and help intelligence education experts
themselves avoid group think! These mutual benefits will ultimately raise the level of discourse and research being undertaken and help mitigate the issues identified by Sims, Heibel and Lowenthal.

**The Literature, 1957 to 2000**

In this section, the pre-2001 literature will be examined, largely as a due diligence task before delving into the much larger and more dimensionalized contemporary research. The early literature tends to provide general prescriptions or simple descriptions, with the focus often on individual courses rather than coherent or full programs of study.

In 1960, Peter J. Dorondo called attention to the role of U.S higher education institutions in helping the IC meet its human capital needs. He wrote that the internationally preeminent place of the United States heightened demands on the IC and in turn higher education. To help colleges and universities fill this critical role, he outlined a single course to be added to existing degree programs (i.e., international relations). He did not suggest that new programs be established—like the intelligence degrees and concentrations we’ve seen emerge since 9/11—but simply that a broad introduction to the world and work of intelligence be offered. Dorondo saw value in this class not only for would-be intelligence practitioners but also for those going into other sectors—and citizens more broadly.

A course mainly for graduate students, Dorondo thought it should examine what intelligence is, how it is produced, and how it supports policy makers in both tactical and strategic action. The course would teach broad concepts and issues, not intelligence
specializations. It would incorporate a variety of academic disciplines (like economics, political science and sociology) that impact upon the work of intelligence professionals, and teach students how to communicate with written and oral competence. Dorondo suggested that the topic of intelligence history be broached through other courses (like history) rather than bundled with the disciplinary and conceptual dimensions he thought most important. Doing all this effectively would require having as an instructor a seasoned practitioner for a full year (two semesters). He eschewed conventional lectures for more interactive approaches where possible. Just a few years before Dorondo’s article, Washington Platt (1957) discussed more broadly how undergraduates and graduates could and should be prepared for intelligence careers. Platt pointed to history, geography, economics, political science, social psychology and social science research methods—many of the same disciplines Dorondo suggested be incorporated into his intelligence fundamentals course.

Dorondo and Platt introduced—or alluded to—many of the issues that later scholars would build on: how should intelligence studies be approached in higher education; what disciplines should students be exposed to; who should teach intelligence courses in colleges and universities; what is the role of education versus training; and, how should intelligence be taught? However, after these early and rather limited works on—or at least pertaining to—academic intelligence education, there was a long period of general inactivity in the literature.

In the 1980’s and 1990’s, simple lists were occasionally put together of all the intelligence courses offered at colleges and universities from around the United States (Cline, 1985; Fontaine, 1992). This intermittent and descriptive exercise focused only on
explicitly intelligence courses, not academic programs in their entirety or the role and efficacy of higher education in preparing future intelligence professionals.

In 1995, Ernest May published an article in the CIA’s *Studies in Intelligence* that touched on the scholarly and teaching benefits of effective relations between the IC and academe. May stressed a healthy and open synergy that would give scholars access to more needed data and help them understand the context from which those data emerged. In turn, this would allow scholars to produce more salient, public and generalizable studies, and establish a foundation of scholarship from which intelligence studies could be more effectively taught.

In 1999, John Macartney revisited what it meant to teach intelligence in higher education settings. For Macartney, intelligence is best taught in the context of political science, embedded in the policy process as a critical variable in the making of foreign policy. (The other historically common ways of teaching intelligence are discussed below.) Key components of such a course include a review of what intelligence is, the network of organizations involved in intelligence, how intelligence is collected, processed and analyzed, and other aspects of intelligence work like covert action and counterintelligence. Macartney adds that many of those topics could be extended into full courses, and outlines other areas that could be incorporated into a course, or form the foundation of a course (e.g., intelligence and law enforcement, intelligence failures, intelligence reform, and business intelligence). Macartney also provides a series of very specific information on potential case studies, key government reports, guest speakers, and important books to incorporate into intelligence curricula and class sessions. Currently, the Association of Former Intelligence Officers offers a similar resource.
In 2000, the journal *Intelligence and National Security* published the first of what was to be an annual review of developments in the teaching of intelligence in colleges and universities (Hindley, 2000). Unfortunately, this did not materialize beyond the initial offering, which was a series of brief overviews of intelligence courses offered in predominately Western institutions. Since, the *International Journal of Intelligence and Counterintelligence*, *Studies in Intelligence* and the *American Intelligence Journal* have been home to most of the scholarly work in this area.

The Literature, 2001 to the Present

This section will explore the key issues and perspectives that have driven the literature on intelligence programs in U.S. colleges and universities. The emphasis is now on post-9/11 books, articles and monographs—which represent the vast amount of work done on academic intelligence curricula. These works will be critically examined in the context of one another, an exercise that has not really been taking place in the literature. With the proliferation of these programs since September 11, 2001 the literature has also grown significantly more advanced. In general, the unit of analysis has moved from individual courses to entire programs (and more elaborated, dimensionalized competency sets).

This section is organized in a simple fashion. First, the matter of program and course content is discussed. The second and third sections will deal with how we can and should teach intelligence in colleges and universities, and who should be doing the teaching. The section outlining future research agendas is essentially built on this post-2001 literature review.
Curricular Designs and Content

The teaching of intelligence in U.S. colleges and universities has grown to unprecedented levels, whether in standalone intelligence degrees or more conventional degrees. Of course, different kinds of programs (i.e., intelligence or international affairs, undergraduate or graduate) have differing objectives and afford varying amounts of space and depth for the teaching of intelligence and other related areas of study. The newer, standalone degrees focus on producing analytic generalists, with process-oriented, mechanical knowledge sets. Existing programs and the new concentrations tend toward the specialist end of the spectrum, perhaps with the concentrations representing a middle ground between conventional liberal arts degrees and standalone intelligence degrees. Said differently, it is in the embedded concentrations that we might find more equal mixes of the specialist and generalist knowledge bases. As we have seen, this is a model endorsed by a number of prominent intelligence educators.

In general, academic content and instruction—whether having a specialist or generalist bent—should become more advanced as students work through their undergraduate and then graduate studies. The experts and new hires interviewed for Spracher’s 2009 dissertation tended to agree that undergraduate education should be more focused on introductions to the field, foundations and theory, and graduate education the place for more technical and advanced knowledge sets.

Stephen Marrin (2011) has suggested the literature has thus far not adequately distinguished between specialist and generalist skill sets and preparation. Certainly, a number of those who have written on academic intelligence education have not always neatly differentiated between intelligence studies programs, “Intelligence Schools” and
intelligence concentrations within liberal arts programs. Michael W. Collier (2005), for example, suggests that curricula should vary more on the basis of level (i.e., graduate or undergraduate) rather than preparing generalist versus specialist analysts. It very much remains a dialogic and empirical question which program model and combinations are best for what occupational-analytic purposes. It seems possible that human capital officers and analytic managers would prefer some of the applied, generalist instruction be deferred until an individual lands in an intelligence organization. As will be discussed further, these are two key perspectives that have not been registered in the literature.

So, the core question remains how do we best operationalize and combine practitioner and academic competencies in different kinds and levels of academic programs? In many important ways, we are still on the margins of answering this question in a satisfying way. No doubt, the answer will continually evolve as our knowledge grows and environment changes. This essay is not seeking to make prescriptions but rather to review the viewpoints and empirics as they stand in the literature—while suggesting a more fine-grained agenda in the future.

To be sure, there is consensus on the importance of some basic things like language skills, regional and functional knowledge, critical thinking and effective communication for would-be intelligence analysts. These are chief among the few settled dimensions of academic intelligence education. The more interesting, important and potentially impactful questions relate to less fixed aspects of curricula—analytic tradecraft and social science methodology, for example—that lie outside those broadly noted areas. This essay will focus on these less settled aspects. To be sure, we can certainly improve on how we deliver education in those areas where there is broad
agreement—the pedagogical advances and insights the literature brings to light will certainly have a role to play there.

Speaking to the distinction between the applied and the academic, Marrin (2011) offers the following delineation for intelligence analysis:

“In terms of intelligence analysis, the term ‘training’ is usually associated with internal government programs intended to provide specific instruction for the implementation of job-related tasks, while the term ‘education’ is normally associated with academic courses or programs geared to provide more conceptual and theoretical frameworks having less immediate effect on performance, but layering the foundation for improved performance over the longer term.” (p. 131)

Christopher A. Corpora (2007) adds,

“Training is geared more toward the practitioner side of intelligence—aimed at developing specific skill sets as related to defined tasks. Education takes on a loftier challenge in demonstrating where and how a research program or broad area of inquiry fits into the larger knowledge map. Of course, it is impossible to have one without the other—the separation of emphasis is critical for focus of intent.” (p. 18)

The role of practitioner skill sets, and the training that generally underlies those skill sets, has been a central topic in the contemporary literature. However, treatment of this topic has gone forward largely without the benefit of precise, shared and/or elaborated explanations of key terms and concepts. Moreover, the literature finds a number of viewpoints that have not really been engaged with one another. The IAFIE has been more active on this front, but again its work is not really permeating—or being checked by—the broader scholarly community.

Most in the literature have expressed the view that academic intelligence programs should take on some (or many) aspects of practitioner-oriented content, in
addition to theory and other substantive instruction. Again—and as we will see—those who have discussed academic intelligence education have not always neatly parsed their views or analysis on the basis of differing program types (i.e., intelligence studies programs, “Intelligence Schools,” and liberal arts programs). Rather, the general lens adopted could be described as ‘programs with the objective of preparing students for intelligence careers.’

When looking more closely at views pertaining to practitioner-oriented content, discrepancies do emerge. In general, there seems to be a spectrum of opinions, with only rare disavowal altogether of this content. On the other end of the spectrum is the broad embrace of developing professional competencies in academic settings. However, at most points in the spectrum a lack of specificity is evident either in what exactly is meant, or in how key competencies are best operationalized and realized in academic settings. This is despite the fact that some very strong and sweeping opinions have been put forth on the role of practitioner-oriented content in academic programs.

Thus, some of the evident disagreement and confusion can probably be explained by differing conceptions or meanings when it comes to terms like ‘professional,’ ‘training,’ ‘tradecraft’ and so forth. Spracher (2009) reminds us that ‘tradecraft’ is a term that “means different things in different agencies and different organizational cultures.” Those writing on academic intelligence education have often treated this set of terms imprecisely and even just in passing—not offering clear definitions or examples. More elaboration on what authors have in mind when they invoke these and related terms would certainly help resolve some differences and let us move forward with greater specificity, efficiency and empirical inquiry.
Some have written that academic intelligence education should be designed chiefly to meet—in virtually one-to-one fashion—the full set of competencies and standards set forth by the IC (Breckenridge, 2010; Spracher, 2009). The first large-scale study on academic intelligence education utilized (or “crosswalked”) ODNI Core Competencies to evaluate the contribution of these programs (the generic set at the major category level) (Spracher, 2009). These competency areas include ‘engagement and collaboration,’ ‘critical thinking,’ ‘personal leadership and integrity,’ ‘accountability for results,’ ‘technical expertise’ and ‘communication.’ This methodology aligned “what is taught in university intelligence studies curricula with the needs of the agencies hiring graduates who become the intelligence professionals of tomorrow” (Spracher, 2009, p. 195). While relying on the ODNI Core Competencies to assess programs, Spracher also outlined what he thought should be a part of any academic intelligence education. Overlapping in some ways with the Core Competencies, Spracher points to the study of group think dynamics, cognitive processes, critical thinking, intelligence control and oversight, operational environment, ethical and normative thinking in intelligence and intelligence-policy relations.

The general (and analytic) directories of the ODNI Core Competencies are inherently practitioner-oriented. They include a number of training-based competencies—particularly at the sub-major category level—as well as competencies expressly labeled “tradecraft.” By definition, then, this would seem to open the door—or at least not close it—to virtually all domains of analytic training and tradecraft. While Spracher did not use the analytic directory in his study, others—see Jensen, below—have endorsed it as a guidepost for academic programs. The analytic directory does offer more
specific insight into what the IC wants in analysts, the occupational group for which higher education has the most responsibility. Thus, it could be argued equally relevant, and possibly more teachable, when compared to the generic directory. Additionally, others, including James G. Breckenridge (2010), endorse academic programs that are broadly responsive to IC standards:

“The IC looks to academic institutions to assist with the preliminary preparation of aspiring analysts. If these institutions are to be effective, evaluation standards and measures of effectiveness, as established by the IC, should be fully integrated into academic curricula.” (p. 320)

Breckenridge adds that academic programs should also be helping students identify where in the IC—or in law enforcement and business—they would like to go. He also advises that programs teach skill sets that are applicable across each of these domains, adding “More specialized training would ensue subsequent to job placement, when employers address their particular roles, terminology and practices” (Breckenridge, 2010, p. 311). Finally, Breckenridge endorses applied courses in analytic techniques for college and university students, noting “Recent studies have indicated that argument mapping, Bayesian analysis, statistical modeling, and structured role playing have yielded positive results in improving human judgments” (Breckenridge, 2010, p. 311).

Carl J. Jensen (2011) has proposed an approach to—or at least facet of—teaching intelligence in college and university settings that is likewise a complete and explicit embrace of training and tradecraft. It is a means to provide intelligence organizations with new hires that are well-established across the ODNI general and analytic Core Competency directories. He points to the practical difficulty of teaching competencies like ‘engagement and collaboration’ and ‘technical expertise’ in a classroom setting—
areas William Spracher’s 2009 dissertation identified as the least catered to in academic programs. He thus presents a more dynamic, interactive model to help inculcate these skill sets. Modeling this design after the military ROTC programs, the Intelligence Officer Training Corps (IOTC) would bring “cadets” together both inside and outside the classroom. Further discussion of the key pedagogical aspects of this proposed design is in the section on approaches to teaching intelligence.

Gordon R. Middleton (2007) endorsed somewhat different professional competencies in his examination of academic intelligence programs—only two of which were from non-governmental colleges. Middleton borrowed a “maturity model” from the field of human resources theory, looking at a number of competencies that have an explicitly training derivation—‘delivery of functional intelligence practices’ and the ‘understanding of business processes.’ The model and its meanings are delved into in the next section, suffice it to say that Middleton—like Breckenridge, Spracher and Jensen—applies a largely practitioner lens to his view of academic intelligence education.

The competency sets endorsed by Spracher, Breckenridge, Jensen and Middleton all share the characteristic of being relatively broad and unspecified for academic purposes. What should follow in the literature is an investigation into how these various competencies can be best operationalized—that is, what are the tool sets that comprise these competencies and how are they to be developed effectively in higher education settings. For a more compelling case in support of teaching to professional competencies, this increased specificity is necessary. Even when looking at the more fine-grained aspects of ODNI Core Competencies, stipulating competencies and then knowing exactly how to achieve them are two different things. And if, for example,
Jensen’s proposed construct is to be truly value-adding and worth the expense, educators will have to know how Core Competencies can be meaningfully inculcated.

The following are competency descriptions from the generic and analytic ODNI directories at the sub-major category level. While they broadly delineate what characteristics and skill sets are expected of employees, specific means and tools are for the most part lacking. The rather broad categories and descriptions are understandable given the range of practitioners and analysts they need to speak to. However, it is that same generality that complicates their transfer to, and application in, academic settings.

**Synthesis (Generic: Critical Thinking):** Identifies and uses principles, rules, and relationships to conduct arguments or interpret facts, data, or other information. Dissects problems into meaningful parts and uses logic and judgment to determine accuracy and relevance of data. Identifies and reconcile gaps, uncertainties, and key assumptions of data. Integrates evidence/information, evaluates and prioritizes alternatives, and assesses similarities and differences in data to develop findings and conclusions. Understands potential implications of these findings or conclusions.

**Tools and Methods (Analytic: Professional Tradecraft):** Applies tools and methods to substantive discipline, domain, or area of work. Adapts existing tools and/or methods or employs new methodological approaches required for substantive discipline, domain, or area of work (Office of the Director of National Intelligence).

Similarly, it is important to consider the possibility that an over-emphasis on
professional competencies in the design of academic programs will mean important academic skill sets go wanting. When examining the unclassified ODNI Core Competencies—whether analytic or generic—it is found that specific methodologies (i.e., econometric analysis), not to mention tradecraft, are not stipulated. As has already been noted, skill sets in areas like advanced methodology are seen as critical, yet largely missing or under-developed, in the IC. This issue will be returned to in more detail below. Suffice it to say, if academic programs are to help build these competencies, more elaborated and academic-specific competency and tool sets need to be delineated.

Developing academic standards has been one of the chief objectives of the IAFIE. But, this conversation must break more openly into the literature, as well.

Stephen Marrin (2009) has looked more closely at the issue of academic standards, considering also how we should go about populating and inculcating competencies. While he has certainly not proscribed training and tradecraft in academic intelligence curricula, he is not ready to fully incorporate all IC Core Competencies—or popular IC analytic methodologies—into curricular design. Instead, as noted earlier in this essay, he suggests a more measured, skeptical approach to codifying standards and content.

In observing the “blurring” between training and education taking place in academic programs, Marrin points out that analytic tradecraft and production is being commonly taught in new intelligence curricula. Among Marrin’s key concerns is the teaching and use of structured analytic techniques, which is an umbrella term for a suite of methodologies. Notably among the menu of structured analytic techniques are Alternative Competing Hypotheses (ACT), Devil’s Advocate, Team A/Team B and Red
Cell Analysis. These and others can all be reviewed in the 2009 IC document A Tradecraft Primer: Structured Analytic Techniques for Improving Intelligence Analysis and are intended to guide analysts through more rigorous and disciplined analytic processes. So, in addition to calling for the careful development of standards for academic intelligence curricula, Marrin also stresses the importance of validating the efficacy of different approaches (i.e., various structured analytic techniques) before codifying anything.

Conversely, Rudner (2009) has written that it is simply not the place of academic programs to teach intelligence tradecraft. He suggests this sort of instruction should be the function of the IC and individual intelligence organizations. Precisely what sort of tradecraft he is referring to (i.e., operational or analytic) is not made entirely clear. Presumably, Rudner was speaking to analytic tradecraft. But, what specifically is meant by tradecraft, and why academic programs should not move into any facets or level of analytic tradecraft, is not really discussed. He does, however, endorse the inclusion of courses on intelligence analysis techniques, which would seem to fall in the realm of analytic tradecraft. He also writes that Master’s education designed in ways that “integrate academic and professional approaches…seems especially compatible with intelligence studies” (Rudner, 2009, p. 119). Where “professional approaches” and “tradecraft” diverge or converge is not made explicit and it is thus hard to know what the dividing line might be. In general, Rudner emphasizes and prescribes substantive material, complemented with some disciplinary and methodological instruction—the more traditional function of higher education. Rudner’s study, which is part prescriptive and part descriptive, is presented in more detail in the section on the empirical literature.
In her interview with William Spracher, Jennifer Sims of Georgetown University offered a viewpoint similar to Rudner, one also lacking in specificity—or at least not elaborated upon (Spracher, 2009). She proscribes the use of “tradecraft” and “professional practice” in colleges and universities that teach intelligence, adding “tradecraft is not part of it, that is mainly training” (Spracher, 2009, p. 119). What is meant by these terms is unexplored, and it is hard to know in what ways she might agree or disagree with Breckenridge, Spracher, Rudner and others.

As was alluded to a few paragraphs back, there are also important issues being taken up on the more purely educational side of the curricular ledger. As Bowman H. Miller (2008) writes,

“Intelligence education that is focused on institutions, processes, tradecraft, and methodologies is no substitute for intimate familiarity with the core social and natural science disciplines. Instead, the latter form the bedrock of analytic expertise and give analysts the very knowledge they need with which to venture confident, sound judgments.”

Similarly, Michael W. Collier (2005) has highlighted the criticality of social science research methods and modeling for advanced intelligence analysis positions. He assigns responsibility for inculcating these skill sets primarily to graduate education. However, Collier worries that only a small number of more “progressive” schools require their students to take multiple semesters in areas such as regression analysis. Collier (2009) points to consequent deficiencies in these areas in the U.S. Intelligence Community, citing the “lack of U.S. intelligence analysts trained in the proper development of theoretical frameworks and research hypotheses and in advanced social-science analytic methods—the basic tools needed by analysts to do their jobs properly” (p. 121). Collier adds that professional development and education within the IC is not
likely to emphasize this sort of instruction.

Speaking to theoretical frameworks, Collier suggests there are virtually hundreds of models that political and military intelligence analysts can look to for conceptual guidance. Which are the most applicable models—and methods—is a conversation that intelligence educators must take up with greater vigor and specificity. It should also include practitioners and officials from the IC. As Collier reminds us, these tool sets can give analysts the capacity to formulate creative hypotheses—an end broadly supported among practitioners and scholars—and rigorously examine those hypotheses.

To help provide some of these foundations, Marrin (2011) has suggested that students in intelligence programs be given instruction that treats the social science origins of the analytic methodologies they are learning and will use. Marrin (2011) suggests a course of this nature will help academic programs and students find an “optimal mix of training and education” (p. 96). Yet, for graduate level intelligence students this would not seem to meet the threshold of multiple semesters in advanced methods courses prescribed by Collier.

There remains much to be done in our dialogue on academic intelligence education. Next steps include populating and operationalizing competencies in more concrete and actionable fashion. Terms like ‘professional,’ ‘training’ and ‘tradecraft’ also need to be clarified and distinguished for the purposes of the literature and use in academic settings. Drawing boundaries and parsing these concepts precisely will allow us to be more surgical and targeted in discussing, testing and ultimately incorporating content from these areas. These terms, while seeming simple enough, cannot be taken for granted. Positions on the role of this content—whatever they may be—must be
premised on precise definitions and meanings, and we should not open or close doors on the basis of generality. Determining what social science methods and models are most important for intelligence analysts is another track requiring a more precise, forward-moving conversation. Right now, each of these efforts is still in its early stages.

**Approaches to Teaching Intelligence in U.S. Colleges and Universities**

Just as important as finding the right mix of training and education in different kinds of academic programs is ensuring that content is being delivered in ways that maximize the transfer and retention of knowledge. As Patrick F. Walsh (2011) reminds us, good content does not necessarily translate into effective courses, deep learning, or student advancement. Delivery methods—as well as those who deliver content—are critical factors. In this section, we will focus on the parts of the literature dealing with different approaches to the teaching of intelligence.

The literature has generally recognized four main approaches to the teaching of intelligence—approaches that predated the contemporary proliferation of intelligence programs (Campbell, 2011; Rudner, 2009). These approaches continue to describe much of what is done in the classroom today. But, new technologies, insights into learning processes, and the greater inclusion of training-oriented facets have resulted in new—and possibly more effective—teaching approaches that do not always fit neatly into these categories. These changes and new techniques are discussed shortly.

The conventional four approaches were first articulated by Stafford T. Thomas in 1988. They include the political-policymaking, functional, structural-organizational and historical approaches. It would be difficult to suggest that these four approaches are truly
mutually exclusive. The political and policy approach emphasizes the role of intelligence in broader foreign policy making dynamics. This was the approach endorsed and discussed by John Macartney (1999). The functional approach takes a more mechanistic view of intelligence functions and processes. The structural approach places intelligence in the context of international relations and the conduct of foreign policy. Finally, the historical approach looks at past events and episodes and is often executed through the use of case studies. In the United States, the political-policymaking and functional approaches have been the most common ways of teaching intelligence (Campbell, 2011).

Thomas W. Shreeve (2004) has highlighted the role and benefits of the historical case study approach to the teaching of intelligence. With the use of case studies,

“Instructors use questions to guide the discussion toward a particular pedagogical destination rather than declarative statements that tell students how or what to think about a complex issue. Learning by the case method is active rather than passive, as students are explicitly made partners in the reduction of ambiguity surrounding complex, realistic issues.” (Screeve, 2004, p.1)

As Shreeve makes clear, much work and material goes into a well-executed and effective case study exercise. Shreeve is writing more for professional than university classrooms, and presumes access to some information and events that will not likely be made available to college and university instructors.

A device similar to case studies, but with some key differences, can be found at Brunel University in London (Davies, 2006). It shares the realism of case studies, but adds a real time dimension and a dynamic information environment that cannot be achieved with case studies. While Brunel is outside the U.S. context, the utility and promise of the Brunel Analytical Simulation Exercise, or BASE, make it a must for this essay.
BASE is a requirement for all students enrolled in Brunel’s M.A. in Intelligence and Security Studies. The exercise is premised on the use of open-source intelligence (OSINT), which by common estimates comprises at least 80% of the intelligence used by all-source analysts. With OSINT, students are tasked to create real-time intelligence products on unfolding issues and events. They are assigned organizational identities that correspond to different intelligence entities and put through an analytic process approximating that of the British intelligence system.

With BASE, students experience a “training simulation” that reflects the informational, organizational and other environmental conditions of the British intelligence system (Davies, 2006, p. 722). Philip H.J. Davies, the Director of the Brunel University Center for Intelligence and Security Studies, points not only to the exercise’s realism but also to its openness. That is, no one knows the deciding issues and outcomes in advance, including the instructors. This affords a more organic experience than case studies. Similarly, students are put in a position to ‘know how’ in addition to ‘know that,’ learning their role and functions in intelligence systems through practical exercises rather than conceptual learning alone (such as the functional or political approaches). Students also have the opportunity to examine their own analytic processes and to identify cognitive, group and other sources of intelligence failure. While case studies may allow students to look at these kinds of issues in past events and groups, they do not provide the opportunity to be self-critical in the same way. Concurrent with this OSINT exercise is an advanced seminar in social science research methods, pairing more purely educational facets with “analytic tradecraft.”

Christopher A. Corpora (2007) also endorses the use of OSINT exercises in the
Corpora (2007) writes that such an approach “requires small groups in the class to trace out separate, but interdependent, activities, demonstrates the flow and complexity of the process, as well as provides an environment similar to that found in intelligence and security organizations” (p. 19). OSINT exercises also provide “a useful and creative experimentation environment for disassembling untested assumptions, posturing new methods and using multidisciplinary optics to better focus intelligence studies and practice” (Corpora, 2007, p. 20)

Mercyhurst College has an undergraduate and graduate capstone that shares some similarities with Brunel’s BASE (Wheaton, 2011). There, students form groups and spend a semester devising strategic intelligence analysis products—sometimes for actual consumers in the IC. Like BASE, students are given intelligence questions that require them to “pick their path” rather than being veered toward a predetermined outcome (Wheaton, 2011, p. 372). Added to the capstone is a segment using games to help teach tools deemed important for the strategic intelligence analyst. While this facet of the strategic analysis capstone is a relatively new feature, Wheaton (2011) points to research demonstrating the efficacy of learning through games and concludes:

“Games-based learning appears to have increased intelligence students’ capacity for sensemaking, improved the results of their intelligence analysis, allowed the lessons learned to persist, and even encouraged new exploration of strategic topics months after the course had ended.” (p. 378)

Games and simulations have also been used to teach international relations theory and other global dynamics (Asal, 2005; Hughes, 1999). Exploring additional opportunities and incorporating new tools and exercises into the intelligence classroom and curricula could prove very enriching. As Wheaton suggests, more testing will help
us isolate the strengths and value-added of games and simulations.

Carl J. Jensen (2011) outlines a curricular device that is also meant to help inculcate those competencies that might be better learned experientially, outside the conventional classroom setting. While this construct remains a hypothetical, it has received statements of support by the Barack Obama Administration and would share a number of similarities to the well known ROTC programs of the armed services. Those enrolled in the Intelligence Officer Training Corps (IOTC) would complete intelligence related coursework (i.e., engineering, language studies, and international affairs) while also taking part in additional exercises and activities with their fellow IOTC cadets. This would include practical exercises—like role playing and simulation—and summer training programs. Upon graduation, IOTC cadets would owe a certain amount of service to the IC.

It is recalled that the new intelligence hires surveyed for Spracher’s study reported difficulty in learning ‘collaboration and engagement’ and ‘technical expertise’ in regular college and university settings. In Jensen’s view, these are Core Competencies that would be better catered to by a program like IOTIC. He writes, “ROTC units…foster the development of leadership, cohesion, and camaraderie. They enhance collaborative skills such as networking and team building” (Jensen, 2011, p. 737). Jensen holds that an IOTC program could serve similar ends, while also helping contextualize ‘personal leadership’ and ‘integrity and accountability for results.’ Overall, the program’s chief objective would be to produce graduates who meet all the lower level Core Competencies stipulated by the ODNI. Jensen adds that cadets would also develop an early appreciation for avoiding risky behavior, something necessary for an intelligence officer.
Until the tangible and comparative benefits of adopting this model are soundly demonstrated—and all such benefits shown to be realized in cost-reasonable fashion—we should defer while we experiment and learn. Jensen recommended a pilot program of 5 to 10 students to help gain insight into this model. Including more students than 5 or 10—and piloting in a number of schools—would allow for more data and feedback as well as the chance to experiment with different designs and examine their comparative efficacy.

Cyber and software modalities also afford new ways to teach intelligence. Currently, e-learning for intelligence seems largely confined to the professional community. However, some schools, like the American Military University (AMU), do have online degrees in intelligence studies (Campbell, 2011; Marrin, 2011). As Stephen Marrin (2011) points out, the AMU model allows faculty from all over the world to teach students in other parts of the world, greatly expanding the kinds of classes an AMU student can take. James G. Breckenridge (2010) discusses how certain software tools can be used to help students learn at a pace most beneficial for them, in turn increasing the retention of knowledge. This individualized, automated “smart technology” can be a decentralized, practical and cost-efficient way to achieve positive learning outcomes. The efficacy of online and software-based learning for intelligence programs and students is still something that requires considerable testing. We should also be seeking out effective ways to use computer and classroom learning in tandem.

More broadly, Breckenridge (2010) and Middleton (2007) have explored how the transfer and retention of knowledge can be maximized for intelligence students. They have looked to the educational psychology literature for key insights and opportunities.
Breckenridge (2010) points out that different people learn differently, drawing reference to “research-based theories of learning and cognitive styles that can help” intelligence educators be more effective (p. 311). Adapting delivery modalities to recognize different styles is a key way of ensuring that knowledge will be effectively received and retained by students:

“The Kirton and Kolb research and related theories suggest that properly understood and engaged cognitive styles, matched systematically with compatible tasks, materials, teams, and instruction, are more likely to produce effective training experiences and transfer of knowledge, therefore maximizing the learning experience.” (Breckenridge, 2010, p. 313)

Similarly, Middleton (2007) explores the notion that there are some competencies that can be better inculcated through the targeted use of three different modalities of learning: cognitive, affective and psychomotor. That is to say that by matching the right mode of learning with key competencies, students will make better advancements in those areas. The competencies Middleton looks for in his study—taken from the “maturity model”—include ‘delivery of functional intelligence practices,’ ‘understanding business processes,’ ‘ability to manage change,’ ‘ability to manage culture’ and ‘personal credibility.’ The cognitive modality, which pertains to the acquisition of knowledge and rational skills, is matched with ‘delivery of functional intelligence practices,’ ‘understanding business processes’ and ‘ability to manage culture.’ The affective modality includes emotional, behavioral and value-based learning, and is presumed to be better suited to managing culture as well as managing change. Psychomotor learning has to do with the connections between cognitive and physical function. Middleton associates this modality—without making the pairing explicit well understood to readers—with the ‘delivery of functional intelligence practices’ and ‘personal
credibility.’ Middleton (2007) concludes that “training and education that utilizes techniques broader than just cognitive approaches may be required to address some of the recent shortfalls in intelligence” (p. 42).

As the foregoing discussion suggests, there remains a lot to be done in learning how we can best teach across the range of content and competency areas that can go into academic intelligence education. Critically examining the comparative efficacy of online versus classroom learning should be at the top of the agenda. Moreover, opportunities for combined use of the different tools and modalities discussed abound. Experimentation and pilot programs will help us gain the knowledge to realize dynamic, adaptive and highly effective programs.

Who Should Teach Intelligence and What Should Intelligence Faculties Look Like?

It is also important to discuss who should teach intelligence—who is and who is not qualified—and what an intelligence studies faculty should look like. In 1960, Peter J. Dorondo opined that only experienced practitioners should be teaching intelligence. Since, practitioners (and former practitioners) have certainly taken on significant instructional roles in many academic programs, and increasingly so. In general, though, the strict view taken by Dorondo is not shared by contemporary intelligence scholars, who see critical and complementary roles for conventional scholars. To be sure, the practitioner’s role as teacher is still viewed as important and highly beneficial to programs and students. John Hollister Hedley (2005) points to the value-added that can only come from practitioners, noting that U.S. higher education has observed growing acceptance of programs like CIA’s Officers in Residence. A number of former CIA
officers participating in that program have retired from the agency to become permanent faculty members.

In large measure, the views contrary to Dorondo’s result from some important tensions and trade-offs between practitioner instruction, effective teaching and rigorous scholarship. If the intelligence literature is to continue advancing—which is critical in having research and theory to teach from—there needs to be a cadre of serious and rigorous intelligence scholars. Further, William C. Spracher (2010) has suggested “at times the old-line practitioners who end up in academe are not necessarily the best teachers. A balance between deep experience, solid academic credentials, and teaching ability must be struck” (p. 6789). Similarly, Rudner (2009) adds that,

“…reliance on ex-practitioners and myriad others can perhaps add valuable exogenous perspectives to these burgeoning programs, yet the absence of a critical mass of dedicated Intelligence Studies scholars might make it difficult, if not impossible, to uphold the teaching and research standards expected of graduate schools. Already, paranoia prevails in certain academic circles about the bona fides of Intelligence and Security Studies.” (p. 124)

Virtually all the intelligence experts and educators interviewed in Spracher’s 2009 study supported a mix of scholars, practitioners and scholar-practitioners. A number of them also voiced concern about “amateurism” among faculties. This is something Rudner (2009) has noted as well. Jennifer Sims placed a special emphasis on the scholar, saying “there is a real role for scholars here. They can challenge theoretical assumptions. Most practitioners are very defensive. They tend to be focused on one case or one point in time. Scholars are better at generalizing” (Spracher, 2009, p. 117). Of course, the multidisciplinary nature of intelligence and related studies means that students will inevitably be exposed to a mix of scholars and practitioners across different disciplines.
Looking at the Contemporary Empirical Research

The contemporary empirical literature on academic intelligence education has largely taken programs rather than courses as the unit of analysis. The literature has a growing descriptive base, and some authors have also taken more integrative and inferential approaches in their analysis. The integrative, inferential works will be looked at first, and then we will move to the more descriptive ones. Some of these studies examine dozens of schools and others just a handful. Stephen H. Campbell (2011) does both, mapping the broad contours of federal and academic intelligence education in the U.S., then comparing a standalone intelligence degree (at Mercyhurst College) with a program that embeds intelligence in the liberal arts (Georgetown University). It will be recalled that Mercyhurst’s founder, Robert Heibel, rejects this distinction—at least as far as Mercyhurst is concerned (Spracher, 2009). The profiles Campbell offers make it difficult to really answer this question, but it seems very plausible that in practice the two programs could turn out to be pretty similar. We will see that another scholar, Martin Rudner (2009), has grouped Mercyhurst and Georgetown together in modeling the typical—and preferable—design for graduate intelligence degrees.

William C. Spracher’s 2009 dissertation represents the first major empirical foray into U.S. academic intelligence curricula, and can be counted among the integrative, inferential studies. His research sought to determine whether or not the recently emergent intelligence programs have supplemented conventional liberal arts education in ways that add value to the work of the U.S. Intelligence Community. The study was operationalized through surveys distributed to new intelligence hires, interviews with intelligence experts and educators (Arthur Hulnick, Jennifer Sims, Robert Heibel,
Carmen Medina, Samuel Wilson, and Mark Lowenthal), and “crosswalking” the general ODNI Core Competency directory with full course offerings. In broad terms, the surveys asked new hires if they thought future practitioners would be well served by undergraduate and/or graduate courses in intelligence. The six experts were asked what they thought the role of the new intelligence programs could or should be, and how practitioners should be educated more generally.

The crosswalking portion of the study included graduate and undergraduate programs in intelligence, as well as other related disciplines. Determining whether or not certain courses are effectively inculcating ODNI Core Competencies is certainly a difficult undertaking, as Spracher recognizes, and some would take the position that applying the Core Competencies is premature.

Spracher’s sample of newly hired intelligence practitioners included 77 respondents, 32 of which came from the Defense Intelligence Agency’s (DIA) elite hiring program. The remaining 45 participants were distributed among the member organizations of the IC, but generally in small numbers. For example, a total of only three respondents came from the CIA or ODNI. While the DIA is an all-source intelligence organization, it would be good if future research used more representative sampling techniques.

With some qualifications, Spracher answers his core research question in the affirmative: the new family of intelligence programs are in fact a sound complement to existing liberal arts programs, adding value and capacity to the U.S. Intelligence Community. First, more than 80% of survey respondents expressed the opinion that students hoping to become intelligence professionals should take intelligence related
courses, with growing specialization and sophistication as they move from undergraduate to graduate programs. Second, four of the six subject matter experts said intelligence programs do provide a unique value-added to the IC—though the dissension could be quite adamant.

Finally, Spracher found that most of the academic programs he identified spoke to the general directory of ODNI Core Competencies. Some categories did seem to get more attention than others, with the crosswalk exercise finding less coverage of ‘engagement and collaboration,’ ‘personal leadership and integrity’ and ‘accountability for results.’ Spracher had also asked the new hires to provide feedback on how prepared they felt across the Core Competencies. They reported feeling less prepared in the categories of ‘engagement and collaboration’ and ‘technical expertise.’ This is not an altogether surprising finding. Respondents said they better learned these competencies through experience and professional training. It is important to note that only a single respondent came from one of the newly established intelligence programs, which are probably more likely to speak to Core Competencies. As more intelligence graduates enter the IC, we will get a better sense of how well the new programs are helping bolster these competencies.

While Spracher’s two participant groups represent needed viewpoints, some equally important groups were not a part of the study: human capital officers and analytic managers. These well-placed individuals have often been at their respective intelligence organizations for longer periods of time and are intimately familiar with their organization’s needs and preferences. Managers are situated at the center of analytic production, which positions them to see many analysts come into contact with a variety
of intelligence requirements. Those who have worked in intelligence for longer periods
have also been witness to changing human capital needs. At the time of Spracher’s
study, many students of the new intelligence programs had not yet entered the IC. A
large number now have, and managers have had the chance to observe their work and
gain insights into their performance and capacities.

These observations can then be compared with the performance of analysts who
have come from more conventional academic programs, like political science and
international affairs. Research in this area should also begin to take into account
differing analytic responsibilities and how well different kinds of programs meet various
IC needs. In the absence of sophisticated and available performance evaluations,
gathering the perspectives of human capital officers and analytic managers is the best
means to critically examine the work of intelligence staffs and analysts.

In his study, Gordon R. Middleton (2007) does something similar to Spracher’s
crosswalk, looking at programs for whether or not they are teaching to the following
competencies: ‘delivery of functional intelligence practices,’ ‘understanding business
processes,’ ‘ability to manage culture,’ ‘ability to manage change’ and ‘personal
credibility.’ Middleton’s analysis included 7 unidentified undergraduate programs (5
government and 2 non-government). The competency set Middleton (2007) uses is a
“maturity model” of staff and organizational skill sets borrowed from a “seemingly
unrelated field—in this specific instance—human resources (HR)” (p. 34). These
competencies are given an ordering from lowest to highest levels—or most basic to most
advanced—in the order just presented. In general, curricula were shown to focus more
on lower levels of the maturity model. To be fair, if undergraduate education did not
focus on these “lower” level competencies, they would be availing themselves to even greater criticisms—it is the role of undergraduate education to build foundations, after all. Middleton does note that professional training and mentorship might be more effective in the development of the “higher” competencies, but evaluates the selected undergraduate programs on the basis of all competencies. But as Middleton points out, there are important benefits in looking to other disciplines to stretch and compare our thinking and research.

In addition to discussing the attention given to each competency, Middleton takes the step of connecting this attention—or, more to the point, lack of attention—with issues and deficiencies observed in the IC. Most notably, the competencies to do with change and culture are shown to receive considerably less attention than ‘delivery of functional intelligence practices’ and ‘understanding business processes’ (with personal credibility getting the least). Middleton does expand ‘ability to manage culture’ somewhat to include studying and understanding other cultures. He then refers to 9/11 Commission findings stressing that the IC needs to better understand both its own cultures and the cultures of U.S. adversaries. Similarly, he points to the neglect shown to the managing change competency and the difficulty the IC has had in adapting to dynamic environments and enemies. Thus, Middleton (2007) concludes, “historical approaches to intelligence education are not aligned to address underlying causes of recent intelligence failures” (p. 33).

Essay four in this dissertation examines 19 U.S. graduate programs in security and intelligence studies to look for advanced social science methods and models. These skill sets have been identified by Collier (2005), Heuer (1999), Miller (2008) and others as
crucial but seemingly deficient in both higher education and the IC. The study design was similar to those used by Spracher and Middleton. While students in virtually all of the programs examined could take classes in the noted areas if they sought them out, most programs only required introductory and sometimes intermediate coursework. It thus seems those social science deficiencies identified in the IC could very well have their root causes in our higher education system.

In his descriptive study of five graduate level intelligence degrees or concentrations, Martin Rudner (2009) includes two programs from the U.S. (Mercyhurst College and Georgetown University), two from the U.K. (Brunel University and University of Wales, Aberystwyth), one from Canada (Carleton University) and one from Australia (Macquarie University). His review is not of the programs individually, but instead offers an integrated model of what programs of this kind look like, or at least share in common. In addition to this descriptive bent, Rudner endorses the model he outlines, which has three central curricular facets: core, cognate and optional courses. Core coursework does or could include Comparative Intelligence Systems, Intelligence and Statecraft, Intelligence Strategies and Operations, and National Security Law. Cognate courses correspond to those areas of knowledge “outside the immediate sphere of intelligence, while contributing to a fuller understanding of intelligence and security issues” (Rudner, 2009, p. 121). Examples include area studies, conflict analysis and the philosophy of law. Rudner believes students should be required to complete at least one course in all specific cognate fields. Mandating at least one course in all cognate areas—particularly if there are several—seems constraining, possibly curtailing the development of specialized and deep knowledge sets. Finally, optional courses can run the gamut of
special intelligence issues, such as intelligence ethics, intelligence analysis techniques, counterintelligence and financial intelligence.

These three course areas are in some cases accompanied by instruction in analytic methodologies, foreign languages and economics. So while some programs may offer methods classes (outside of intelligence analysis techniques), the core model Rudner presents is consistent with the expectations of Michael W. Collier and the findings of this dissertation’s third essay (on social science and intelligence education).

Stephen H. Campbell (2011) has broadly mapped the full U.S. intelligence education infrastructure, including professional and pre-professional civilian and military sectors. A shorter version of his article first appeared in the American Intelligence Journal. For the purposes of this literature review, Campbell’s presentation of civilian pre-professional intelligence curricula will be the focus—that is, at colleges and universities.

In his study, Campbell highlights two civilian academic programs. One offers a standalone intelligence degree (Mercyhurst College) and the other embeds intelligence in a liberal arts degree (Georgetown University). He selected these schools on the presumption they represent the best in their respective family of programs. These are the same two U.S. programs included in Rudner’s map of graduate intelligence curricula, but Campbell examines each individually.

Deeming Georgetown the preeminent liberal arts program for would-be intelligence practitioners, Campbell points to the constant presence of former CIA officers and the frequent rotations of senior policymakers. Some instructors focus on comparative intelligence studies while others devote their attention to the analyst-
consumer relationship or counterterrorism. The University’s Director of Intelligence Studies is Jennifer Sims, who previously served as U.S. Assistant Secretary of State for Intelligence and Coordination. Sims promotes an expansive and innovative approach to the teaching of intelligence, hoping, for example, to move beyond the intelligence cycle model so prevalent in intelligence literature and education.

To demonstrate the alternative to the liberal arts approach, Campbell discusses the programs at Mercyhurst College. In addition to a bachelor’s degree in intelligence studies, Mercyhurst offers a Master’s of Science in Applied Intelligence. In the realm of standalone degrees, Campbell labels Mercyhurst’s the “gold-standard.” The program was founded by Robert Heibel, who now acts as Director of Mercyhurst’s Institute for Intelligence Studies. Previously, Heibel had served as a counterterrorism chief at the Federal Bureau of Investigation.

Campbell notes that Mercyhurst’s graduate program closely matches the model outlined by Martin Rudner (2009). Of course, Rudner’s model was partly informed by Mercyhurst, as well as Georgetown. The Mercyhurst Master’s program,

“…consists of a number of core courses on strategic intelligence, research methods, collection, analysis, and interagency operations. Students can qualify for a generic degree by complementing these courses with a selection of general courses such as threat analysis, indications and warnings, counterintelligence, human intelligence, imagery, profiling, and ethics. Alternatively students can choose a particular concentration such as intelligence collection, competitive intelligence, homeland security, intelligence operations, political-military intelligence, terrorism studies, or information warfare.” (Campbell, 2011, p. 318-319)

Spracher’s 2009 dissertation also offers brief 1 to 2 page profiles of academic intelligence programs. However, neither Campbell nor Spracher build fully or easily comparable profiles. Doing so in the future will allow us to better grasp qualitative
differences among and between intelligence studies programs, the “Intelligence Schools” and more conventional liberal arts programs. Moreover, our broader “maps” will gain in accuracy and we will be better positioned to adopt more sound inferential analyses.

**Going Forward: Growing the Research and Dialogue**

Both quantitatively and qualitatively, the scholarly literature on academic intelligence curricula in U.S. colleges and universities has grown in impressive ways. More programs have been examined and in more ambitious, advanced ways. As the literature grows further, we want to always be moving closer to a better understanding of what should and can be done in academic programs. This requires first a more precise and elaborated consideration of terms, concepts and competencies. In turn, this will make possible a more robust piloting and experimentation agenda that takes into account content, technologies and modalities (and combinations therein). Our assertions must be tested not only through dialogue but also through empirical inquiry—explicitly stating what we mean and testing to see what is possible and what works well. There may be content we all agree just should not be incorporated into academic programs. But, we may be surprised at what can be done and what content can be incorporated.

We should also continue to pursue a more interconnected and integrated perspective on academic preparation, professional development and actual IC dynamics. How can we better sequence academic and professional instruction to optimize intelligence performance and products? In part, this will require a broader shift in the unit of analysis—from programs to the system and sets of programs that funnel graduates into the IC. This will necessitate a comparable, close and continuous mapping of a range
of academic programs. It is important to remember that many—if not most—intelligence professionals still come from academic programs that are not explicitly “intelligence.” We should not move forward at the exclusion of such programs.

Speaking to options for better harmonizing academic and professional development, Stephen Marrin (2011) and James G. Breckenridge (2010) point to the possibility of beginning professional training during the academic phase. By taking stipulated courses, college and university students could receive waivers for certain instruction otherwise provided in the IC. Breckenridge (2010) notes that “analysts so educated may be able to test out of or spend less time in basic courses offered by the IC, and resources can be redirected to advanced and career Intelligence Analysis courses” (p. 320). This will require significant trust between hiring agencies and academic institutions, and may require a relatively elaborate design for it to be effective and accepted.

There are certainly some issues to be considered with the idea of harmonizing academic and professional development. One that quickly comes to mind is the fact that the IC is still without uniform and coordinated training and education across organizations (Breckenridge, 2010). That is to say, it would not always be clear just what academic programs would be sequencing their offerings with. In this vein, Marrin (2009) writes,

“No codified process for entry into the profession, standards in terms of educational requirements, professional development processes, or ways to accumulate and transfer knowledge from generation to generation currently exist...Therein begins the discussion about professionalization and improvement in the practice of intelligence analysis.” (p. 139)

Thus, there remains much work to be done not only in the realm of academic
programs, but also in the realm of professional education and training. We are a good distance away from well-calibrated sequencing, let alone any sort of credentialing process or program. However, intelligence educators and programs cannot be—and are not—waiting for more precise cues from the IC. A more robust dialogue on academic intelligence education can actually also help inform the discussion on professional standards and development.

The absence of some major voices—human capital officers and analytic managers—has impeded a more rapid and informed advancement in the literature. For the many reasons specified in this essay, these perspectives must be collected—as they have been in related fields like homeland security—and registered in the literature (Ramirez and Rioux, 2012). Institutionalizing such an exercise would help academic programs continuously calibrate to meet grassroots IC needs. This would be a relatively inexpensive and non-sensitive undertaking. Major studies like those of William C. Spracher (2009), Jeffrey R. Cooper (2005), Rob Johnston (2005) and Richards Heuer (1999) suggest that the kind of information human capital officers and analytic managers could offer is well within the non-classified realm. Additionally, efforts like this should take a representative sampling of the IC, and should probably include military and law enforcement intelligence offices.

Going forward, the IC’s human capital needs from colleges and universities are likely to shift as the nature of intelligence issues and targets change. Already we know that analysts do more than simply analysis. Maintaining an active literature will help higher education institutions adapt more readily—and maybe even predict coming needs. This kind of forecasting might be of little immediate use when devising the coming
year’s class schedule. But, when planning for longer-term departmental needs, educational administrators and leaders might be a little more proactive in how and who they recruit. Stephen Marrin (2007) has discussed how intelligence managers have a responsibility to predict and prepare for future intelligence needs. Perhaps intelligence educators should feel a similar responsibility.

Lastly, to support and encourage an energetic and regular agenda, we might do well to codify a dialogue in the literature. The IAFIE should also find a regular mechanism to share—and have checked—its work and findings. An option to meet these two suggestions is the establishment of a journal dedicated to intelligence education, training and professional development. Similar fields, like public affairs, political science and homeland security each have their own scholarly journal specifically for academic education. Perhaps a wholly new journal is not necessary, but a special or dedicated annual addition of a key intelligence journal would be of great benefit.

References


Essay 2: Next Steps in the Intelligence Education Literature:

Stipulating Academic Competencies with Greater Precision and the Pursuit of Curricular Innovations

Abstract:

This essay calls for an intelligence education literature more active and precise in developing academic competencies to apply in the design and measurement of U.S. intelligence studies programs. It is argued these competencies should not be informed solely by signals from the Intelligence Community (IC), including its Core Competency directories. Intelligence studies programs deal with serious resource constraints, need to maintain an appropriate degree of autonomy and diversity, and cannot lose sight of their core educational mission. That is not to say Core Competencies and other IC preferences should not be reflected in academic intelligence curricula at all. Rather, the most critical and teachable for academic purposes need to be identified and then incorporated effectively. Moreover, the Core Competencies do not expressly stipulate key education-based skill and knowledge sets, some of which have been found critically lacking in the IC. Intelligence scholars and educators themselves have not adequately stipulated and explored these educational facets. Operating under the assumption that intelligence studies programs are sometimes poorly equipped to provide instruction in certain Core Competencies, and other related areas, a new curricular device is offered. This device is premised on 1) the comparative resources of the IC and academe, 2) innovations and knowledge gains in the field of intelligence education and 3) the need for broad yet agile delivery mechanisms. This device could also be of use for more purely educational
aspects. Simply, it will help fill gaps in course offerings and expand student choice. Thus, intelligence studies programs must simultaneously establish selectively closer and more autonomous positioning vis-à-vis the IC. This might prove a difficult balancing act, but one that will serve all stakeholders’ interests in the longer term.

**Introduction**

In the last decade, college and university degree offerings in intelligence studies have increased markedly (Campbell, 2011; Middleton, 2007; Spracher, 2009). Even before this uptick, the U.S. higher education system was undoubtedly the most critical resource in the U.S. Intelligence Community’s (IC) external knowledge environment. Despite this, the literature on what these programs look like, and what these programs ought to look like, has been relatively thin. That research in this area has not kept pace with the growth in intelligence programs, or with research on other factors that influence the performance of the IC, is worrisome. To date, there has been only one major study done on contemporary intelligence studies programs in the U.S. (Spracher, 2009). The International Association for Intelligence Education (IAFIE) has undertaken multiple initiatives in this area. These initiatives, however, have not permeated the broader literature and have gone forward with little research and dialogic support in that literature. If the IC, the largest and most sophisticated in the world, is to get the most from the U.S. higher education system, more research, dialogue and purposive action is necessary.

To make a contribution to such ends, this essay will do two primary things. First, the case is made that intelligence scholars, educators and practitioners need to work
toward a distinct set of academic competencies. One critical issue pertains to the role of training and tradecraft in intelligence studies programs, which speak largely to ODNI Core Competencies. It is argued that a more in-depth dialogue is necessary to determine what aspects of these less conventionally educational areas should be incorporated into intelligence curricula. Moreover, it seems that contemporary intelligence departments and faculties—not to mention traditional course and curricular structures—may not be adequate to meaningfully accommodate all these areas. Thus, new curricular mechanisms will be necessary.

With that in mind, building directly on key perspectives and findings in the intelligence education literature, this essay offers a new such curricular mechanism. The most important contribution of this mechanism is structural, that is, as a practical vehicle for broader and enhanced intelligence curricula. Termed the Office of the Director of National Intelligence’s (ODNI) “Academic Intelligence Certificates,” it would be completed through a set of centrally administered online modules that are also credit-bearing at participating institutions.

This mechanism provides a means by which intelligence studies program can provide instruction in less conventional areas, like ODNI Core Competencies, and offer more diverse coursework generally. It can be used to give departments and degree programs the capacity to offer coursework in areas they may lack expertise, capacity or prerogative. It would also grant the IC more control over areas of instruction it feels might benefit students during the academic phase, but are thought best left to IC instructors and approaches. Lastly, it could be used to incorporate diverse offerings of a more academic variety, perhaps with an intelligence bent. Taken together, these options
will help programs fill gaps in their particular curriculum, giving students greater choice and specialized opportunities. It can also help in meshing the academic and professional development of U.S. intelligence practitioners.

To be sure, the author’s underlying perspective is that overly standardizing intelligence curricula, in any direction, is a dangerous thing, especially in such a dynamic and interdisciplinary field as intelligence analysis. Academic institutions and departments should be robust, vibrant places that produce diverse graduates who can bring different and even competing ideas and competencies with them into the real world (in this case, the IC). Thus, in no way is the author suggesting that an end goal should be to make intelligence studies programs uniform, though there are certainly areas where baseline foundations should be expected. To that end, intelligence studies programs must stipulate and fulfill critical educational responsibilities, cognizant of the differences between professional and academic competencies.

Perhaps the healthiest and best objective is to have broad academic competency categories that can be populated with a variety of instructional content. Some content may be more suited to students who wish to pursue political, military or terrorism analysis, for example. Increasingly, law enforcement and competitive intelligence instruction is found in intelligence studies programs. While in some fundamental ways these facets are different than intelligence in support of security and foreign policy, they should nonetheless be included in these efforts.

So, more important than developing uniform and codified standards is ensuring that due diligence is being exercised. Critical and uniquely applicable material must not go unutilized. It should be standard practice for intelligence educators and scholars to
conduct regular environmental scanning to promote responsiveness to all applicable or new theory, models and pedagogies. For intelligence, this could extend into diverse fields like cognitive science and social psychology, and of course political science and international relations. It is unlikely the educational practices and intelligence standards committees of IAFIE can adequately take on this responsibility autonomously. It must be accompanied by a more robust dialogue within the broader intelligence education literature.

**Toward Academic Competencies for Intelligence Studies Programs**

The most important sector in the IC’s external knowledge environment is the set of educational institutions that prepare and funnel students for careers as intelligence professionals, namely analysts of various kinds. Each year, American colleges and universities send hundreds if not thousands of graduates into intelligence work, be it national, sub-national, civilian, military, private sector or law enforcement. Many students in intelligence studies programs are in fact probably not quite sure which part of the IC they would like to work in. Intelligence career paths will also grow increasingly diverse, and many workers will change agencies and/or offices, levels of government, “accounts” and even functions. The Office of the Director of National Intelligence (ODNI) has developed an extensive set of Core Competencies for IC practitioners, some universal and some for specific job functions. Wherever intelligence students do secure employment, at least at the national level, they will soon be expected to be adept across a range of stipulated competency areas. In support of this, some uniform IC-wide training modules like “Analysis 101” have been introduced, and the
National Intelligence University is also meant as a centralized source of IC professional development.

Upon entering the IC, new hires are of course expected to have a sound educational foundation, wherever they may land. However, a well-developed and varied set of academic intelligence competencies, parallel to but distinct from ODNI Core Competencies, exists only in the loosest form. A handful of authors have suggested broad prescriptive or descriptive content areas for intelligence curricula, overlapping at points with the ODNI Core Competencies. However, and like the ODNI Core Competencies, they are not exhaustive of all the skill and knowledge sets that could and should be derived from academic intelligence education. This point is fleshed out at some length in the sub-section to follow.

Spracher (2009), for example, points to the importance of including instruction in group think dynamics, critical thinking and cognitive processes, intelligence control and oversight, operational environment, ethical and normative thinking in intelligence, and operational dynamics and intelligence-policy relations. Rudner (2009) identifies three broad categories of intelligence curriculum: core, cognate and optional courses. Within these various categories are functional and regional studies, intelligence law, institutions and process, and special issues in intelligence and security. Others, like Collier (2005) have suggested and partially explored other areas of instruction with more precision—in his case, social science methods and models—but others have not answered his call to actively identify the various social science foundations that can be useful in the intelligence realm.
Some have suggested academic intelligence curricula be designed chiefly to help meet ODNI Core Competencies (Breckenridge, 2010; Spracher, 2009). Partly because of this, the central thrust of this essay is put forward in the context of these competencies. Similarly, the ODNI Core Competencies have been used in the only major study and assessment of intelligence studies programs (Spracher, 2009). Additionally, using this framework is a helpful way to address key issues of incorporating training facets into academic curricula and aids in highlighting the differing purposes of intelligence education and intelligence training.

Further stipulating and populating academic competency categories is a necessary next step in optimizing the human resources contribution of intelligence studies programs. It will also support a more long-term and developmental perspective on the IC’s workforce. Critically, a robust dialogue around academic competencies in intelligence studies programs can help inform larger efforts to design a professional intelligence analysis discipline. Corpora (2007), Collier (2005), Miller (2008) and Heuer (1999), for example, have pointed to the commonalities between intelligence analysis and social science research and the utility of applying social science methods and models in the context of intelligence analysis. Thus, intelligence analysis as a professional discipline will need to take on certain parallel aspects and approaches of the social sciences. Academe, comparatively strong in this domain, can be a unique contributor in this way.
Issues with Building and Measuring Intelligence Curricula around ODNI Core Competencies

Some notable scholars have suggested intelligence studies programs should be designed chiefly around building the ODNI’s Core Competencies in students. For these authors, it is seen as the most effective way to meet the IC’s human resource needs. Spracher (2009) applied the most foundational ODNI Core Competencies in the first major study of contemporary intelligence studies programs in the U.S (“crosswalking” them with curricula). This aligned “what is taught in university intelligence studies curricula with the needs of the agencies hiring graduates who become the intelligence professionals of tomorrow” (p. 193). Similarly, James Breckenridge (2010) has written: The IC looks to academic institutions to assist with the preliminary preparation of aspiring analysts. If these institutions are to be effective, evaluation standards and measures of effectiveness, as established by the IC, should be fully integrated into academic curricula” (p. 320).

Somewhat conversely, Martin Rudner (2009) has written that the role of academic intelligence education is “…certainly not to provide training in actual intelligence tradecraft. That is something best left to the national Intelligence and Security Community itself” (p. 116). It is not exactly clear what Rudner meant in this statement, but surely he is pointing to at least some of what can be found among the ODNI Core Competencies (some of which is explicitly labeled “tradecraft”). In any case, scholarly perspective and intelligence studies programs are generally moving in the direction of combining education and training (Campbell, 2011; Breckenridge, 2010; Davies, 2006; Spracher, 2009).
The ODNI Core Competencies might currently be the most defensible standards to use in designing and measuring intelligence studies programs given the lack of differentiated and more precise academic competencies. Many Core Competencies speak to the disciplinary and cultural foundations the IC requires of its intelligence professionals. And getting started in an effective way on some key ODNI Core Competencies in the academic phase has distinct advantages. Students will have the opportunity to learn in a comparatively less pressurized environment, where retention is likely to be greater and foundations laid for later development. Students can begin developing disciplinary and cultural sensibilities before establishing an identity at a particular intelligence organization. In this way, students are more likely to develop an “enterprise perspective”—something of a counter to overly insular and protective organizational instincts.

However, there are myriad issues, both practical and developmental, with constructing academic intelligence curricula around ODNI Core Competencies. First, it simply seems impracticable, given constraints in space, resources and expertise, for all ODNI Core Competencies to be—incorporated into curricular designs. This is especially true if more function-specific Core Competencies like the “Analysis and Production” directory are deemed important—another issue requiring attention. It is unlikely that current intelligence studies faculties have the capacity to create academic exercises and structures that can effectively pull in the myriad and multifaceted ODNI Core Competencies. Rudner (2009) has pointed to the difficulty intelligence studies programs have had in finding qualified and experienced faculty members.
Moreover, some of these Core Competencies really cannot be meaningfully taught or operationalized for research purposes in an academic setting (like courage and conviction or innovation). Some of the Core Competencies found in the more specialized directories (like “Analysis and Production”) are likely more teachable and critical than those from the generic directory. Presumably, intelligence studies programs are geared toward preparing students for analytic-centric work (which their coursework tends to suggest) as opposed to more operational facets of intelligence. Some of the more generic, cross-cutting Core Competencies are integral no doubt, but if greater value can be gained through targeting some of the more specialized directories, these options need to be examined. We need to pick more closely what can and should be done and not overburden limited faculties, potentially convoluting intelligence courses and assignments.

An undue emphasis on all ODNI Core Competencies also risks the dereliction or displacement of more purely academic foundations—ones that, as Marrin (2009) points out, are necessary foundations for later training:

“In terms of intelligence analysis, the term ‘training’ is usually associated with internal government programs intended to provide specific instruction for the implementation of job-related tasks, while the term ‘education’ is normally associated with academic courses or programs geared to provided more conceptual and theoretical frameworks having less immediate effect on performance, but layering the foundation for improved performance over the longer term.” (p. 131)

Similarly, we must not constrain the healthy autonomy and diversity of IC feeder programs. A too closely mapped relationship also runs the risk of injecting into intelligence curricula some of the problematic tendencies identified in the IC, such as an overemphasis on current intelligence tasks and communication styles favoring (overly)
confident appearance. There are a variety of risks in over-standardization of any kind, which would no doubt produce its own new, unintended deficiencies and pathologies in the IC.

Second, and connected to the first point, it is very likely that key stakeholders in the IC—namely human resource and analytic managers—would prefer that much instruction relating to Core Competencies be deferred to the intelligence organizations where graduates find employment. From the perspective of some of these managers, new hires may find themselves needing to unlearn and relearn certain material and methods. Rudner (2009) and Campbell (2011) have pointed to the skepticism that scholars and practitioners alike have voiced about highly specialized intelligence studies programs. Certainly the IC (and its component organizations) is better positioned to provide instruction in a number of Core Competency areas.

More generally, the perspectives of human resource and analytic managers have been largely left out of the intelligence education literature. Their input would be a great complement to existing studies and empirics, and is of course necessary as intelligence studies programs stipulate academic competencies and adopt professionally oriented components.

So to reiterate, it has been argued some ODNI Core Competencies should be developed in students before they graduate and enter the IC. However, keeping in mind the set of constraints and issues just noted, decisions must be made about which ones, in what measure, and how. These decisions must be supported by sustained research and more inclusive dialogue. Some innovative piloting and experimentation is taking place—like Brunel University’s open-source graduate exercise—that demonstrate the
benefits of learning “how” not just “that” (Davies, 2006). Learning “that” is surely the more conventional and conceptual approach, whether through the historical/case study, functional/process, structural/organizational or political/policymaking teaching frames identified by Rudner (2009). There are many benefits to pursuing the realism-based exercise at Brunel, as opposed for example to case studies, which are predetermined and probably less engaging for students.

Members and committees of IAFIE have taken up matters of academic intelligence standards and pedagogies, as well as other important issues. However, their institutional membership remains limited and somewhat homogenous, and their dialogues and reports have not often emerged in the intelligence education literature. In 2001, the journal *Intelligence and National Security* initiated a “Teaching Intelligence” series, slated to be an annual feature. Unfortunately, it ended abruptly after that first year. In the future, IAFIE might summarize the presentations and findings of its annual conference for publication in an academic journal, thus transmitting critical research and dialogue to broader audiences; this journal is a natural fit for that.

Third, ODNI Core Competencies (especially in the more generic directories and categories) are not sufficiently explicated to account for a host of educational domains that should be inculcated in the academic phase of development. This also means that when ODNI Core Competencies are used in the assessment of academic intelligence curricula, these more specific educational domains will go unexamined.

Collier (2005) asserts, for example, that students completing graduate degrees in intelligence studies need to be deeply knowledgeable in such things as regression analysis and the philosophy of social science. None of these domains can be expressly found in
the ODNI Core Competencies, and will thus be left out in any evaluation based solely on those Core Competencies.

Intelligence scholars have identified analytic deficiencies and shortcomings in the IC that seem attributable to a lack of the sorts of competencies Collier points to, competencies that fit naturally into academic education. Collier (2005) has observed the “lack of U.S. intelligence analysts trained in the proper development of theoretical frameworks and research hypotheses and in advanced social-science analytic methods—the basic tools needed by analysts to do their jobs properly” (p. 21). Heuer (1999) found that “theoretical insights that are available are often unknown to or at least not used by political intelligence analysts” (p. 42).

Collier notes that virtually hundreds of theoretical and methodological domains speak to the work of political and military intelligence analysts and should thus be investigated and incorporated accordingly. Yet, no concerted dialogue or research has taken place to further identify these domains and hash out their merits and applicability. In turn, intelligence curricula at both the graduate and undergraduate levels likely fail to take advantage of some really useful tool and knowledge sets. Essay 3 of this dissertation found that most graduate intelligence studies programs are very light on advanced social science content. If intelligence studies programs do not incorporate such competencies into their curricula, graduates will not likely pick them up once they enter their respective intelligence organizations (Collier, 2005). It is also unlikely that intelligence practitioners will develop these skill or knowledge sets intuitively or recreationally; formal instruction will generally be required.
So, unless and until these domains are articulated and subjected to critical examination, they will likely not be incorporated into intelligence curricula, and intelligence practitioners will continue to be without key educational foundations. It might be in this area where the most rewarding dialogue and advances can occur. While instruction in other facets of intelligence education is critical (like regional studies, language and critical thinking), they are more fixed in nature and already better established in academic intelligence curricula.

There is also the question of how content and competencies should be distributed across graduate and undergraduate education. Presumably, more advanced forms of intelligence analysis—like predictive and estimative analysis—require advanced competencies. Students coming from graduate programs will be expected to have broader and deeper foundations as they will be filling the more advanced positions. However, those coming into the IC directly from the undergraduate level (or without graduate education) will sooner or later fill advanced positions having missed the advanced instruction found in graduate education. Such gaps need to be addressed.

A New and Agile Curricular Device: ODNI Academic Intelligence Certificates

It has been argued above that some, but not all, ODNI Core Competencies should be reflected in academic intelligence curricula and competencies. However, the institutional capacity to do this across intelligence studies programs does not seem wholly adequate. Growing trends and knowledge in intelligence education have opened up opportunities for more agile, innovative instruction that can help fill instructional gaps. In this section, a new device is presented that builds on such trends and knowledge to
help programs offer a greater variety of instruction. It is an option that will also help mesh academic and professional development, injecting greater flexibility and purposive sequencing.

The curricular device proposed, loosely termed “ODNI Academic Intelligence Certificates,” is a means to practically, efficiently, transparently, inclusively and systematically help intelligence studies programs (with help from the IC) provide instruction across the full range of domains that can be expected of them. It takes advantage of IC infrastructure and expertise, ensures a safe degree of academic autonomy and diversity, and allows for the broader use of advanced learning instruments that have been proven effective. It would bring a diversity, flexibility and adaptability of instruction that many schools and departments are not likely to provide on their own, given somewhat fixed resources and expertise. This device would afford intelligence studies programs the capacity to provide instruction in 1) ODNI Core Competencies they should teach to but may lack the necessary faculty and resources, 2) areas the IC would prefer to be in more control of but sees value in early development, 3) important substantive areas that may be lacking in individual departments, or intelligence studies programs more broadly, and 4) more purely academic and social science domains.

The instruction underlying these certificates would be centrally facilitated and coordinated by the ODNI (or some surrogate body), and like the ODNI Core Competencies, could take some more foundational forms and some more specialized ones. Individual modules (probably semester long, but maybe less) could result in a particular certificate, or a series of modules could result in a certificate. The appropriate number of modules would depend on the various topical areas of instruction.
It is possible to imagine modules and certificates spanning a range of issues and topics—critical thinking, cognitive science and bias, structured analytic techniques, military and tactical intelligence, and open-source analysis, for example. This could help fill gaps in academic intelligence education and introduce a heightened level of fluidity, responsiveness and dynamism into more static intelligence studies programs. It would also allow students to pursue interests and areas that their particular institution may be weak in.

Instruction would be delivered through online media and/or video-conferencing sessions. Instructors could be drawn from the various intelligence organizations and federal colleges and universities, as well as private research and academic institutions. Colleges and universities participating in the program could offer credit to students who complete various ODNI modules and certificate. While the federal government would have significant financial responsibility for the infrastructure necessary to facilitate this program, student tuition could be directed to help fund programmatic inputs and resources.

Building from Existing Research and Resources

Rudner (2009) has observed that the proliferation of intelligence studies programs has outpaced the supply of qualified faculty. Presumably then, the ability of these programs to teach to ODNI Core Competencies and other specialized areas is also tenuous. While supply will edge closer to meeting demand, individual faculties will continue to be limited or imbalanced in terms of substantive expertise, and in turn course
offerings. With this in mind, it becomes important to figure out how these constraints can be mitigated and students given broader access to diverse and critical instruction.

A venture like the one outlined here would not be cheap or simple, and a small-scale pilot project might be advisable. But, as Rudner (2009) also points out, if purposive public investment in academic intelligence education is not made, academe will not meet the demand placed on it by the IC. An example of an existing and healthy IC-academe partnership is the set of Centers for Academic Excellence (CAE) the ODNI has facilitated since 2005. As a starting point, the ODNI modules and certificates could offer instruction and test students along the same lines as the ODNI CAE’s. The new program, however, would prove more agile than the CAE’s, covering a wider array of topics.

There is another critical advantage when compared with ODNI CAE’s and other similar programs. ODNI CAE’s are rather limited in number, failing to reach into many if not most of the undergraduate and graduate programs that will produce the coming generation of U.S. intelligence professionals. Even when including other IC-academe partnerships like the Central Intelligence Agency’s Officer-in-Residence program, the aggregate reach is still very limited, and almost random. Breckenridge (2010) stresses the importance of broad and systematic coordination across academic intelligence education programs, which the proposed device would go a long way in doing.

Campbell (2011) describes one of the major trends in intelligence education as the increased use of e-learning, speaking more however to instruction in the IC (for example, the National Intelligence University). A small number of universities, some of them for-profits, have begun to offer online intelligence degrees intended largely for working professionals. A broader and more flexible use of cyber media, however, has not yet
taken hold. Similarly, Breckenridge (2010) notes the promise made possible through the use of automated, personalized learning platforms, generally executed through software applications. These platforms match instructional pace and approach to individual learners, yielding greater knowledge transfer. Bringing these various developments to bear in greater measure on academic intelligence education seems a most natural progression.

**Conclusion**

This essay has suggested a relationship between the IC (and its cultures and stipulated core competencies) and academic intelligence curricula that is in some ways more arms-length than is espoused by others. Simultaneously, a new curricular program is suggested which would create new and closer ties between the IC and intelligence studies programs. Arriving at and then maintaining this relationship may be a difficult balancing act, but ultimately, it is in the best interest of all stakeholders. Just as intelligence studies programs and educators must be mindful of (not) reflecting certain problematic tendencies found in the IC, they must be critically aware of the impact they have on the capacity and work of the IC (consider the lack of advanced social science competencies).

Thus, intelligence studies curricula should be selectively responsive to IC signals and standards, retaining a healthy degree of autonomy and diversity so that their core objectives and responsibilities are not displaced. Academe cannot and should not teach to all ODNI Core Competencies, and intelligence scholars, educators and practitioners need to more purposively choose which are most important and appropriate. Similarly,
these stakeholders must be more active and precise in stipulating the educational and social science domains that speak to intelligence work.

By delineating the sets of academic competencies intelligence students should or can have, and continuing to adapt and adopt mechanisms to provide instruction across these domains, we can get the most out of our higher education system. No other entity in the IC’s external knowledge environment is so crucial to its capacity and performance. The existing intelligence education infrastructure, across professional and pre-professional domains, already affords opportunities that can be used more broadly in academe to very positive effect. Seeking to utilize these resources to the fullest should be an ongoing campaign, as should uncovering (and devising) new content areas for intelligence studies programs.

References


Essay 3: Social Science and Intelligence Analysis: The Role of Intelligence Education

Abstract:

The literature on intelligence analysis identifies a number of analytic dynamics and shortcomings in the U.S. Intelligence Community that reflect insufficiently developed competencies in advanced theoretical modeling and research methodology. These domains are squarely in the mission and purview of higher education, particularly at the graduate level. Higher education has been assigned some of the blame for the social science (and related) deficiencies observed in the Intelligence Community. However, the absence or failure of this kind of instruction, and possible implications for the Intelligence Community, has received little empirical attention. It is to begin filling this gap this essay is written.

INTRODUCTION

Scholarly study and practitioner observation in the realm of U.S. intelligence organizations and analysts points to a failure to know or use highly applicable theoretical insights, a counterintuitively dangerous “paradox of expertise,” undisciplined use of data, and an overreliance on situational logic and (often error prone) inductive methods (Collier, 2005; Davis, 2008; Heuer, 1999; Johnston, 2005). Moreover, key instances of U.S. intelligence shortcomings have been attributed to an unhealthy emphasis on substantive expertise (Davis, 2008). The aforementioned assessments of U.S. intelligence analysis thus seem to have had real implications for U.S. intelligence and foreign policy.
communities. In light of what is known about expert judgment and analytic outcomes, namely that a singular reliance on substantive expertise can contribute to confirmation bias, overconfidence, the overestimation of events, and an inability to recognize changing conditions, it might not be surprising that the U.S. Intelligence Community has missed critical foreign and international events (Betts, 2007; Davis, 2008; Herbert, 2006). These dynamics are subsequently discussed in more detail.

Some researchers have pointed to the U.S. higher education system to explain in part the skill composition and deficiencies in the U.S. Intelligence Community (Cooper, 2005). Consistent with that view, Michael Collier (2005) wrote that graduate intelligence and security curricula provide a limited theoretical and methodological preparation, with only the more progressive programs giving students the advanced social science backgrounds needed for advanced analytic positions in the U.S. Intelligence Community. This sort of preparation seems wholly consistent with the mission of higher education institutions, particularly for graduate programs meant to prepare knowledge workers who will, as careers, probe and parse complex social systems and settings. Christopher A. Corpora (2007) indicated that the work of intelligence analysts and social scientists, despite differing objectives and data, can be similar in process and methodology. Speaking to the fundamental objectives of educational (and training) programs in this area, Stephen Marrin observed:

“In terms of intelligence analysis, the term ‘training’ is usually associated with internal government programs intended to provide specific instruction for the implementation of job-related tasks, while the term ‘education’ is normally associated with academic courses or programs geared to provided more conceptual and theoretical frameworks having less immediate effect on performance, but laying the foundation for improved performance over the longer term.” (Marrin, 2009, p. 131)
In practice, the performance of U.S. intelligence analysis seems to have suffered from a paucity of critical social science foundations, the development of which falls squarely with graduate-level education. To be sure, this is not to absolve the Intelligence Community, which has been loath to provide instruction in these areas (Collier, 2005). The continued education that takes place in U.S. intelligence organizations will likely remain largely substantive and linguistic in nature, and analytic training, as Michael Collier (2005) noted, will focus on “developing basic descriptive research tools” (p. 24).

This essay will survey 19 U.S. graduate intelligence and security curricula to identify the relative presence or absence of advanced social science content. Although these programs are meant to prepare practitioners for other sectors (research institutions, international organizations, nonprofit organizations, and private industry), they are a concentrated source of U.S. intelligence analysts, and many of the same competencies needed by these analysts are likely needed by their counterparts in the other noted sectors. Further, there is no perfect symmetry in degree name or focus, with some programs emphasizing security policy and others intelligence process, for example. However, in all likelihood graduates will pursue similar kinds of advanced professional positions, many in the U.S. intelligence apparatus. Although that apparatus spans civilian intelligence organizations, law enforcement, and the military, the underlying foundations needed are largely the same for intelligence analysts (many of whom, when students, are unsure of where they would like to end up). Almost every program identified for this study explicitly markets itself as a preparatory station for future intelligence professionals—an intentionality that rightly subjects these programs to assessment from an intelligence (education) standpoint. Moreover, many, if not most, of the programs
selected are housed in elite departments and/or institutions, producing graduates with advanced degrees from top flight schools—who are likely hires.

No graduate programs in political science or regional studies have been included, and there is no doubt that many of the Intelligence Community’s analysts come from these sorts of programs. Thus, the sample, although likely having a high concentration of graduates who enter intelligence work, is not entirely representative of the educational profile of the Intelligence Community as a whole.

The analysis in this study will allow for the establishment of tentative links between skill and knowledge composition in the Intelligence Community and curricular design in the graduate programs meant to populate the Intelligence Community’s analytic ranks. Evidence of any such causal dynamic will not be definitive, but it might identify weak links in the overall development process of U.S. intelligence analysts.

The essay will also look more closely at a subset (four) of the study sample to provide a better contextual touchstone, highlight key issues in security and intelligence education, and to identify potential explanations for why programs look like they do. More complete program profiles can be found in Appendix A for each of the 19 programs. These profiles will incorporate most facets of the selected programs, including such things as language and regional studies requirements.

The Salience of Advanced Theory and Methods for Intelligence Analysts

The criticality that intelligence analysts possess substantive expertise (regional, cultural, functional, historical specialization), language faculties, and professional communication skills is in not contested in this essay. In the past decade, there has been
increased attention given to training analysts to manage common analytic and cognitive pathologies (in U.S. academe and the Intelligence Community). In the Intelligence Community, new approaches to analytic training and standards have been implemented, including the virtual National Intelligence University, Analysis 101, and the Office of the Director of National Intelligence’s analytic competency standards. Shortly before 9/11, the Central Intelligence Agency had established the Kent School of Intelligence Analysis, and subsequently Central Intelligence Agency University, introducing broader and more extended professionalization and training for new analytic hires (Marrin, 2003). The Central Intelligence Agency also makes analytic methodologists readily available to Directorate of Intelligence analytic staff. Richards Heuer’s (1999) Psychology of Intelligence Analysis has become frequent reading in college and university courses in intelligence, and structured analytic techniques are being taught in the classroom (Campbell, 2011; Marrin, 2009). Miller (2008), Herbert (2006), and Heuer (1999) have provided good overviews of the various cognitive biases and analytic pathologies that can afflict intelligence analysts (and are often targeted by structured techniques). The Office of the Director of National Intelligence also began supporting Intelligence Community Centers of Academic Excellence in a small number of universities around the country.

The patent importance of the different competencies noted earlier is taken as a given by the author, which is not to say the aforementioned programs or pedagogies have always been optimally designed. However, in this section, the case will be made that these competencies are not enough; they can be greatly complemented with more comprehensive knowledge of advanced theoretical modeling and methodology, even in an Intelligence Community that is almost entirely focused on the production of current
intelligence. To some, substantive specialization is unequivocally the most important form of expertise an intelligence analyst can possess, while recognizing the importance of complementary competencies (Miller, 2008). It certainly stands to reason that an applicant for an analytic position in the Intelligence Community who does not have functional or regional expertise is probably not much of a candidate at all.

This essay does not suggest an optimal balancing or distribution of these various skill and knowledge sets (or more to the point, the instruction that underlies these competencies), it does, however, argue that analysts will do their best work when they can bring all these competencies to bear on intelligence questions. In Strategic Intelligence and American World Policy, Sherman Kent (1965) set out what he saw as the key attributes of a competent intelligence analyst: subject matter master, creative and sophisticated researcher, skilled communicator of findings, cognizant of own analytic tendencies, and impartial to new data. It is mainly to the second attribute listed by Kent, and to a lesser extent the latter two, this essay speaks.

The evidence and rationales presented in this section are derived from (a) empirical findings and expert observation on the U.S. Intelligence Community, (b) insights taken from relatable research on expert judgment and analytic performance, and (c) key and consensus perspectives found in the contemporary intelligence literature. Taken together, this section and the next section are meant to demonstrate (a) the need for analysts to have competencies in advanced modeling and methods, and (b) the need to assess graduate intelligence and security education on the basis of these instructional domains.
There are a number of findings and perspectives in the intelligence literature that point to the need for contemporary intelligence analysts to be equipped with a heightened knowledge of advanced social science theory and methods. There is also evidence that these foundations are lacking throughout the U.S. Intelligence Community, suggesting a shared failure on the part of the Intelligence Community and the educational programs meant to prepare its analysts. Consistent with other critiques of the U.S. Intelligence Community, Collier (2005) pointed to a cultural reliance on historical and inductive approaches to intelligence analysis. For Collier, these analytic approaches were less disciplined than deductive analytic methods, making it easier for a variety of biases, pathologies and errors to enter into analytic judgments and prediction. He pointed to a lack of analysts “trained in the proper development of theoretical frameworks and research hypotheses and in advanced-social-scientific analytic methods” (p. 21). Central Intelligence Agency–commissioned studies by Richards Heuer (1999), Rob Johnston (2005), and Jeffrey R. Cooper (2005) generally corroborate Collier’s (2005) assertion that today’s intelligence analysts and organizations are not sufficiently equipped with advanced theoretical or methodological foundations.

In his seminal Psychology of Intelligence Analysis, Richards Heuer (1999) offered the judgment that the Intelligence Community in general is much better at situational logic, attributing this to the area studies and history preparation received by many of its analysts. Although those with strong social science backgrounds are more likely to apply theoretical perspectives and conceptual insights, as a whole, the analytic corps does not,

“…generalize enough . . . This is especially true in political analysis, and it is not entirely due to the unavailability of applicable political theory.”
Theoretical insights that are available are often unknown to or at least not used by political intelligence analysts.” (p. 42)

Heuer (1999) also wrote that cognitive biases and mental models that erroneously favor recent and vivid data and plausible and familiar outcomes are thought to frequently displace more rigorous, empirically sound analysis. R. Scott Rodgers (2006) likewise noted even experts have difficulty grounding their assessments in more accurate statistical and regression empirics, relying often instead on bits of more stark information. Backgrounds in advanced methodology, such as inferential statistics and regression analysis, should help analysts appreciate and grapple with confounding factors and sampling errors.

Similarly, a number of intelligence scholars have pointed to the dangers of not matching (or checking) substantive expertise with theoretical and methodological expertise. Some studies have shown that expert judgment is often inferior to regression outputs, or even mere chance (Rieber, 2004; Rodgers, 2006). Rob Johnston (2005) noted the “paradox of expertise,” citing evidence that Bayesian methodologies are at least as accurate as expert judgment. Moreover, scholarship on expert judgment and analytic accuracy suggests that placing too much emphasis on substantive expertise can contribute to confirmation bias, overconfidence, overestimation of events, and/or inert analysis (the inability to recognize changing conditions, especially of a nonlinear fashion; Betts, 2007; Davis, 2008; Herbert, 2006).

Jack Davis (2008) cited confirmation bias and the paradox of expertise as central to a number of intelligence shortcomings in U.S. history, including the community failure to anticipate the Yom Kippur War, the Soviet buildup of nuclear weapons in Cuba, the
Iranian Revolution in 1979, and the fall of the Berlin Wall in 1989. Speaking to the latter example, Davis offered the perspective of one intelligence analyst then working:

“There was among analysts a nearly perfect correlation between the depth of their expertise and the time it took to see what was happening on the streets of Eastern Europe (e.g., collapse of government controls) and what was not happening (e.g., Soviet Intervention).” (p. 161–162)

To be sure, and as Robert Jervis (1986) reminded us, analysts without the requisite substantive expertise may also come to rely too heavily on generic and even irrelevant theory. He wrote:

“...a grave danger lies in not having sufficient expertise about an area of a problem to detect and interpret important trends and developments. To make up for such deficiency, analysts tend to impose on the information the concepts, models, and beliefs that they have derived elsewhere.” (p. 31–32)

Jeffrey R. Cooper (2005) attributes some blame for intelligence analysts’ deficiencies to the U.S. higher education system, which “increasingly produces linear thinkers more comfortable ‘painting within the lines’ and pointed more toward likely solutions than toward broader problem-solving capabilities” (p. 49). Linearity will almost certainly describe less and less of the issues and questions facing intelligence analysts in the coming years, and beyond. Collier (2005) suggests preparation in complexity theory as one means to ameliorate such deficiencies, and Jervis (1999) and others have brought to bear systems thinking on international relations.

Sherman Kent may have been the first to write about the need for analysts to have a creative and imaginative bent, but intelligence scholars continue to promote this as a key attribute—something insights on cognitive psychology and bias suggest is no simple feat for the human mind (Collier, 2005; Heuer, 1999; Kent, 1965; Lahneman, 2006). Creative thinking has in fact been codified as a supporting competency for analysts by the
Office of the Director of National Intelligence. The learning of deductive theoretical models can inject analysts with a broader range and diversity of how political and social phenomena (might) operate, and there is no shortage of theoretical insights that can inform contemporary intelligence analysis. The construction of creative and alternative hypotheses to be tested can thus be greatly helped through the possession of various models of social behavior and dynamics. To learn more imaginative approaches to analysis in a structured way may seem counterintuitive, but to not provide this intellectual infrastructure, which can be built on, expanded, and integrated, seems at the very least a missed opportunity and a reliance on individuals’ own imaginative talents. And why not make use of models and insights developed from scholars who have done the work of constructing, refining, and continually testing complex theory? The ability to build imaginative and creative hypotheses to test requires not only proficiency in systems modeling, but again deep substantive and methodological expertise to inform and operationalize rigorous testing.

**Building on a Small Field of Research: Literature and Issues in Intelligence Education**

In the 10 years since the attacks of September 11, 2001, the myriad and diverse sources of intelligence failure and error have been extensively studied; however, empirical studies of the academic programs that prepare intelligence analysts have been remarkably few. Although the content and rigor of academic preparation may not be as immediate or apparent a factor as some others (such as information gathering and sharing), if a comprehensive view is to be taken of causes of intelligence shortcomings in
the United States, graduate intelligence education cannot continue to be overlooked. The U.S. higher education system is arguably the most critical component of the Intelligence Community’s external knowledge environment, supplying hundreds of analysts every year who will conduct the day-to-day analytic work for America’s intelligence and policy principals.

Of course, the set of responsibilities that these principals have for tasking and using intelligence can be exercised with more or less skill and seriousness. And a number of other factors also play a role in determining the strength and use of finished intelligence products, but for the purposes of graduate education in intelligence and security studies, programs can only prepare their students to be well-rounded and ready for the training and job tasks that are waiting for them in the Intelligence Community. Over time, a greater proficiency and facility with advanced modeling and methods might become a broad community characteristic, even part of the analytic culture, augmenting the support intelligence can provide to policymakers.

While a survey of the literature shows that the need to evaluate intelligence education is taking hold at least nominally and conceptually, the subsequent empirics have been slow to come. The empirical analysis that has been done thus far has focused somewhat more on undergraduate education. At the graduate level, only basic mapping and conjecture by a few scholars has been offered. This minimal literature does little to investigate the proposition that graduate intelligence programs bypass advanced modeling and methodology. In 2001, the Teaching Intelligence Project was announced in the journal Intelligence and National Security, with a mission to “spark” ideas for updating tried-and-true classes, generate ideas for new courses, and give those . . .
contemplating teaching a class on intelligence for the first time a place to begin’” (Hindley, 2000, p. 191). This effort never really got off the ground, though the International Association for Intelligence Education emerged as a venue for educator-practitioner dialog around intelligence curricula and pedagogy.

Moreover, the empirical studies conducted have applied standards perhaps more akin to professional contexts than higher education. William Spracher’s (2009) study seeks to understand if the intelligence education programs that have emerged in U.S. colleges and universities since 9/11 were a constructive and necessary complement to the primarily liberal arts programs from where many intelligence analysts come. The first two prongs of the study surveyed (a) young practicing analysts (predominately Defense Intelligence Agency analysts) and (b) 6 intelligence experts and scholars for their views on whether would-be intelligence analysts should complete coursework in intelligence. The third prong is the application of the Office of the Director of National Intelligence’s core competencies to assess surveyed intelligence programs. These competencies include engagement and collaboration, critical thinking, personal leadership and integrity, accountability for results, technical expertise, and communication, each of which is further subdivided into more specific competencies. Although Spracher (2009) concluded that most of these programs offer some kind of instruction in those competency areas, it is not necessarily the only mission of intelligence and security education (particularly at the undergraduate level) to produce graduates who meet all of those core competencies. Moreover, to learn these competencies in an academic setting, and from a conceptual standpoint, is surely less effectual than more practical, training-oriented approaches. Spracher (2009) also offered his own set of topics and issues
intelligence curricula should reflect, but relied on the Office of the Director of National Intelligence criteria for his conclusions (there is some overlap between the two sets). Spracher’s (2009) own criteria include group think dynamics, critical thinking and cognitive process, intelligence control and oversight, operational environment, ethical and normative thinking and intelligence, and operational dynamics and intelligence-policy relations.

Similar to Spracher’s (2009) design, Gordon R. Middleton (2007) evaluated programs (including intelligence and security community programs, to be sure) on the basis of a human resources theory “maturity model,” which includes such professional competencies as culture and change management skills. Although these are probably sought-after traits in any organization, this example should make clear that measuring academic-educational programs through a practitioner lens is not wholly appropriate. It is surely more important, for example, that intelligence analysts have deep substantive knowledge and a foundation in research methodology than the capacity to shepherd an office through an uncertain period. The latter skill set is surely critical for managers, but they represent a minority of the analytic corps, and this sort of responsibility is one that is unlikely to emerge until well into one’s career. And while another competency domain, delivery of functional practices, is more foundational, and includes skill sets similar to the Office of the Director of National Intelligence’s core competencies (critical thinking, communication), absent from the maturity model and Office of the Director of National Intelligence’s core competencies are more fundamental (educational) theoretical and methodological competency sets.
There may well be some room for the inclusion of training and tradecraft at the graduate level, and scholarly perspectives and academic programs are surely moving in this direction. Stephen Marrin (2009) noted the general blurring between training and education occurring in academic programs, and there are prominent voices in the literature which suggest the necessity and appropriateness of this:

“The [Office of the Director of National Intelligence’s] core competencies explored in the present study will be key in aligning what is taught in university intelligence studies curricula with the needs of the agencies hiring graduates who become the intelligence professionals of tomorrow.” (Spracher, 2009, p. 193)

“The Intelligence Community (IC) looks to academic institutions to assist with the preliminary preparation of aspiring analysts. If these institutions are to be effective, evaluation standards and measures of effectiveness, as established by the IC, should be fully integrated into academic curricula.” (Breckenridge, 2010, p. 320)

Others have expressed a hesitancy to move in this direction. Martin Rudner (2009) commented that intelligence curricula at any level should “not provide training in actual intelligence tradecraft. That is something best left to the national Intelligence and Security Community itself” (p. 116). Rudner’s (2009) survey of graduate programs finds that most of the content is substantive in nature, consisting of regional studies, functional topics, and special intelligence-related issues.

These findings seem consistent with Collier’s (2005) worry that only more progressive graduate programs give sufficient attention to modeling and methodology. Thus, in Collier’s (2005) view, the best opportunity to give analysts “the basic tools needed by analysts to do their jobs properly” goes mostly unexploited (p. 21). In addition to strong foundations in social science research and analytic methods (quantitative and qualitative), Collier (2005) asserted that candidates for advanced analytic positions
should have foundations in the major classic theoretical approaches in international relations (realism, liberalism, and Marxism), and key contemporary theories and models used in their particular discipline (such as rational choice theories for political scientists).

The approach used in this essay is similar to that of Middleton (2007), who found tentative connections between gaps in the maturity model in intelligence education and observed dynamics in the U.S. Intelligence Community. Similar to Middleton (2007) and Spracher (2009), I “crosswalk” the competencies deemed important with the course content of selected graduate intelligence and security programs. Again, the important difference is that the lens applied here will be a purely education-based one, whereas previous lenses have been largely informed by various training and practitioner standards.

This research also maps territory (the graduate level) that, to date, has been documented in only more limited ways. It speaks directly to the limited and even unsubstantiated suppositions of those who have written on graduate intelligence education, giving a more solid empirical understanding.

RESULTS

This section presents study results, (a) evaluating the 19 selected programs on the basis of their advanced social science requirements and offerings, (b) discussing how certain advanced content found in the study might be uniquely useful for intelligence analysts, and (c) taking a closer look at a subset of four programs selected for their unique content or institutional location. It concludes with a discussion of the tentative implications the study findings have for the capacities and performance of U.S.
intelligence organizations and analysts. First, a note on the coding scheme adopted and the study’s course identification rules is offered.

**Coding and Course Identification**

The distinctions between advanced and basic methods and theory were made along rather simple lines, however a number of methods courses included basic and advanced content. Basic methods courses are those dealing with introductory and descriptive statistics or policy or intelligence analysis. Advanced quantitative methods are those beyond foundational statistical or practitioner analytics, generally dealing with multivariate analysis and the nature of evidence and inference. All qualitative research methodologies are coded as advanced.

Basic theoretical modeling includes courses in international relations, diplomacy, strategic thought, and the role of intelligence in state policy processes. These are the foundational theory courses expected in most any master’s degree in security and intelligence studies, and this study bears out that expectation. Because this study is less concerned with basic theory and more concerned with advanced theory, and because basic theory courses do not factor into most study calculations, these courses are not presented exhaustively (in the essay’s Appendix B)—although all required basic theory courses are listed.

Advanced theoretical modeling includes conceptual frames that seek to explain or operationalize complex social and political phenomena more broadly, ranging from small group to transnational dynamics. A number of complex international and military simulation courses have been included in this category. This category of courses is
certainly most difficult in terms of deciding what is included and what is excluded. The key is that the theoretical content attempts to make sense of dynamics that are of concern (at least broadly) to intelligence organizations or pertains to the behavior of actors embedded in those dynamics. Courses in ancient political theory or Nietzsche’s critique of modernity, for example, likely have a level of theoretical abstraction or narrowness as to have minimal application for contemporary intelligence analysts. Some of the theory and modeling courses included may be considered more basic in their fields, but in the realm of intelligence and security education, they represent pertinent conceptual instruction beyond the norm.

The literature on intelligence analysis points to some clearly applicable advanced theory (e.g., system dynamics, complexity theory, rational choice), but consensus on what is best and most applicable has certainly not been reached. Thus, there is a degree of subjectivity and induction driving decisions on course inclusion, and readers may reasonably reach conclusions different from the author—in fact, this would be a good and constructive thing. Later in this section, the practical, intelligence-specific utility of some of the more commonly found advanced coursework is discussed. In general, the theory-based courses that are offered in these programs (or partnering departments), seem patently applicable in most cases. Where they did not seem applicable and were thus excluded, there were usually enough courses pertinent at face value to make the former’s inclusion unnecessary. An extensive presentation of courses by program is found in the Appendix.

For the sake of space, and because students are, in general, unable to complete a high number of electives, not all advanced coursework has been included in Appendix B.
Readers will notice that similarly titled courses are sometimes listed in different categories, following from my review of available course descriptions and emphasis. These descriptions are not included in Appendix B, again given the space that would be required, but can be made available upon request.

As a decision rule, this study includes only those courses offered within the departments that house these security and intelligence programs, or courses offered by other departments that are expressly pointed to in the websites and literature of home departments. To be sure, data were not uniform in terms of how current they were or the way they were organized and presented. For example, some courses come with only brief one- or two-sentence explanations, whereas others might have multiple paragraphs. In addition, course offerings change some from one year to the next, and the data used for this study is not more than a snapshot of curricula and course offerings. Of course, within the parameters noted earlier, every effort was made to be uniform in categorization and exhaustive in listing all pertinent courses.

**A Look Across and Within Programs**

In this section, a cross-sectional analysis is offered to capture advanced methods and theory requirements among the 19 programs in this study. The possibilities for elective study of advanced content are also reviewed. The analysis will look both at the number of programs requiring the completion of advanced coursework and the percentage of courses dedicated to (or open for) advanced instruction. These latter calculations are based simply on the percentage of total required credits that are or can be satisfied with advanced methodology and theory courses.
Only 1 of the 19 programs examined has course requirements for advanced analytic or research methodology. A number of programs (12 of 19, or 63%) have required methods courses that touch on more advanced content, but these hybrid classes tend to spend much more time on foundational or basic methods, while offering short surveys of more advanced content, both qualitative and quantitative. For example, ethnography or multivariate analysis might be covered in a small number of class sessions or assignments. Such coverage, however, can do little more than introduce students to advanced techniques in only the loosest terms, not give them an operational skill set. A few additional programs allow students to take hybrid methods courses as an elective, or require a hybrid methods course if a language skill or different methods course is not satisfied. For the purposes of the calculations in this essay, these hybrid courses have been coded as elective.

While entire courses dedicated to advanced qualitative or quantitative methods are virtually never required, they can be taken on an elective basis in most programs (13 of 19, or 68%). Often, however, barriers (such as instructor permission) are placed on master’s student enrollment in these courses, which are intended often times for Ph.D. students. Ultimately, it is possible for students from almost every program to complete their degrees and enter the U.S. Intelligence Community (or other sectors) with only minimal exposure to any sort of advanced research methodologies.

A requirement for completion of advanced theoretical modeling classes is also rare, found in only 3 of the 19 (16%) programs surveyed. Similar to advanced methods, this sort of content can be more readily found among elective offerings (17 of 19 programs, or 89%). This assessment of advanced requirements reveals that not a single program of the 19 surveyed requires coursework to be taken in advanced theory and methodology. However, 13 of 19 (68%) programs permit for coursework in both domains, if students seek it out.
Although this essay does not prescribe an amount of coursework that should be dedicated to advanced social science within Master’s programs, it captures the number of credits (or classes) students must or can use to study theoretical modeling and research methodology. The aforementioned analysis offers some hints about what these numbers will look like, but it certainly does not present the full picture. Here, calculations are made on the percentage of overall credit requirements that must or can be fulfilled with advanced social science classes. In two cases (Tufts University and University of Chicago), calculations are based on total number of classes rather than total credits, with no discernable effect on study results likely.

Within individual programs, the percentage of coursework dedicated to advanced instruction (theory and methods combined) ranges from 0% to 7%, again with 15 programs (79%) having no mandatory advanced social science classes. When advanced electives are added, that range increases to 0% to 50% (excluding one extreme outlier), with the average percentage of degree credits that can be satisfied with advanced social science being 22%. Keep in mind that for the high end of these individual ranges to be reached, students would need essentially to fill all elective requirements with available advanced social science courses. When looking at required advanced coursework and required hybrid methods together, a range of 0% to 14% is observed, with an average of 6%. Last, when taking all required and elective advance and required hybrid courses, a range of 0% to 50% is again observed (only one school at 0%), with a mean of 27%.

The aforementioned figures reveal the minimal emphasis placed on instruction in advanced theory and methods in U.S graduate intelligence and security curricula. In only one program was there an option to major or specialize in methodology (see next
section), and it is not surprising that concentrations come almost exclusively in regional or functional areas (i.e., substantive). In many cases these concentrations are requirements. In addition, basic theory and methods courses are much more common than their advanced counterparts, and for obvious reasons (and by consensus) are imperative for programs of this kind. Of the 19 people who were surveyed, 14 (74%) had basic and/or hybrid statistical course requirements. Fifteen (79%) programs had one or more course requirements for international relations and/or intelligence theory. The essay now turns to some uniquely applicable advanced content for analysts.

**Systems Modeling, Ethnography, and Organization Theory**

Although advanced requirements and sometimes offerings were found to be minimal, some common and seemingly highly applicable coursework was identified in the study. I make no claim that these curricular commonalities suggest any sort of consensus on what the best areas of advanced study are, because these courses are never required in the particular programs surveyed and are often meant more specifically for other degrees or concentrations. Nonetheless, they are available and permissible for course credit for security and intelligence students, and their utility for practicing intelligence analysts is subsequently argued.

Three graduate programs offered a course in ethnographic analysis, whereas 11 had coursework in organizational theory and analysis (some expressly focusing on the institutional context of foreign policy decision making), and 9 in systems approaches and modeling. Readers can see Appendix B for a full presentation of the advanced instructional classes identified in the study. The review in the next paragraphs will simply
demonstrate in more concrete terms how these advanced social science domains might be highly useful in the context of intelligence analysis. These brief reviews also make clear that advanced methods and theory are not always simply only one or the other. Often, a particular conceptual framework lends an analytical lens, even if that lens is broad and not as precisely delineated as a discrete methodology.

**Systems Approaches and Modeling**

A number of intelligence scholars have described IC analysts as lacking in their capacity to understand and model complexity and nonlinearity. System approaches to the analysis of political and social phenomena are designed to build such capacity, helping analysts engage in more expansive and integrative analysis. In these approaches, causal relations are presumed to often be indirect, delayed, nonlinear, interactive, or otherwise mediated, rather than linear or direct in nature. These varied reverberations, or system effects, resulting from a change in one variable, will not only produce changes in other parts of a system, but will also result in circular feedback that again alters the state of the original variable (Jervis, 1999).

System dynamics is a modeling and simulation tool used to analyze and demonstrate posited interconnections and sensitivities in human systems (could be an organization or facility, or an economy, for example). Although system dynamics is highly technical and requires extensive training, there are computer simulation tools available for the purposes of modeling international relations and events that can be readily incorporated into classroom settings.
Ethnography

Ethnographic analysis is an inductive, qualitative approach to the study of people, groups, and social settings, or more specifically, cultures, social relations, and shared systems of meaning. It is a tool most commonly used by social and cultural anthropologists, but has also seen wide application in the public administration and organization theory fields. To be sure, there is not a single ethnographic approach. Ethnographic study can consist of participant observation, extensive but unstructured interviews, and sometimes outright immersion in the activities of a group or social setting. However, all variations are fundamentally inductive at their core, letting people and groups tell their own stories. A working knowledge of this methodology could serve to mitigate some of the pathologies associated with mirror-imaging, a well-known cause of intelligence error and failure.

Organization Theory

Actors, both state and nonstate, are embedded in systems, organizations, and networks that constrain or otherwise influence their decisions and behavior (policy systems, political institutions, bureaucratic agencies, political parties, professions and disciplines, and even family). The organizational theory literatures can also offer theoretical and empirical insights on how entities relate to other stakeholders in their networks. Robert Jervis (1999) indicated that interconnections and system factors influence or even overwhelm individual decision making, largely the same sentiment that points to the benefits of applying system approaches and modeling. Similarly, Richards Heuer (1999) wrote in a discussion of cognitive bias and intelligence analysis, “When
inferring the causes of behavior, too much weight is accorded to personal qualities and dispositions of the actor and not enough to situational determinants of the actor’s behavior” (p. 127).

**A Closer Look at Selected Programs**

This essay also set out to attempt tentative explanation for why programs look like they do, and why they vary from department to department, institution to institution. This goes beyond a curricular mapping, and begins looking for causal dynamics between location and design. What will be left unexamined is how external relations and dynamics influence program design and content—a line of inquiry perhaps more important than any undertaken in the present study. The questions and issues to be investigated around this issue will be expanded upon in the conclusion.

This section thus looks more closely at a subset of the graduate programs selected for this study. These include Columbia University, Mercyhurst College, The George Washington University, and the Georgia Institute of Technology (i.e., Georgia Tech). The programs included were selected because they are good examples of some of the issues identified in the intelligence education literature, have unique content and approaches to the teaching of intelligence and security studies, and/or are divergent in departmental or degree location. This analysis also provides some insight into why programs take on varying curricular designs and assesses them in the context of the broader sample of programs. A related and important research question for future research is “Do the different curricular designs and emphasized student competencies help inject the
Intelligence Community with a diversity of perspectives and knowledge that, taken together, help enrich the analytic corps and work of the U.S. Intelligence Community?”

Georgia Institute of Technology: International Affairs and Security as a Science

Georgia Tech offers a Master of Science in International Affairs with a specialized track in international affairs and security, which is taken alongside one of three other specialized tracks: comparative and regional studies, globalization and development, or science and technology. Although maybe not surprising at a technology school, the first difference is that Georgia Tech’s program is a master of science not a master of arts, as are most of the other programs surveyed. This moniker, however, does not result in a program that necessarily differs from its arts counterparts. The optional science and technology track (3 courses, 9 credits) represents the main divergence, and a technology literacy requirement affords students the opportunity to learn a specialized skill set, which can range from something novel (such as remote sensing) to courses such as those found in a number of other programs (quantitative analysis; systems analysis and design). The skills developed through the technology literacy requirement can be a real value-add to prospective employers, in many cases setting Georgia Tech students apart in this way from those in other programs. Perhaps a Georgia Tech graduate of the Master of Science in International Affairs will be more attractive to an intelligence organization such as the National Geospatial-Intelligence Agency. Georgia Tech also requires students to fulfill international relations, quantitative methods, economics and language requirements, each common among the programs surveyed in this essay. Ultimately, it
depends largely on individual students if Georgia Tech’s program differs fundamentally from master of arts programs.

Mercyhurst College and George Washington University: Training and Tradecraft in Education

Mercyhurst’s Master’s of Science in Applied Intelligence is the only program among the selected sample that does not embed the study of intelligence in a security studies or international affairs degree, and the composition of course requirements reflects this difference. The curricular model of Mercyhurst raises the question, “Should intelligence studies be the core of a degree or a component of a degree?” The success the program has had in placing students in U.S. intelligence organizations, and the replication of Mercyhurst program features elsewhere, both suggest that this approach certainly has its place in the broader network of security and intelligence curricula.

The program’s core course requirements are each intelligence-specific (each has the word intelligence in the title), and include law enforcement and business intelligence courses—a broader treatment of intelligence than is found in most other programs surveyed. This program focuses in large measure on the mechanics and function of intelligence, analytically (“Analytic Methodologies for Law Enforcement and Homeland Security” and the use of open-source analysis exercises) and operationally (“Counterintelligence Events and Concepts,” for example). The program’s applied and focused nature make forays into instruction on intelligence tradecraft virtually unavoidable. These specialized skill sets seem historically reserved for training programs at intelligence organizations, and technical instruction in counterintelligence is probably
among the clearest examples of a typically professional, not academic, area of instruction. Most intelligence professionals are unlikely to act as counterintelligence operatives or analysts, and those who do will be given extensive training within their intelligence organization. When counterintelligence is covered in intelligence education, it is most likely as part of a broader course in intelligence function and policy. The George Washington University’s program (Master of Arts in Security Policy) also demonstrates a proclivity for extensive attention to tradecraft as well, offering courses in “Red Team” analytic methods and counterintelligence practice. In general, however, the contours of The George Washington University’s program are similar to the other programs selected for this study.

The inclusion of this content is something of an aberration from the prescriptions of some intelligence scholars and the conventional expectations of what is found in graduate study. However, these findings demonstrate what Stephen Marrin (2009) called the “blurring” (p. 132) of education and training in academic degrees focusing on intelligence studies. Particularly at the graduate level, there may be clear benefits to including this training content. For example, if intelligence analysis is to develop into a professional discipline such as law or medicine, its educative supports will need to be adjusted accordingly and may need to take on an even more professional bent.

Two final interesting and related courses offered at The George Washington University examine critical thinking and historical cases of U.S. intelligence success and failure. Similar to Brunel University’s innovative opensource intelligence analytic exercise, these courses, and those at Mercyhurst noted earlier, can familiarize students
with common sources of intelligence error and failure, compelling them to develop the active skill of thinking about thinking (Davies, 2006).

Last, Mercyhurst’s program is the only those surveyed housed in a primarily 4-year liberal arts school (there are four other graduate programs in the college). It thus lacks a selection of other graduate programs and schools from which to borrow courses. This factor likely explains Mercyhurst’s relative lack of advanced social science theory and methodology course offerings, impeding the interdisciplinary complexion that other programs are oft to highlight in their mission statements. To be sure, forays into advanced social science research methods are components of the program’s courses titled “Research Methods in Intelligence” and “Advanced Analytic Methods,” but deeper and more specialized courses are not a part of the curriculum.

Columbia University: A Unique Emphasis on Analytic Methodologies

Columbia University’s Master of International Affairs stands out in its emphasis on and course offerings in advanced methodologies. It is the only degree in the study sample that has an analytic concentration, termed “Advanced Policy and Economic Analysis.” Within this concentration, which requires the completion of three methodological courses, the focus is on the application of quantitative methods to public issues of social and governmental implication. This concentration can be attached to a policy specialization in international security policy, regional studies, or a number of other domains. The Master of International Affairs is housed in a department that has about a half dozen other graduate degrees, and in a larger university setting, both of which contribute to the extensive and diverse advanced methods courses available to
Master of International Affairs students. These offerings can provide a qualitative complement to the quantitative methods concentration (in such things as ethnography). There are two interesting and notable faculty members in the Master of International Affairs Department: Richard Betts, who has written on individual and social cognition and intelligence analysis; and Robert Jervis, who has written on system effects and complexity in the context of international relations. These faculty members afford students direct perspectives on and approaches to the study of intelligence not available in many departments, adding to the methodological depth and diversity of the Master of International Affairs.

Summary

From this closer review of a few selected graduate programs, it is possible to see that program location is an important determinant of program content—not an altogether surprising finding. The Master of Science programs placed emphasis on methods and mechanics, and programs housed in large departments and/or universities had a greater range of courses to utilize, something particularly important in the realm of advance social science content. It is also demonstrated that training and instruction in tradecraft are realities in graduate intelligence education, showing up in multiple programs.

Tentative Implications for the U.S. Intelligence Community

An underlying premise of this essay is that advanced theory and methods fall cleanly into the domain of graduate education in the fields of intelligence and security studies—something it seems few intelligence scholars or educators would disagree with.
Education is meant to establish the broad foundations upon which more specialized and applied skill sets can be built. At a more practical level, the rigor and dynamism that such knowledge can inject into the various products of contemporary intelligence organizations and analysts is critical, and seemingly much needed. This can mean the reigning in of cognitive biases such as sampling error or inert analysis, or the broadening of one’s analytic lens for more imaginative, creative sorts of analysis. Moreover, a review of the intelligence analysis literature reveals a number of empirically supported perspectives that by and large U.S. intelligence analysis is deficient in, or simply does not utilize, advanced theoretical and methodological approaches.

Looking back to the first section of this study’s results, the analytic cultures and deficiencies observed in the contemporary Intelligence Community, noted by Richards Heuer (1999), Rob Johnston (2005), Jeffrey R. Cooper (2005), and Michael Collier (2005), among others, could perhaps be seen as resulting in part from the lack of emphasis on advanced theory and methods in U.S. graduate intelligence and security curricula. Graduate intelligence curricula do tend to prepare students for more inductively driven analysis through the heavy reliance on substantive content, while deductive theory and methods constitute the least common type of course among the programs surveyed. To be sure, inductive approaches have their place in intelligence analysis, and probably as the dominant mode of analysis in the current environment of current intelligence. As observed earlier, there are available more rigorous methods to inductive analysis as well, such as ethnography, which might go along way in ameliorating the common analytic pathology known as mirror-imaging.
The theoretical frames that are most common in the programs surveyed revolve around international relations, intelligence, and security, which probably do not treat many of the sorts of social settings and questions that analysts face, and offer little in terms of deductive guidance. It seems that an analyst can barely bring to their daily work (the often normative) theories of the role of intelligence in a democratic state, or the question of if realism or liberalism best describes the behavior of international actors. This is not to say this content is not important, but that it will minimally help analysts think about their more specialized and localized intelligence accounts. Further, the creative and nonlinear approaches to intelligence analysis so broadly supported in the literature will be poorly served by these most basic of political frames. The now decade-old study of Richards Heuer (1999) found a failure of intelligence analysts and organizations to use highly applicable advanced theory. That observation about the Intelligence Community in the 1990s seems to have as much salience in the realm of contemporary intelligence education.

The emphasis in these practitioner-oriented curricula is clearly on developing substantive expertise, which as we have seen, can exacerbate such things as confirmation bias, and often times has show itself to be no better in predicting events and outcomes than sheer chance or multivariate regression outputs. Multivariate and inferential analysis as a broad requirement was absent in a majority of the programs surveyed, and it seems that a real opportunity is missed to inculcate the sorts of perspectives that can mitigate common cognitive biases (sampling error, vividness) and bring about a better awareness of confounding factors.
Presuming that coursework in these advanced methods and theories should in fact be an integral component of graduate intelligence education, and can through some not fully established mechanism help analysts do their jobs better once in the field, it is important to ask why programs seem to incorporate them in such scant fashion. The aforementioned program descriptions offered some insight, but there may be broader dynamics and issues at play as well. Perhaps the core explanation is that programs respond to market demands (i.e. prospective employers’ preferences), which in the U.S. Intelligence Community have been for students with strong substantive expertise.

CONCLUSION

This essay has offered an empirical test of graduate-level security and intelligence curricula on purely educational grounds, and a narrow and focused subset, at that. It is a complement to and extension of similar studies to date (Middleton, 2007; Spracher, 2009), corroborating the findings of some (Rudner, 2009), and providing some answers to the speculation of others (Collier, 2005).

A number of assumptions and findings served as the impetus for this study. The first is that the fundamental purpose and role of higher education, particularly graduate education, is consistent with the teaching of advanced theory and methods. Recall Stephen Marrin’s (2009) differentiation of education and training in the aforementioned literature review. Moreover, students at this phase in their education are more likely prepared for and capable of advanced study, and the needed institutional and intellectual resources are most likely to be available. To be sure, the foundations developed here can and should be built upon in intelligence organizations, but it is better to begin on these
foundations before analysts are in the midst of a new and highly challenging job. Moreover, the analytic weaknesses and pathologies found in Intelligence Community by Collier, Heuer, Johnston, Cooper, and others, point to the need for more education in advanced theory and methods. Other findings have shown the importance of balancing substantive expertise with theoretical and methodological expertise. As Michael Corpora (2008) indicated, intelligence analysts, after all, are knowledge workers, and their work, while having differing objectives and data, is not that dissimilar to that of social scientists.

The essay revealed that graduate security and intelligence curricula are decidedly light on advanced theory and methods, with some variation between programs, to be sure. Requirements are almost nonexistent, but students can certainly build these capacities if they seek out the right classes. Although any causal dynamics between this relative lack of advanced content and the various findings and observations on the contemporary Intelligence Community would be highly tentative, it does seem that an important and unique opportunity is going unrealized. Instruction in advanced methods and theoretical modeling then would seem to be falling through the cracks in the current educational infrastructure (undergraduate, graduate, and professional) for U.S. intelligence analysts.

Again, this essay has argued the burden for advanced instruction is first and foremost on graduate education, but perhaps these programs and the professional education of intelligence analysts should incorporate more advanced content. Master’s programs of this type could perhaps be more akin to doctoral study, in this way. The section on program descriptions offered partial insight into why programs take on the structure and content that they do, and other possible explanations have been offered.
Such content may also be absent because of the lack of a consensus on what advanced studies are most important and applicable. The resolution to that will be found through continued research and dialogue. This study has identified a number of advanced domains found to be more common in graduate intelligence education (organization theory, ethnographic analysis, and systems modeling), and briefly presented their specific applicability for intelligence analysts.

To be sure, advanced theory and methods preparation is but one feature critical to a sound and reasonably balanced graduate intelligence or security education. Substantive education, learning to effectively communicate and function in group settings, and foreign language skills are undoubtedly integral. Although a core presumption was that reparation in advanced theory and methods will pay dividends once analysts reach their intelligence organizations, these competencies are embedded in a long, complex, and interrelated set of determinants of analytic performance. These determinants include anything from resource allocations, to information gaps, to organizational culture and norms (such as the oft-cited emphasis on current intelligence and analytic volume), to policy failures on the part of political officials. The interactions and convergences of these many variables offer a litany of research opportunities, contingent of course upon having access to the necessary data.

Going forward, the field for research in intelligence education in U.S. colleges and universities remains an open one with myriad possibilities—many of which are suggested in the aforementioned review of the intelligence education literature. It is desirable that much of this research would be undertaken in the context of longer term professional development and analyst performance in the U.S. Intelligence Community.
This will help support the development of a more integrated intelligence analysis discipline and hopefully better analytic outcomes.

First, it is important to understand how responsive intelligence curricula are to the needs of the Intelligence Community. It is also necessary to understand what degree of distance and autonomy should exist between academe and the IC in the realm of curricular development. Although it is critical that academic programs effectively meet the needs of the intelligence organizations their students enter, it might also be possible for academe to be too responsive and for the Intelligence Community to transmit certain pathological tendencies to academe (such as an overemphasis on current intelligence and overly confident communication styles).

Second, how responsive are intelligence curricula to developments in other fields that speak to intelligence analysis (such as educational psychology and cognitive science). Do programs exhibit the capacity and boundary spanning relations to adapt to changing conditions and advances in knowledge? The fields of cognitive psychology and science are instructive in their constantly evolving knowledge sets, and more and more will continue to be known about human cognition. Moreover, cognitive processes and patterns are likely functions of environmental stimuli, which themselves are constantly evolving. Thus, there is little that is static about either cognitive fields or actual cognitive process. Similarly, James Breckenridge (2010) indicated that much can be learned and applied from the field of educational psychology, and experimentation and observation of the pedagogical devises found in security and intelligence curricula can also help programs and educators adopt more fruitful approaches and exercises. One example of innovative approaches to the teaching of intelligence at the graduate level can be found at
Brunel University in London, where students are tasked to conduct realtime intelligence analysis using the same open-source intelligence as their professional counterparts (Davies, 2006).

Last, it would be instructive for future policy and planning to understand how the recent growth in intelligence curricula unfolded. What kinds of efforts did colleges and universities with new intelligence or security curricula undertake? What has been the role of institutions such as the International Association for Intelligence Education? Were previously established programs emulated (“organizational isomorphism”), and if so, what are potential good and bad outcomes of this? What new innovations in design, content, and approach were introduced? Did the establishment of these programs outpace the capacity of departments to appropriately build needed resources, content, and faculty members? If so, what were the effects, and have corrective efforts been made?

References


APPENDIX A: PROGRAM PROFILES

This appendix represents in a mostly complete way the most salient features of the Master’s programs included in this study. Every effort was made to capture the nuance and novelty of different programs without being tedious. Differing or uncommon features not accounted for in the basic framework of the appendix can be found in the last row, titled “Other.” After reviewing these profiles, it is the author’s hope that readers will have a good sense of the curricular design of each program, and a basis for looking at differences across programs. These profiles are concerned only with features internal to degrees, and do not make reference to other resources and options available either in the home departments or larger institutional settings – for example, graduate certificate programs have not been included.

Most of the categories in this appendix are rather self-explanatory. The appendix first presents institutional locations of the Master’s programs, the particular name of each degree, and the name of the concentration (when applicable) that is security and/or intelligence focused. Following this are, separately listed, the core course requirements for both the general degree and the security-intelligence degree concentration. Other degree concentrations (including fields, tracks, etc) available alongside the security and intelligence concentrations are also included, and concentration requirements stipulated. The general course space reserved for electives is listed, with the caveat that electives are generally a flexible facet of a degree, and more electives can probably be completed then are required. The number of elective courses reflected in this table is that which brings students to meeting minimum degree or elective credit requirements. When total degree credits were not available online, the total number of required courses was substituted (University of Chicago and Tufts University).
It became apparent that regional studies and economics are prevalent features in this sort of Master’s degree, so a category was provided for each. While virtually all programs allow for regional studies and economics, for the purposes of the appendix, only course requirements and the option or requirement for a regional or economic specialization are documented. Finally, program features regarding language proficiency, additional academic work (thesis, comprehensive exams) and internship experience are presented.
<table>
<thead>
<tr>
<th>Degree Feature</th>
<th>University at Albany</th>
<th>Boston University</th>
<th>University of Chicago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department or School Name</td>
<td>Rockefeller College of Public Affairs and Policy</td>
<td>Department of International Relations</td>
<td>Committee on International Relations</td>
</tr>
<tr>
<td>Degree Name and Total Credits</td>
<td>Master of Public Administration (49 credits, 11 courses)</td>
<td>Master of Arts in International Affairs (64 credits, 15 courses)</td>
<td>Master of Arts in International Relations (9 courses)</td>
</tr>
<tr>
<td>Security or Intelligence Concentration</td>
<td>Homeland Security, Specialization (2 to 5 courses, 8 to 20 credits)</td>
<td>Security Studies, Track (3 or 4 courses, 12 or 16 credits; students must also complete a second track)</td>
<td>International Relations Theory, Security, and History, Field (3 courses)</td>
</tr>
<tr>
<td>Core Courses: Degree</td>
<td>Institutional Foundations of Public Administration; Public and Nonprofit Financial Management; Principals of Public Economics; Data, Models, and Decisions I; Data, Models, and Decisions II; Foundations of Public Management (6 courses, 24 credits)</td>
<td>Introduction to International Relations; Research Methods for International Relations Practitioners; International Security; Global Economics and Development Policy (4 courses, 16 credits)</td>
<td>International Relations Theory Seminar</td>
</tr>
<tr>
<td>Core Courses: Security or Intelligence Concentration</td>
<td>Political Violence (4 credits)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other Degree Concentrations (including tracks, fields, specializations, etc)</td>
<td>Public Management; Public Economics and Finance; Policy Analysis and Information Systems; Politics, Policy and Institutions; Substantive Policy Areas</td>
<td>Theory and Policy; Political Economy; Asia; Europe; Latin America; Middle East and Africa; Muslim World</td>
<td>International Political Economy and Development; Regional Studies and Nationalism; Human Rights, Environment, and International Law</td>
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<td>Electives</td>
<td>No Electives</td>
<td>4 Electives (16 credits)</td>
<td>2 Electives</td>
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<td>Optional Regional Tracks (3 or 4 courses, 12 or 16 credits)</td>
<td>Optional Regional Field (3 courses)</td>
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<td>Economics</td>
<td>Optional Public Economics and Finance Specialization (2 to 5 courses), 1 Required Course</td>
<td>Optional Political Economy Track (3 or 4 courses), 1 Required Course</td>
<td>Optional Economics Field (3 courses)</td>
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<td>Language Proficiency</td>
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<td>Required</td>
<td>Not Required</td>
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<td>Thesis</td>
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<td>Required (&quot;MA paper&quot;)</td>
<td>Required (&quot;MA paper&quot;)</td>
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<td>Comprehensive Exam</td>
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<td>No</td>
<td>No</td>
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<tr>
<td>Internship</td>
<td>Required</td>
<td>Not Required</td>
<td>Not Required</td>
</tr>
<tr>
<td>Other</td>
<td>Professional Applications and Career Capstone Experiences</td>
<td>MA Paper Workshop</td>
<td>Perspectives on International Relations; MA Paper Workshop</td>
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<thead>
<tr>
<th>Degree Feature</th>
<th>Columbia University</th>
<th>University of Denver</th>
<th>George Washington University</th>
<th>Georgetown University</th>
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<tr>
<td>Department or School Name</td>
<td>School of International and Public Affairs</td>
<td>Josef Korbel School of International Studies</td>
<td>Elliott School of International Affairs</td>
<td>Walsh School of Foreign Service, Center for Peace and Security Studies</td>
</tr>
<tr>
<td>Degree Name and Total Credits</td>
<td>Master of International Affairs (54 credits, 16 or more courses)</td>
<td>Master of Arts in International Security (80 credits, 15 to 18 courses)</td>
<td>Master of Arts in Security Policy Studies (80 credits, 12 courses)</td>
<td>Master of Arts in Security Studies (36 credits, 12 courses)</td>
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<tr>
<td>Security or Intelligence Concentration</td>
<td>International Security Policy, Policy Concentration (5 courses, 15 credits, including concentration core; must also complete specialization)</td>
<td>-</td>
<td>Intelligence, Specialized Field (9 or more credits, including concentration core; second specialized field also required)</td>
<td>Intelligence, Concentration (12 credits, 4 courses, including concentration core)</td>
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<tr>
<td>Core Courses: Degree</td>
<td>Conceptual Foundations of International Affairs; Economic Analysis I and II or Economics I and II; Quantitative Analysis; Public Management or Nonprofit Management; Budgeting and Accounting or Economics of Finance; Course on Interstate Relations (7 courses, 22 credits)</td>
<td>Theories of International Politics or Comparative Politics or International Political Economy; U.S. Foreign Policy; U.S. National Security Policy; Major Issues in International Security; Classes in Security and Strategy; Security and Defense Analysis Methods I and II (7 courses, 35 credits)</td>
<td>Politics of International Security; Defense Policy and Program Analysis I; History of Strategy and Policy; Quantitative Analysis for International Affairs Practitioners (or language) (4 courses, 12 credits)</td>
<td>Theory and Practice of Security; Strategic Studies and Military Operations; Analytical Methods: Security; 1 course in each of 3 different Substantive Areas (area, economic, and technology studies) (6 courses, 18 credits)</td>
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<tr>
<td>Core Courses: Security or Intelligence Concentration</td>
<td>War, Peace, and Strategy in the 20th Century (3 credits)</td>
<td>-</td>
<td>Fundamentals of Intelligence (3 credits)</td>
<td>Theory and Practice of Intelligence (3 credits)</td>
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<tr>
<td>Other Degree Concentrations</td>
<td>Economic and Political Development; Energy and Environment; Human Rights; International Finance and Economic Policy; Urban and Social Policy; Advanced Policy and Economic Analysis; Applied Science; International Conflict Resolution; Communications and Media; International Organization; Management; Regional Specializations</td>
<td>-</td>
<td>Transnational Security Issues; U.S. National Security Policy and Process; Political Psychology; Defense Policy and Defense Programs; Conflict and Conflict Resolution; Homeland Security Policy; Strategic Concepts and Military History; Science, Technology, and National Security Policy; Security and Development; Regional Security</td>
<td>Homeland Security; International Security; Military Operations; Science and Technology; Terrorism and Substate Violence; Unconventional Weapons and Non-Proliferation; U.S. National Security</td>
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<tr>
<td>Electives</td>
<td>4 or more Electives (12 credits)</td>
<td>5 to 8 Electives (25 to 40 credits; plus 3 International Security electives, 15 credits)</td>
<td>0 to 2 Electives (0 to 6 credits)</td>
<td>1 Elective Stipulated (with possible for more)</td>
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<td>Regional Studies</td>
<td>Optional Regional Specializations (3 courses, 9 credits)</td>
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<td>Optional Regional Specialized Field (3 courses, 9 credits)</td>
<td>1 Area Studies Course Required</td>
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<td>Economics</td>
<td>2 Required Economics Courses; Optional Advanced Policy and</td>
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<td>Demonstrate Proficiency</td>
<td>1 Required Course in Economics and Security</td>
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<td>Degree Feature</td>
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<td>University of Kentucky</td>
<td>University of Maryland</td>
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<tr>
<td>Department or School Name</td>
<td>The Sam Nunn School of International Affairs</td>
<td>Patterson School of Diplomacy and International Commerce</td>
<td>School of Public Policy</td>
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<tr>
<td>Degree Name and Total Credits</td>
<td>Master of Science in International Affairs (42 credits, 12 or 14 courses)</td>
<td>Master of Arts in Diplomacy and International Commerce (30 credits, 10 courses)</td>
<td>Master of Public Policy (48 credits, 16 courses)</td>
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<tr>
<td>Security or Intelligence Concentration</td>
<td>International Affairs and Security, Track (3 courses, 9 credits, including concentration core; students must also complete a second track)</td>
<td>Intelligence, Concentration (1 to 8 courses, 3 to 24 credits, including concentration core)</td>
<td>International Security and Economic Policy, Specialization (4 courses, 12 credits; 9 of these credits come from concentration core, below)</td>
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<tr>
<td>Core Courses: Degree</td>
<td>Macroeconomics; Microeconomics; International Economics; Empirical Research Methods; IR Theory; Technology Requirement (5 to 6 courses, 9 to 18 credits)</td>
<td>Statistics; Research Problems in International Relations (2 courses, 6 credits)</td>
<td>Quantitative Aspects of Public Policy or Quantitative Analysis of Policy Issues; Political Analysis; Microeconomics and Policy Analysis; Moral Dimensions of Public Policy; Public Management and Leadership; Macroeconomics or Finance (6 courses, 18 credits)</td>
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<tr>
<td>Core Courses: Security or Intelligence Concentration</td>
<td>International Security (3 credits)</td>
<td>International Intelligence (3 credits)</td>
<td>American Foreign Policy-Making Process; International Security; International Economic Policy (9 credits)</td>
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<td>Other Degree Concentrations (including tracks, fields, specializations, etc)</td>
<td>Globalization and Development; Comparative and Regional Studies; Science and Technology</td>
<td>Diplomacy; Development; International Security; International Organizations; International Commerce</td>
<td>Environmental Policy; Federal Acquisition; International Development; Management and Leadership; Public Sector Financial Management; Philanthropy and Non-Profit Management; Social Policy</td>
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<td>Electives</td>
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<td>7 Electives (21 credits)</td>
<td>5 Electives (15 credits)</td>
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<td>Economics</td>
<td>3 Required Courses (9 credits; waivers and combined courses possible), Optional Globalization and Development Track (3 courses, 9 credits)</td>
<td>1 Required Course in Commerce, Economic Theory, IR and Diplomacy (“Research Problems in International Relations”); Optional Development and International Commerce Concentrations</td>
<td>3 Required Economics Courses; Optional International Development Specialization (5 courses, 15 credits)</td>
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<td>Other</td>
<td>Technology Requirement</td>
<td>Summer Reading; Crisis Simulation</td>
<td>Project Course</td>
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<tr>
<td>Department or School Name</td>
<td>Department of Intelligence Studies</td>
<td>Department of Defense and Strategic Studies</td>
<td>Henry C. Lee College of Criminal Justice and Forensic Sciences</td>
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<tr>
<td>Degree Name and Total Credits</td>
<td>Master of Science in Applied Intelligence (34 or 36 credits, 10 or 11 courses)</td>
<td>Master of Science in Defense and Strategic Studies (36 credits, 9 to 12 classes)</td>
<td>Master of Science in National Security and Public Safety (36 credits, 11 courses)</td>
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<td>Security or Intelligence Concentration</td>
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<td>Core Courses: Degree</td>
<td>Research Methods in Intelligence; Intelligence Theories and Applications; Competitive Intelligence; Law Enforcement Intelligence; Intelligence Communications; Contemporary Leadership in Intelligence; Managing Strategic Intelligence Analysis (7 courses, 21 credits)</td>
<td>Seminar on Strategy and Arms; Seminar on International Security Affairs (2 courses, 6 credits)</td>
<td>National Security Programs Architecture and Mission; NSP Personnel Security Programs; National Security Charter, Legal Issues and Executive Orders; Securing National Security Information Systems (4 courses, 12 credits)</td>
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<tr>
<td>Core Courses: Security or Intelligence Concentration</td>
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<td>-</td>
<td>Information Protection and Security</td>
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<td>4 Electives (12 credits)</td>
<td>7 Electives (21 credits)</td>
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<tr>
<td>Regional Studies</td>
<td>New Mexico State University</td>
<td>University of Pittsburgh</td>
<td>Cal State, San Bernardino</td>
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<th>New Mexico State University</th>
<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<th>Language Proficiency</th>
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<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<tbody>
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<th>New Mexico State University</th>
<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<tbody>
<tr>
<td>Optional (or research-based project)</td>
<td>Optional (or comprehensive exam)</td>
<td>Optional (or internship or research project)</td>
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<th>Comprehensive Exam</th>
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<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<td>Optional (or thesis or research project)</td>
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<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<tbody>
<tr>
<td>Required (as intelligence analyst)</td>
<td>Not Required</td>
<td>Optional (or thesis or research project)</td>
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<tr>
<th>Other</th>
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<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<tr>
<td>Research-Based Project (optional, or thesis); Open Source Exercise</td>
<td>Not Required</td>
<td>Research Project (or thesis or internship)</td>
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<th>Degree Feature</th>
<th>New Mexico State University</th>
<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<tbody>
<tr>
<td>Department or School Name</td>
<td>Department of Government</td>
<td>Graduate School of Public and International Affairs</td>
<td>College of Social and Behavioral Sciences</td>
<td>Maxwell School of Citizenship and Public Affairs</td>
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<tr>
<th>Degree Name and Total Credits</th>
<th>New Mexico State University</th>
<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Public Administration (42 credits, 12 or 13 classes)</td>
<td>Master of Public and International Affairs (48 credits, 16 courses)</td>
<td>Master of Arts in National Security Studies (46 credits, 12 courses)</td>
<td>Global Security, Career Track (2 or 3 classes, 6 or 9 credits; must complete second career track)</td>
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<table>
<thead>
<tr>
<th>Security or Intelligence Concentration</th>
<th>New Mexico State University</th>
<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence and Security Studies, Graduate Minor (3 courses, 9 credits)</td>
<td>Security and Intelligence Studies, Major (4 courses, 12 credits, excluding major core)</td>
<td>Intelligence, Field (3 courses, 12 credits)</td>
<td>Managerial Economics or Microeconomics; Quantitative Skills for IR or Introduction to Statistics; Strategic Planning, Implementation and Evaluation in International Affairs; Signature Course (4 courses, 12 credits)</td>
<td></td>
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<table>
<thead>
<tr>
<th>Core Courses: Degree</th>
<th>New Mexico State University</th>
<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Methods in Government; Public Budgeting; Public Sector Human Resource Management; Public Policy Analysis; Government Organizations; Ethics in Government (6 courses, 18 credits)</td>
<td>Quantitative Methods; Economics for Public Affairs; Global Governance; Policy Analysis; Administration of Public Affairs; Macroeconomics or Microeconomics (6 courses, 18 credits)</td>
<td>Theory and History of Strategy; Strategic Systems and Strategic Thought; International Security; Operations Analysis or International Relations</td>
<td>Managerial Economics or Microeconomics; Quantitative Skills for IR or Introduction to Statistics; Strategic Planning, Implementation and Evaluation in International Affairs; Signature Course (4 courses, 12 credits)</td>
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<table>
<thead>
<tr>
<th>Core Courses: Security or Intelligence Concentration</th>
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<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>International History; Security and Intelligence Studies (2 courses, 6 credits)</td>
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<table>
<thead>
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<th>Other Degree Concentrations (including tracks, fields, specializations, etc)</th>
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<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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<tbody>
<tr>
<td>-</td>
<td>Global Political Economy; Human Security</td>
<td>Eurasia; Middle East; Terrorism</td>
<td>Global Markets;Global Development;Foreign Policy;Negotiation/Conflict Resolution;International and Transnational Organizations and Leadership</td>
<td></td>
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<table>
<thead>
<tr>
<th>Electives</th>
<th>New Mexico State University</th>
<th>University of Pittsburgh</th>
<th>Cal State, San Bernardino</th>
<th>Syracuse University</th>
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</thead>
<tbody>
<tr>
<td>3 or 4 courses (9 or 12 credits)</td>
<td>3 to 6 Elective Courses (9 to 18 credits)</td>
<td>4 or 5 Electives (10 to 20 credits)</td>
<td>1 to 3 Electives (3 to 9 credits)</td>
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<tr>
<td>Regional Studies</td>
<td>Not Required</td>
<td>Not Required</td>
<td>2 Optional Regional Tracks (3 courses, 12 credits)</td>
<td>6 Credits of Regional Studies Required</td>
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<tr>
<td><strong>Economics</strong></td>
<td>Not Required</td>
<td>2 Required Courses</td>
<td>Not Required</td>
<td>1 Required Economics Course; Optional Career Tracks in Global Markets and Global Development (2 or 3 classes, 6 or 9 credits)</td>
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<tr>
<td><strong>Language Proficiency</strong></td>
<td>Not Required</td>
<td>Not Required</td>
<td>Not Required</td>
<td>Required</td>
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<tr>
<td><strong>Thesis</strong></td>
<td>Optional (or internship)</td>
<td>Optional (or capstone seminar)</td>
<td>Optional (or comprehensive exam)</td>
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<tr>
<td><strong>Comprehensive Exam</strong></td>
<td>Yes</td>
<td>No</td>
<td>Optional (or thesis)</td>
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<tr>
<td><strong>Internship</strong></td>
<td>Optional (or thesis)</td>
<td>Required</td>
<td>Not Required</td>
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<tr>
<td><strong>Other</strong></td>
<td>Optional Capstone Seminar (or thesis); Professional Development</td>
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<td>Capstone Course</td>
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<th><strong>Tufts University</strong></th>
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<tbody>
<tr>
<td><strong>Department or School Name</strong></td>
<td>Bush School of Government and Public Service</td>
<td>Fletcher School of Law and Diplomacy</td>
</tr>
<tr>
<td><strong>Degree Name and Total Credits</strong></td>
<td>Master’s Program in International Affairs (48 credits, 16 courses)</td>
<td>Master of Arts in Law and Diplomacy (16 courses)</td>
</tr>
<tr>
<td><strong>Security or Intelligence Concentration</strong></td>
<td>Intelligence as an Instrument of Statecraft, Concentration (2 to 5 courses, 6 to 15 credits)</td>
<td>International Security Studies, Field (3 or more courses, including concentration core; students must complete a second field)</td>
</tr>
<tr>
<td><strong>Core Courses: Degree</strong></td>
<td>Leadership and Public Administration; International Politics in Theory and Practice; Fundamentals of the Global Economy; Quantitative Methods in Public Management I; American Foreign Policy since World War II (5 courses, 15 credits)</td>
<td>Two courses in Diplomacy/History/Politics, one course in International Law and Organization, one course in Economics and International Business, and one course in Quantitative Reasoning (5 courses)</td>
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<tr>
<td><strong>Core Courses: Security or Intelligence Concentration</strong></td>
<td>-</td>
<td>The Role of Force in International Politics</td>
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<tr>
<td>Other Degree Concentrations (including tracks, fields, specializations, etc)</td>
<td>Development Economics, Human Security; Humanitarian Studies; International Business and Economics Law; International Business Relations; International Environmental and Resource Policy; International Information and Communication; International Monetary Theory and Policy; International Negotiation and Conflict Resolution; International Organizations; International Political Economy; International Trade and Commercial Policies; Law and Development; Pacific Asia; Political Systems and Theories; Public International Law; SW Asia and Islamic Civilization; United States; Designated Fields of Study</td>
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<tr>
<td>Electives</td>
<td>6 to 9 Electives (18 to 27 credits)</td>
<td>Up to 5 Electives</td>
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<tr>
<td>Regional Studies</td>
<td>Optional Regional Studies Track (2 to 5 courses)</td>
<td>Optional Regional Studies Fields (3 or more courses)</td>
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<tr>
<td>Economics</td>
<td>1 Required Course; Optional Concentrations in International Economics and International Economic Development (2 to 5 courses)</td>
<td>One Required Course; Optional Economic Fields (3 or more courses)</td>
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<tr>
<td>Language Proficiency</td>
<td>Required</td>
<td>Required</td>
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<tr>
<td>Thesis</td>
<td>No</td>
<td>Required</td>
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<tr>
<td>Comprehensive Exam</td>
<td>No</td>
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<tr>
<td>Internship</td>
<td>Required (for those without substantial professional experience)</td>
<td>Not Required</td>
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<tr>
<td>Other</td>
<td>Capstone Seminar; Intensive Summer Language and Cultural Study</td>
<td>Professional Development Program</td>
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# APPENDIX B: COURSEWORK IN METHODS AND THEORY

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<thead>
<tr>
<th>School and Degree</th>
<th>Advanced Research and Analytic Methods</th>
<th>Hybrid Methods</th>
<th>Advanced Concepts and Theoretical Modeling</th>
<th>Applied and Basic Analytic Methods</th>
<th>Basic Concepts and Theory</th>
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<tbody>
<tr>
<td><strong>Boston University</strong>&lt;br&gt;Master of Arts, Inter. Affairs (Security Studies)</td>
<td>R: Research Methods for International Relations Practitioners</td>
<td>E: Bureaucracy and Governance: A Comparative Inquiry&lt;br&gt;E: Civil Society and the State</td>
<td>E: International Business Intelligence and Security Practice</td>
<td>R: Introduction to International Relations&lt;br&gt;R: International Security&lt;br&gt;E: Classics of International Relations&lt;br&gt;E: Strategic Intelligence</td>
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<td>School and Degree</td>
<td>Advanced Research and Analytic Methods</td>
<td>Hybrid Methods</td>
<td>Advanced Concepts and Theoretical Modeling</td>
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| **Columbia University**  
Master of International Affairs (Inter. Security Policy) | E: Applied Regression Analysis  
E: Organizational Analysis  
E: Workshop in Quantitative Political Science  
E: Time Series Analysis  
E: Sample Surveys | R: Quantitative Analysis | R: Conceptual Foundations of International Affairs  
E: Group Dynamics: Systems Perspective  
E: Game Theory and Political Theory  
E: Global Collective Action | E: Analytic Techniques for Military Policy  
E: National Intelligence Estimates (half course)  
E: Methods for Defense Analysis and Assessment | R: War, Peace, and Strategy in the 20th Century  
E: Seminar on International Theory  
E: Intelligence and Foreign Policy |
| **University of Denver**  
Master of Arts, International Security | R: Security and Defense Analysis Methods II  
E: Statistical Methods III  
E, E: Econometrics for Decision-Making I and II  
E: Social Science Methods  
E: Applied Field Methods  
E: Comparative Politics: States and Societies in the 21st Century | E: Systems Thinking for Social Scientists  
E: Organization and Group Dynamics  
E: Social Construction of International Society | R: Security and Defense Analysis Methods I  
E: Statistics I  
E: Political Risk Analysis  
E: Art of Forecasting  
E: Strategic Intelligence: Data Collection and Analysis | R: Major Issues in International Security  
R: Classics in Security and Strategy  
E: Theories of International Politics |
| **George Washington University**  
Master of Arts, Security Policy Studies (Intelligence) | E: Qualitative Methods  
E: Advanced Quantitative Methods | E: Quantitative Analysis for International Affairs Practitioners (or language)  
E: Foreign Policy Decision-Making | E: Gaming and Simulation  
E: Foreign Policy Analysis I  
E: Political Risk Analysis  
E: Alternative Analysis  
E: Analyzing Conflict  
E: Political Analysis | R: Defense Policy and Program Analysis I  
R: History of Strategy and Policy  
R: Fundamentals of Intelligence |
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<tr>
<th>School and Degree</th>
<th>Advanced Research and Analytic Methods</th>
<th>Hybrid Methods</th>
<th>Advanced Concepts and Theoretical Modeling</th>
<th>Applied and Basic Analytic Methods</th>
<th>Basic Concepts and Theory</th>
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<td>School and Degree</td>
<td>Advanced Research and Analytic Methods</td>
<td>Hybrid Methods</td>
<td>Advanced Concepts and Theoretical Modeling</td>
<td>Applied and Basic Analytic Methods</td>
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<tr>
<td>Mercyhurst College</td>
<td>R: Research Methods in Intelligence</td>
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<td>R: Competitive Intelligence</td>
<td>R: Intelligence Theories and Applications</td>
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<td></td>
<td>E: Advanced Analytical Techniques</td>
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<td>R: Law Enforcement Intelligence</td>
<td>E: Theory and Process in Law Enforcement Intelligence</td>
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<td>R: Managing Strategic Intelligence</td>
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<td>Analysis</td>
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<td>E: Strategic Business Intelligence</td>
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<td>E: Analytic Methodologies for Law Enforcement and Homeland Security</td>
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<td>E: Cyber Threat Analysis</td>
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<td>E: Analyzing Financial Crimes</td>
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<td>Missouri State University</td>
<td>E: Analysis of International Security Politics</td>
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<td>E: Seminar on Defense Policy Analysis</td>
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<td>R: Seminar on International Security Affairs</td>
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<td>R: Seminar on Strategy and Arms</td>
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<td>E: Intelligence, Counterintelligence, and Covert Action</td>
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<td>E: Seminar on Strategic Thought</td>
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<td>E: The Structure of National Security Decisions</td>
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<td>E: Situational Evaluation and Failure Analysis Models</td>
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<td>E: National Security Incident Mapping</td>
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<tr>
<td>School and Degree</td>
<td>Advanced Research and Analytic Methods</td>
<td>Hybrid Methods</td>
<td>Advanced Concepts and Theoretical Modeling</td>
<td>Applied and Basic Analytic Methods</td>
<td>Basic Concepts and Theory</td>
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</tbody>
</table>
| New Mexico State University  
Master of Public Admin. (Intelligence and Security Studies) | E: Qualitative Research Methods  
E: Seminar in International Relations Theory  
E: Advanced Intelligence Studies  
E: Advanced National Security Policy |
| University of Pittsburgh  
Master of Public and International Affairs (Security and Intelligence Studies) | E: Seminar in Research Design and Methods  
E: Multivariate Analysis  
E: Theory and Concepts of Comparative Politics  
E: Evidence and Inference  
E: Policy Research and Analysis  
E: Intelligence Collection, Analysis and Application | R: Security and Intelligence Studies: Theory and Public Policy  
R: Global Governance  
E: Theory of International Relations |
| Cal State, San Bernardino  
Master of Arts, National Security Studies (Intelligence) | E: Qualitative Political Analysis  
E: Comparative Political Analysis  
E: Ethnographic Method | E: Operations Analysis | E: Strategic Intelligence | R: Theory and History of Strategy  
R: Strategic Systems and Strategic Thought  
R: International Security  
E: International Relations Theory  
E: Political Intelligence |
| Syracuse University  
Master of Arts, IR (Global Security) | E: Qualitative Political Analysis  
E: Comparative Political Analysis  
E: Ethnographic Method | R: Introduction to Statistics or Quantitative Skills for International Relations  
E: Economic Statistics | E: Comparative Foreign Policy Analysis  
E: Topics in Game Theory  
E: Political and Social Change | R: Strategic Planning, Implementation and Evaluation in International Affairs  
E: Public Policy Analysis | E: International Security  
E: Political Realism in IR |
<table>
<thead>
<tr>
<th>School and Degree</th>
<th>Advanced Research and Analytic Methods</th>
<th>Hybrid Methods</th>
<th>Advanced Concepts and Theoretical Modeling</th>
<th>Applied and Basic Analytic Methods</th>
<th>Basic Concepts and Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Master’s Program in Inter. Affairs (Intelligence as an Instrument of Statecraft)</strong></td>
<td>E: Organizational Theory for the Public Sector</td>
<td>E: Bureaucracy in a Democracy</td>
<td>E: Policy Analysis</td>
<td>E: Grand Strategy</td>
<td></td>
</tr>
<tr>
<td><strong>Tufts University</strong></td>
<td>E: Econometrics</td>
<td>E: Comparative Politics</td>
<td>E: Analytic Frameworks for International Public Policy Decisions</td>
<td>E: The Role of Force in International Politics</td>
<td></td>
</tr>
<tr>
<td><strong>Master of Arts, Law and Diplomacy (Inter. Security Studies)</strong></td>
<td>E: Qualitative Research Methods</td>
<td>(A course in quantitative reasoning is required – the above course, or econometrics, quantitative methods, or marketing research)</td>
<td>E: Foundations of Policy Analysis</td>
<td>E: The Art and Science of Statecraft</td>
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<tr>
<td></td>
<td>E: Qualitative Research in Communities Affected by War</td>
<td></td>
<td></td>
<td>E: Classics of International Relations</td>
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<td></td>
<td>E: Field Seminar in Comparative Politics and International Relations</td>
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<td></td>
<td>E: Diplomacy: History, Theory and Practice</td>
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</tbody>
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Essay 4: Building an International and Comparative View of Academic Intelligence
Education: A Look at Graduate Programs in Indonesia, South Africa, India, Israel and South Korea

Abstract:

Research on intelligence education in colleges and universities has been comprised largely of descriptive studies of programs in North America, the United Kingdom and Australia. There has been some work done that is comparative, inferential or evaluative in nature. This essay extends these efforts by profiling and examining five intelligence and related graduate programs in nations thus far excluded from the literature: Indonesia, South Africa, India, Israel and South Korea. Not all of the programs selected are explicitly labeled “intelligence.” This is indicative of the fact that academic intelligence programs are still largely an Anglo phenomenon. However, many intelligence practitioners come from other kinds of academic programs, such as international relations and security studies, making them pertinent to the study of higher education’s human capital role vis-a-vis intelligence organizations. This study looks at two intelligence degrees, an intelligence concentration within an international relations degree, and two security studies degrees that offer intelligence coursework or instruction. Keeping in mind the sample is not scientific or perfectly comparable, program content, commonalities and divergences will be assessed and also examined in the context of the existing literature. Potential explanatory factors for curricular designs will be explored, including departmental location, international curricular diffusion, and specific security circumstances.
Introduction

The relatively nascent but growing scholarly literature on higher education’s role in the production of intelligence practitioners has yet to extend beyond a small number of Anglo nations. The focus has remained chiefly on programs in the United States, the United Kingdom, Canada and Australia. This is not altogether surprising, given that so many new intelligence curricula have emerged in those countries. Researchers simply have a better handle to grab on to, so to speak. Nonetheless, it might be viewed as an “intelligence failure” on the part of scholars and practitioners to have waited so long to closely study the design and implications of pertinent higher education programs. Even with this new set of programs, it is probably still the case that a majority of new intelligence hires have completed degrees not explicitly labeled “intelligence.” Thus, to exclude such programs from study is to forego understanding the educational backgrounds and preparation of a great number of intelligence practitioners. More generally, to limit study to only intelligence programs would yield a literature that, for the time being, excludes most nations. Discounting those nations would constrain not only the literature on intelligence education, but the literature on intelligence theory and practice more broadly.

This study demonstrates that academic intelligence curricula are in fact being established in other parts of the world, though in seemingly small numbers. The programs selected for this study include two standalone intelligence degrees (in Indonesia and India), one intelligence concentration within an international relations degree (in South Korea), and two programs that have courses or instruction on intelligence within security studies degrees (in South Africa and Israel). This study will profile each of these
programs, consider them—as is practicable—in the context of the existing literature, and offer potential explanatory factors pertaining to program design. Expanding the literature in this way will allow for a broader and comparative—albeit it tentative—understanding of program content and variation. While this study examines only five (not perfectly comparable) programs, it offers a regionally diverse sample of countries. Again, perhaps the best and most interesting basis for comparison is to look at those programs most likely to prepare intelligence practitioners.

This research also fits into more general theoretical and empirical inquiry in the field of intelligence studies. For example, Loch K. Johnson (2003) has hypothesized, “The more affluent the nation and the more extensive its global interests, the greater its pool of potential intelligence recruits with advanced training in world affairs” (p. 10). Similarly, Kevin M. O’Connell (2004) notes that intelligence production methods vary from nation to nation. While the methods and models applied in intelligence analysis have a range of determining factors, training and education are certainly among them.

Another theoretical supposition extended from Loch K. Johnson (2003) partly informed the sampling for this study, which sought out nations with particularly exigent security circumstances and/or a prominent or growing international role. Johnson has hypothesized that as a nation’s interests grow and globalize, so too will its intelligence apparatus. It can also be expected that as intelligence systems become larger and more complex, they will have greater human capital needs. Thus, higher education in such nations will have a greater demand to meet. So while suspicion of this dynamic informed sampling, the findings in this study offer at least partial evidence of just such a dynamic.
In a small way, this essay will help build more complete empirical and theoretical foundations. As our map and understanding of academic intelligence programs internationalizes, we will be in a better position to make connections between various national factors and academic programs, as well as between those programs and actual intelligence practice. While this essay offers some analysis of this kind, the focus is chiefly on descriptive facets. For the time being, the limits of the data preclude more ambitious causal analysis. Hopefully others will add to this empirical base and our understandings can continue to become more precise and intricate.

Before moving to the core sections, which present program profiles and then look at potential causal and comparative dynamics, a short review of the existing literature is offered. Sampling is then discussed. The essay concludes with a summary of key findings and suggestions for further research in intelligence education and intelligence studies more broadly.

A Short Review of the Contemporary Literature

A number of intelligence studies programs have emerged in mostly Western colleges and universities following September 11, 2001. Previously, the teaching of intelligence had been largely couched in security studies, political science and international relations programs (some still is) and the literature on academic intelligence education was quite small. Following the advent of these new programs, the intelligence literature increasingly looked at intelligence studies programs. Much of this work has been descriptive or broadly normative in nature, not surprising given the nascent state of the programs themselves. Some has been more evaluative and even inferential. Virtually
all the studies to date have pertained to programs in the United States, the United Kingdom, Canada and Australia. The United States has been at the forefront of this research, a function of its comparatively large set of academic intelligence programs. In this section, the broad empirical and then normative contours of this literature are presented to situate the analysis that follows.

Stephen H. Campbell (2011) has, in broad terms, mapped the full U.S. intelligence education infrastructure, looking at pre-professional and professional education in the civilian and military sectors. He highlights the programs at Georgetown University and Mercyhurst University as exemplars of liberal arts and standalone intelligence degrees, respectively. Martin Rudner (2009) profiled six graduate programs from different Anglo countries: two in the United States (Georgetown and Mercyhurst, also), two in the United Kingdom (Brunel University and University of Wales, Aberystwyth), one from Canada (Carleton University) and one from Australia (Macquarie University). From these profiles, Rudner forms a descriptive (and prescriptive) cross-national model of graduate intelligence education. This model has three main curricular facets: core, cognate and optional courses. Core courses include studying intelligence comparatively, in the context of statecraft, and from strategic and legal perspectives. Cognate courses are those “outside the immediate sphere of intelligence, while contributing to a fuller understanding of intelligence and security issues,” and can include area studies, conflict analysis and the philosophy of law (Rudner, 2009, p. 121). Optional courses are very broad, and can include special issues like the ethics of intelligence and financial intelligence.
William C. Spracher has looked at academic intelligence resources in the United States, the United Kingdom and Canada in one study, and profiled and examined dozens of U.S. intelligence studies programs in another (Spracher, 2010; Spracher, 2009). Michael S. Goodman (2006) profiled five programs in the United Kingdom (King’s College, Brunel University, University of Birmingham, University of Wales, Aberystwyth, and the University of Salford). Goodman demonstrates how the different departmental locations of these programs (i.e., business, war and American and Canadian studies departments) influence the pedagogical and substantive approach taken in each. Philip H.J. Davies (2006) presented a detailed overview of the Brunel Analytical Simulation Exercise (BASE) at Brunel University. BASE tasks students to build open-source (OSINT) intelligence products in an organizational context that simulates real-world characteristics of intelligence process. Others have endorsed such an approach, and a similar exercise can be found at Mercyhurst University in the U.S (Corpora, 2007; Wheaton, 2011). These approaches allow students to work toward an analytic end that is not predetermined while experiencing the various factors and forces that influence the analytic process.

Goodman (2006) also highlights how programs in the United Kingdom are more likely to take the historical approach to intelligence education, whereas American counterparts more commonly embed the teaching of intelligence in a political science framework. Campbell (2011) points to the functional approach as also typical of American programs. This approach takes a mechanistic and mechanical view of intelligence functions and operations. The historical approach is sort of self-evident, often utilizing case studies to examine past episodes and events. The political science
approach, labeled also ‘political-policymaking,’ generally embeds intelligence in political and policy decision making processes. The fourth broad approach recognized in the literature is ‘structural-organizational,’ examining intelligence as a tool and feature of international relations and the conduct of foreign policy. These approaches, of course, are not always mutually exclusive.

Others have looked to make connections between intelligence education and intelligence practice. Spracher (2009), for example, “crosswalked” course content in academic intelligence programs in U.S. institutions with the general Core Competencies stipulated by the U.S. Office of the Director of National Intelligence (ODNI). He found that such programs teach well to these competencies. Similarly, Michael W. Collier (2005) has suggested that research methods and modeling deficiencies in the U.S. Intelligence Community (IC) have their root in academic programs—specifically at the graduate level—that place little emphasis on such skill sets. Consistent with Collier’s expectations, essay two of this dissertation examined 19 graduate U.S. programs for that kind of content and instruction, and found it generally lacking. Gordon R. Middleton (2007) has similarly commented that in the United States, “historical approaches to intelligence education are not aligned to address underlying causes of recent intelligence failures” (p. 33). He points to a lack of emphasis on the study of culture, managing change, and adapting to dynamic environments and enemies. Middleton arrives at this conclusion through the application of a “maturity model” of intelligence competencies borrowed from human resources theory. He uses this model—and its five competency areas—to test (or crosswalk) curricular content in relevant academic programs. Jeffrey R. Cooper (2005) and Bowman H. Miller (2008) have also connected analytic
weaknesses and failures in the U.S. Intelligence Community to shortcomings in feeder academic programs. However, the views of the latter two scholars can be described more as broad assessments than as following from detailed empirical inquiry.

The literature on academic intelligence programs also has some important normative dimensions and debates, which have sometimes informed the empirical work that has been done. Chief among them is the issue of how programs should integrate training and tradecraft instruction with conventional education. Spracher’s (2009) work to evaluate these programs in the context of ODNI Core Competencies endorses the inclusion of applied, professional competencies (including ‘technical expertise’ and ‘tradecraft’). Similarly, Carl J. Jensen (2011) has suggested the use of a collegiate Intelligence Officer Training Corps (akin to American ROTC programs) that trains participating students to meet ODNI Core Competencies. Similarly, James G. Breckenridge (2010) has written, “The IC looks to academic institutions to assist with the preliminary preparation of aspiring analysts. If these institutions are to be effective, evaluation standards and measures of effectiveness, as established by the IC, should be fully integrated into academic curricula” (p. 320).

Martin Rudner (2009) and Jennifer E. Sims have said that it is simply not the role of academic programs to teach to tradecraft and professional practice (Spracher, 2009). Suffice it to say, there is a spectrum of perspectives on this issue, and they have not been particularly well engaged with one another. Regardless, the blurring of training and education in academic programs is a reality (Marrin, 2009).
Another key—and closely related—discussion is whether intelligence should be taught within a liberal arts degree, either as a concentration or through individual classes, or as a standalone degree. Some have voiced skepticism about overly specialized academic intelligence programs, stressing the importance of embedding intelligence studies in broader social science and liberal arts foundations. Mercyhurst University’s Robert J. Heibel has suggested that their intelligence studies programs are in fact liberal arts degrees, rejecting the distinction made by others (Spracher, 2009). Also in Spracher’s 2009 dissertation, study participants Arthur S. Hulnick and Carmen Medina commented that intelligence organizations do not want graduates who have been educated to be “intelligence specialists.” Ultimately, Marrin (2011) believes that while academic intelligence programs have in fact been attractive to intelligence organizations, it remains important that the value-added of intelligence degrees be continually demonstrated. Marrin has also begun to make a distinction between intelligence studies programs and “Intelligence Schools,” the latter taking a more practical orientation.

A small number of scholars have focused on how to most effectively transfer knowledge in the classroom. Patrick F. Walsh (2011) reminds us that good content does not necessarily mean that courses and instruction will ensure deep learning and real student advancement. Middleton (2007) explores the possibility that different content areas should be taught in differing fashions. Breckenridge (2010) highlights the use of new educational technologies and educational psychology insights to maximize learning among different kinds of learners.

Just as important as what and how intelligence studies is taught is who is doing the teaching. Today, most agree that a combination of academics, practitioners, and
practitioner-academics is necessary to promote quality and practical instruction as well as advanced scholarship. Some have expressed concern that there is not a sufficient number of qualified intelligence faculty, citing the potential for amateurism (Rudner, 2009; Spracher, 2009). There is certainly important value-added to each of the faculty types noted. Programs like the U.S. Central Intelligence Agency’s (CIA) Officers in Residence not only bring experienced viewpoints to academe, but also serve as mechanisms to encourage practitioners to pursue scholarship and become permanent faculty members (Hedley, 2005).

Speaking to the importance of a qualified mixed faculty, Spracher (2010) has suggested that “at times the old-line practitioners who end up in academe are not necessarily the best teachers. A balance between deep experience, solid academic credentials, and teaching ability must be struck” (p. 6789). Martin Rudner and Jennifer E. Sims have added, respectively,

“...reliance on ex-practitioners and myriad others can perhaps add valuable exogenous perspectives to these burgeoning programs, yet the absence of a critical mass of dedicated Intelligence Studies scholars might make it difficult, if not impossible, to uphold the teaching and research standards expected of graduate schools. Already, paranoia prevails in certain academic circles about the bona fides of Intelligence and Security Studies.” (Rudner, 2009, p. 124)

“...there is a real role for scholars here. They can challenge theoretical assumptions. Most practitioners are very defensive. They tend to be focused on one case or one point in time. Scholars are better at generalizing…” (Spracher, 2009, 117)

This essay builds on and extends the descriptive and inferential work that has been undertaken regarding academic intelligence programs in the United States, United Kingdom, Canada and Australia. It follows largely in the mold of what has already been
done, growing and diversifying our empirical base and providing greater possibilities for comparative and causal analysis.

**Sampling and Study Parameters**

The national sampling for this study was not done on a scientific or random basis, but rather through a purposive and convenience approach. The first objective was to select nations that have thus far been excluded from the literature, while also achieving regional variation. As noted, the author also had an eye to choosing nations with unique or particularly exigent international and security dynamics, where there is likely more market demand for graduates ready to enter intelligence organizations. However, care was taken to identify programs in all parts of the world, but through broad web searches rather than the time-consuming examination of the websites of individual universities (as was done for the study’s sample programs from India, South Korea, Israel and South Africa).

The search for programs was centered on identifying relevant Master’s programs. It is at this level of study more career-specific education is likely to be found. While the search for and selection of programs was carefully undertaken, readers should not infer that those selected are necessarily representative of others from their home country.

The data for this study were gathered in the spring and summer of 2012, represent a snapshot of the programs selected, and were not always equivalent across programs. Individual course syllabi were often not available, and therefore the analysis generally hinges on broader program designs. Course offerings—both required and elective—are reviewed, to be sure, but without syllabi it is difficult to examine the particular
approaches, exercises and assignments used in the classroom. Similarly, detailed information on faculty members was not always attainable. In one case (the University of Indonesia), Google Translate was used to understand program literature.

Program Profiles

*University of Indonesia, Master’s of Strategic Intelligence Studies*

Indonesia, in Southeast Asia, is home to the largest national Muslim population and is the fourth most populous nation in the world at 249 million people. The archipelago is situated between Australia and Malaysia and has experienced comparatively impressive economic growth in recent years.

The University of Indonesia (UI) is one of the premier institutions of higher learning in the country and offers a Master’s degree in Strategic Intelligence Studies. The degree is considered one of the University’s interdisciplinary programs and is offered as part of a National Security Studies program. Students complete the degree over four semesters and in a very structured way, leaving little room for electives or specialization outside stipulated courses. The first three semesters each have five classes, and the final semester consists of only a thesis requirement. In the second and third semesters, students are given a small degree of choice among classes, and the third semester offers Special Topics and Seminars. The first three semesters at UI look as follows:

**First Semester:** Fundamentals of Intelligence (Intelligence Theory and Application), History of Intelligence, Managing Intelligence Analysis, Intelligence Communication, Research Methods in Strategic Intelligence Studies
Second Semester: Strategic Intelligence Thinking and Analysis, Intelligence Success and Failure Case Studies, Intelligence Production, Intelligence and National Security or Strategic Business Intelligence, Transnational Crime or Globalization/International Political Economy

Third Semester: Terrorism and Counterterrorism or Financial Crime Analysis, Judicial Intelligence or Competitive Intelligence, Intelligence and International Affairs or International Business Competition, Policy Analysis and Decision Making, Special Topics and Seminars

This degree is very intelligence-centric—perhaps not surprising given that it is a standalone degree. There are specific intelligence courses for history, case studies, management, communication, and analysis and production. Additionally, business and competitive are offered, though not required.

More specifically, intelligence analysis—its management, underlying social science, production and communication—could be said to sit at the center of this program. Analysis is treated in virtually comprehensive fashion. Students can take no less than four classes expressly focused on some facet of intelligence analysis (Managing Intelligence Analysis, Research Methods in Strategic Intelligence Studies, Strategic Intelligence Thinking and Analysis, and Intelligence Production). The program thus gives great emphasis to specific methods and mechanics of intelligence analysis with a broader research methods foundation.

Given the heavy emphasis on specific facets of intelligence and the somewhat rigid course requirements, little space is left for other areas such as regional and
functional studies. Students can take national security, transnational crime and terrorism courses, but outside of these, the options are essentially limited to political economy, finance and commerce. The special topics and thesis options do afford students some additional variation and choice. The faculty at UI is comprised of a mix of scholars and retired military officers.

Looking at the course components of the Master’s of Strategic Intelligence Studies at UI, a pretty striking resemblance to Mercyhurst University’s Master of Science in Applied Intelligence is noticed. Some have labeled Mercyhurst the “gold standard” of academic intelligence programs in the U.S (Campbell, 2011). It was certainly the earliest innovator in America, having been introduced in the 1990s. When compared with UI, Mercyhurst’s program has a smaller number of required courses, giving students more latitude in coursework. Looking at Mercyhurst’s 7-course core, 5 of the courses have virtually exact counterparts in the program at UI. These include courses in intelligence theory and application, intelligence management, intelligence communication, competitive intelligence and intelligence research methods. Looking then at Mercyhurst’s electives, we see more courses reflected in UI’s program: intelligence history, strategic business intelligence and financial crimes analysis. Thus, across these two programs, virtually exact course counterparts are found in at least 8 areas. It seems highly probable that curricular diffusion is at work here, or what is called isomorphism in the organization theory literature.
University of Pretoria, Master of Security Studies (South Africa)

South Africa is a major player and power on the African continent, and increasingly, outside of Africa. The country has experienced severe political and social change in recent decades, transitioning out of apartheid. It continues to balance its important international position with internal social and political instability.

The University of Pretoria offers a Master’s of Security Studies (MSS), embedded in a Department of Political Science. The program seems to have experienced some turbulence in recent years, with changes in program design and new admission temporarily suspended. Nonetheless, the degree remains in place and requirements and course offerings are listed in the university’s 2012 academic catalogue.

The MSS is divided equally between research and core course credits (each comprising 90 credits, for a total of 180 credits). The research component includes a “mini-dissertation” (60 credits) completed as a guided independent study on a selected security topic. The other research requirement is completion of a course titled Methodology of Security Studies (30 credits), which focuses on research methodologies and the production of reports. The core courses include National Security, Security and Strategic Theory, and Strategic Intelligence and Forecasting (30 credits each).

According to program literature, the strategic intelligence and forecasting course focuses on both the theory and practice of strategic intelligence, connecting sound intelligence to effective threat analysis and in turn national security. Intelligence policy, organizations and oversight also form key aspects of the course, which is rounded out with a focus on the various methods and applications of strategic forecasting (including risk analysis and scenario construction). Thus, this course takes more than one approach
(i.e., functional and policymaking) to the teaching of intelligence. In prior years, two different intelligence-related courses had been part of the core coursework: Strategic Intelligence & Threat Perception and Strategic Forecasting & Risk Analysis. The current intelligence course had not been offered, and seems likely to be a melding of the older two courses.

The above courses and requirements comprise the MSS program in its entirety, and students seem relatively limited in the electives they can take. However, the degree is housed in a Political Science department, which does offer other security and intelligence related courses (i.e., foreign policy).

*Sharda University, Master’s in Security and Counter Intelligence (India)*

India is the world’s second most populous nation, has a large and growing national economy, and in turn a large and growing role in the international system. India also has an extended history of tension and conflict with neighboring countries China and Pakistan, both nuclear powers.

Sharda University is 1 of the 7 schools that comprise the Sharda Group of Institutions, which has a total of 25,000 students. Sharda University is a relatively new institution, established in 2009 and certified as a private university by India’s University Grants Commission (UGC), the national educational standards organization. Its website boasts,

“"The entire curriculum in the University has been planned in a highly flexible credit based system approach by studying the best practices adopted in India, US and UK. We have devised a term based system in which an academic year is broken into two 16 week terms and a summer term of 9 weeks.” (Sharda University A).
The intelligence studies Master’s degree at Sharda is something of a programmatic outlier and innovator in India. Master’s degrees in Strategic and Defense Studies have been very common there, and probably the most concentrated graduate-level source of intelligence practitioners. Under the auspices of the UGC, a number of top Indian universities have recently transitioned those programs to more broad National Security Studies graduate programs (Mani, 2012). The program at Sharda differs from its strategic and security studies counterparts by putting intelligence front and center, though certainly in the context of security and interdisciplinary studies. It is a degree “dedicated to intelligence studies and policy analysis,” borrowing some of its faculty from areas such as computer science, engineering, business and law (Sharda University B).

The University’s School of Investigations, Security and Intelligence is 1 of 11 educational divisions at Sharda. In addition to the 2-year Master’s program, the School also offers a 6-month executive diploma and a 1-year post-graduate degree. While the different intelligence programs take between 6 and 24 months, the core structure and material are essentially the same for each (according to available program literature). Core coursework includes Intelligence Concepts: Theory and Policy, Intelligence Analysis, Contemporary Issues in Safety and Security, and Case Studies in Intelligence Failure and Success. Electives include Technology and Security, National and International Financial Security, Crime and Security, and Organization and Management. The program literature makes unclear what additional coursework is built on top of—or offered in addition to—the small number of core and elective courses.

Additionally, “A distinctive feature of the courses lies in the combination of the rigorous study of intelligence and security policy studies with practical opportunities to
develop intelligence skills through…simulation exercises” (Sharda University B). Former Indian security and intelligence practitioners support students in these exercises, and coursework generally. The degree programs are concluded with the supervised research and writing of a dissertation, helping fulfill the program’s dual objectives of preparing intelligence and security practitioners as well as future academic researchers.

Tel-Aviv University, Master of Arts in Security and Diplomacy Studies (Israel)

Israel has a security environment as constantly threatening as perhaps any other nation in the world today. Tensions with Arab neighbors, Iran, and multiple terrorist organizations like Hezbollah and Hamas result in a complex and highly pressurized security context. This has recently been exacerbated by the Syrian civil war and unrest in Egypt. In turn, Israel places a premium on dynamic, effective security intelligence capacities. The Mossad, for example, is generally viewed as one of the best intelligence organizations in the world.

Tel-Aviv University has two Master’s programs relevant to the study: an M.A. in Security Studies and an M.A. in Security and Diplomacy Studies. The two programs share much of the same faculty. The Security Studies program is a joint effort of the Department of Political Science and School of History, while the Security and Diplomacy Studies program is housed in the Department of Political Science. The Security Studies program is geared largely toward mid- and upper-level security practitioners, while the Security and Diplomacy Studies program has a more conventional student body. This essay will examine the latter program, given its broader student body and better data availability.
The Security and Diplomacy Studies program consists of three semesters over the course of one year. A total of 12 courses are completed, 8 of which are stipulated. The remaining four are selected from an approved course list. The core courses treat the international system, modern strategic thought, modern diplomacy, political economy, international law and Middle East conflict, Israeli’s strategic doctrine, and the history of the Arab-Israeli conflict. The final required course is a workshop consisting of security field trips (to places including Israeli Defense Force bases) and an ambassador forum (where students meet with ambassadors and other high level officials). Of the four elective courses, three must be selected from among Jewish International Politics, The Future of War, National Security Concepts of the Arab States and Iran, Terror and Moral Dilemmas, Propaganda and Public Diplomacy, Nationalism and International Relations, Medicine and War, and China’s Foreign Policy and National Security.

A research methods course is mandatory for those students pursuing the thesis track. It is optional for those in the non-thesis track. For those not completing a thesis, a Middle East Crisis simulation is required, and is voluntary for thesis track students. The faculty and administration encourage, but do not require, internships.

The faculty is comprised largely of political science scholars, but also has multiple former intelligence practitioners—from analytical and operational sides. Major General (Ret.) and Professor Isaac Ben-Israel is the former head of the Israeli Air Force’s Intelligence Analysis and Assessment Division, and has authored numerous books on military intelligence. Professor Ben-Israel teaches intelligence as a module in the Israel’s Strategic Doctrine course. Brig. General (Ret.) Shalom Harari brings extensive collection
experience—both in signals and human intelligence—to the classroom. His former posts include Syria and Iraq.

As the above review makes clear, the Security and Diplomacy Studies degree places a special and multifaceted emphasis on Israel and the Middle East. Simply, this can be interpreted as a response to Israeli security conditions. At Tel-Aviv University, intelligence is taught through a regional security lens, including by those who have worked at high levels in Israeli intelligence.

**Sogang University, Master of International Relations, National Intelligence and Security Track (South Korea)**

South Korea has existed as a democratic state and society for more than two decades now. It boasts an advanced economy and strong higher education system. It also manages tense relations with its neighbor, North Korea. Only miles from the Demilitarized Zone (DMZ), Seoul, South Korea’s capital and most populous city, is perhaps the chief vulnerability in the context of North Korean nuclear and military capacity.

At Sogang University, the ‘National Intelligence and Security’ graduate track is the newest program in the Graduate School of International Studies (GSIS). Students complete this track as part of a Master’s degree in international relations. The 2-year program may be completed through 15 courses, for a total of 45 credits, or with 13 courses and a 6-credit thesis option.

All National Intelligence and Security students take Economic Analysis and Introduction to International Relations. Additionally, fulfilling track requirements entails
the completion of a mostly stipulated set of six courses. International Security and Peace, Theories of National Intelligence, and Theory of Area Studies must be among them. The following is the course description for Theories of National Intelligence:

“The course will cover the life cycle of strategic intelligence from the collection of data to the formulation of analytic judgments. It will focus on the impact of the intelligence process and the products of intelligence on security policy-making, and hence upon a global environment in an information age. The emphases will be on contemporary intelligence issues and processes, but will include the greater use of the analytic skills at the corporate and government levels (Sogang University).

The remaining three track-specific courses can be drawn from Theories of International Relations, International Political Economy, Globalization and Regional Integration, International Organizations and Contemporary World Politics. Rounding out the degree requirements are two area studies courses and three to five electives (three electives for students who choose the thesis option). With these remaining electives, National Intelligence and Security students may choose to enroll in the following:

- National Intelligence System and Policies
- National Security and Intelligence Policy
- Comparative National Intelligence Systems
- Industrial Security
- National Cyber-Security
- E-Government
- Space and Information Warfare
- Studies on Security Issues
- International Terrorism
- Cyberwar and Intelligence
- Economic Intelligence
- International Crime and Intelligence Cooperation
- Intelligence, Counterintelligence, and Covert Action
- Topical Seminars on National Intelligence I, II and II
In addition to security intelligence and intelligence systems and process, these classes take up intelligence studies in the context of economics, criminal organizations, cyber warfare and special functions (counterintelligence and covert operations). Another examines intelligence in a comparative framework. Thus, students have the opportunity to take a rather multifaceted approach to the study of intelligence. At the same time, all students are required to complete multiple courses in economics, area studies and international studies.

Sogang’s GSIS offers a range of other courses and study areas, spanning international trade, international law, and international finance. Language courses are also provided (all other classes are delivered in English). Special lectures and independent studies are available, and students are encouraged to complete an internship. The GSIS faculty is comprised of mostly academics, with some former practitioners. For example, a former Korean Minister of Foreign Affairs and Senior Secretary to the President for National Security is an adjunct faculty member.

**Looking Across Programs**

This study has demonstrated that intelligence studies programs are emerging beyond Anglo nations, but it seems in rather small numbers. Taken together, the programs identified mirror the various approaches to intelligence education found in nations already examined in the literature. Some offer standalone degrees, others intelligence concentrations, and yet others intelligence coursework within security studies degrees. While we cannot definitively label the three expressly intelligence programs identified for this study the very first of their kind (outside the UK, North America, and
Australia), they are certainly among the early adopters. Each is also in a nation experiencing a growing international role and/or exigent national security matters. This fits into the narrative that as intelligence requirements grow, higher education will respond to such demand in the form of academic programs. We can also observe such dynamics in programs not expressly intelligence. For example, the curricular design at Tel-Aviv University is built hugely around Israel’s unique and severe security environment. The limited nature of this study makes the delineation of other, more fine-grained causal national factors difficult (as they relate to program design and content). But, the descriptive empirics found in this study will hopefully encourage and enable continued research on both academic intelligence education and comparative and theoretical inquiry more broadly.

In addition to the noted national explanatory factors, there seems to be some transfer or replication of program design from more established programs. For example, the degree found at the University of Indonesia bears a strong resemblance to the one at Mercyhurst University. While some overlap is to be expected in any given field, the commonalities between these two programs suggests that administrators and educators at UI looked directly at Mercyhurst for guidance. The UI program also fits pretty well into the graduate curricular model identified and endorsed by Martin Rudner (2009). Similarly, the program literature for Sharda University states explicitly that that institution looked to the United States and the United Kingdom in the design of its various curricula.

The four general approaches to the teaching of intelligence outlined in the literature can be found in the programs selected for this study. For example, the program
at the University of Indonesia offers a separate course for each of the four approaches: Intelligence and National Security (policymaking), Intelligence and International Affairs (structural), History of Intelligence (historical), and Intelligence Production (functional). That individual courses are built around these frames is not that surprising in a standalone intelligence degree. Conversely, in other programs, individual courses incorporate more than one approach. Looking across programs, course titles suggest that the policymaking-political and functional approaches are the most common. This could point to the influential nature of academic programs in the U.S., where intelligence education is more frequently approached from policymaking and functional angles.

In addition to diffusion—and not wholly separate from that dynamic—we might look to broader developments, such as the increasing program specialization found in higher education (O’Neill, 2005). More, and more diverse, programs are being established in higher education, driven in part by specific national circumstances and labor market needs. In the United States, it was 9/11 and subsequent IC human capital needs that triggered the emergence of many new academic intelligence programs. Even in a country with an advanced economy and higher education system—not to mention an immensely prominent international role—it was a single major event that resulted in increased specialization in the realm of security and intelligence education.

The variations observed in program location and content speak to some key debates found in the literature. Some have promoted standalone intelligence degrees and others urge that intelligence be taught in the context of the social sciences—for example, international studies. The standalone degrees and concentrations identified in this study—which are found in international and security studies departments—tend to take a
more applied, professional approach, one that demonstrates the blurring of training and education Stephen Marrin (2009) has noted. In the program at the University of Indonesia, for example, separate courses cover analytic methods for intelligence, intelligence communication, and intelligence management. Economic and competitive intelligence and analysis can also be found across programs. While most students do have the opportunity for some multidisciplinary studies, advanced social science methods are not a common facet of the selected programs (which is not to say students cannot look to other departments for instruction of this kind).

Some unique or especially interesting facets that were identified include the use of simulations (Sharda University, Tel-Aviv University), course offerings in intelligence failure and success case studies (University of Indonesia, Sharda University), and a course in comparative intelligence (Sogang University). While these are not fundamentally new offerings or approaches in academic intelligence education, they do stand out among the programs selected for this study.

Lastly, virtually all of the programs (at least 4 out of 5) selected for this study have a faculty with both scholars and former practitioners. Some faculties have more former practitioner representation than others, and scholars certainly predominate across the board. Former intelligence, defense, military and diplomatic officers can be found teaching in these programs, including some very high level officials. The composition of these faculties jibe well with the views already registered in the intelligence education literature.
Conclusion

This study sought to add to the intelligence education literature in a number of ways. First, it expands the empirical base beyond the small number of nations examined in the literature to include those from other regions. By its comparative nature, it also helps look across programs and grow our understanding of program commonalities and divergences, and potential explanations for them. It offers a means to test existing empirics and normative observations in new and different contexts, giving a sense of the developmental stages found in countries that have thus far evaded study.

The programs identified for this study take different approaches to intelligence education. We see intelligence studies as standalone degrees, concentrations, courses and instruction. Intelligence is taught using the policymaking, functional, structural and historical approaches. Somewhat obviously, the more central the study of intelligence is to a given degree, the more of these approaches are likely to be found. The policymaking and functional frameworks were more common. The essay also found evidence of curricular diffusion, the influence of national factors, and blurring between intelligence training and education.

The relative difficulty identifying academic intelligence programs to include in this study suggests these programs remain a largely Anglo phenomenon. However, by looking at what exists in other regions and nations—and indirectly at what is not there—we begin understanding the emergence and content of new programs and have a foundation from which we can follow developments in this arena. This research can also inform and support theoretical and comparative inquiry in the broader intelligence literature. Like in this study, research going forward should take into account the
academic programs most likely to produce intelligence practitioners, not just expressly intelligence programs. Professional training and education can and should be a part of this study, as well as government relations and programs vis-à-vis higher education (such as the U.S. CIA’s Officers in Residence program).

References


Sharda University (b). School of studies of investigation, intelligence and security. Retrieved June 8, 2013 from http://www.sharda.ac.in/Schools/SchoolofStudiesofInvestigation,IntelligenceandSecurity


