Journal of Social Sciences and Humanities

Vol. 3, No. 4, 2017, pp. 23-30 http://www.aiscience.org/journal/jssh

ISSN: 2381-7763 (Print); ISSN: 2381-7771 (Online)



Criminal Justice and Political Science Capstone Course Comparisons, 2017

Michael Thomas Eskey*

Criminal Justice Administration, Park University, Parkville, USA

Abstract

Capstone courses are designed to give students the opportunity to apply the knowledge they have acquired through an education program, through the summarization of course program learning objectives. This application is important for application to real-world situations, employment, or future education. The current paper addresses the responses of criminal justice and political science educators responding to the usage of various types of capstone courses in their program, to include the senior thesis, research papers, internships, portfolios, and/or other major projects in this major course(s). The current research addresses the major findings of capstone course applications based on survey responses of political science instructors from numerous colleges and universities in the Southeast region of the United States and will include direct comparisons with Georgia colleges and universities. Preliminary results will be presented with comparisons of the institutional programs.

Keywords

Capstone, Internships, Criminal Justice, Thesis, Online Learning, Blended Learning

Received: August 29, 2017 / Accepted: November 19, 2017 / Published online: December 9, 2017

@ 2017 The Authors. Published by American Institute of Science. This Open Access article is under the CC BY license. http://creativecommons.org/licenses/by/4.0/

1. Introduction

Capstone courses are designed to give students the opportunity to apply the knowledge they have acquired through an education program, through the summarization of course program learning objectives. For the capstone course, the combination of applications is important for application to real-world situations, employment, or future education. The current paper and research addresses the responses of criminal justice educators responding to the usage of various types of capstone courses in their program, to include the senior thesis, research papers, internships, portfolios, and/or other major projects and requirements in this major course(s). These represent a culmination of undergraduate criminal justice study. The current research addresses the major findings of capstone course applications based on survey responses of criminal justice and political science instructors from numerous colleges and universities in the Southeast region of the United States. Preliminary results will be presented with comparisons of the institutional programs.

Capstone courses are designed to give students the chance to apply the knowledge they have acquired throughout their education to real-world situations, and to encapsulate all the learning objectives of a student's major (AASL, 2014).

Capstones are designed to address a range of important educational processes and outcomes including integration and closure, application, reflection, and transition (Gardner et al. 1998). A capstone course is an increasingly common method to measure student learning and assess programmatic and institutional success. Up to this point, individual institutions analyze their program and program needs leading up to their capstone course and capstone requirements. There has been somewhat of a limited amount of research on the comparison of the usage and requirements of capstone courses in criminal justice degree programs. There have been slightly more research projects related to capstone courses in

* Corresponding author

E-mail address: Michael.Eskey@park.edu

political science degree programs (One consistency across disciplines is that students usually take capstone courses during the final year, even final semester of their senior year in college.

The current research had an objective of finding if there is a consistent format and requirement for a capstone course in undergraduate criminal justice and political science, Findings may provide possible direction for future policy or decisions in relation to how the subject could be managed and for future research as a means to benchmark this research against others offered at other institutions. Capstone courses are a means to help students attain a holistic, integrated recognition of the key facets of their education over the course of their university experience, particularly within the major. Such courses should also provide faculty with the means to assess how well students have progressed in relation to the institutional learning goals and the subject area's learning outcomes. These will vary by institution and, thus, although similarities are expected, differences are also expected. Such varied findings were validated in a metaanalysis by Brownell and Swaner (2010) that validated a lack of a universal definition for senior capstone course experiences.

The current study represented an attempt to focus on an investigation of capstone course organizations and requirements of both political science and criminal justice programs. The criminal justice discipline has been somewhat ignored in past research related to this type analysis. There have been a number of research studies directed at political science programs and capstone courses (Henscheid, 2000; Kelly & Klunk, 2003; Sum & Light, 1006; Hummer, 2014). The current research compares the requirements of current criminal justice capstone course(s) related to institutional criminal justice programs and political science capstone courses related to institutional political science programs.. Previous research has been somewhat limited to other disciplines such as sociology and psychology (Hauhart and Grahe 2010); and, more so the examinations have been more limited in focus on a single institution or single discipline. Although prompted by a personal desire to pursue the focus and objectives of the departmental capstone course, there was a need to pursue what had been published in this area and discipline. Further, the researcher compared the presence-of and usage-of capstone courses by various institutions with criminal justice and political science degree programs.

There is a question of whether studies conducted in other disciplines support, or perhaps even amplify, the research findings that are being reported. An initial review of the literature suggests that there has been limited numbers of discipline research that has pursued comparable studies across institutions of their capstone practices. Henscheid

(2000) finds that almost half of 707 regionally accredited colleges and universities use capstones as part of their institution's assessment program. And, he found that smaller colleges were more likely to use capstone courses for assessment, than were larger colleges. Generally, the published discussions of capstone courses in history and anthropology appear mostly limited to the sort of singlecourse examinations that characterized both sociology and psychology for many years in the Social Sciences. Additionally, studies of capstone courses in the disciplines of political science (Sum and Light 2010) and economics with a capstone focus of using existing knowledge to explore issues and creating new knowledge (Carlson, Cohn, and Ramsey 2002); and, the capstone course were found to be related to the honors program (Siegfried 2001). This generally appears to confirm and support both specific results and the implications derived from the current findings.

Seeborg (2008), for example, concluded that capstones in economics ideally should be "integrative experiences" that involve a required research paper to maximize learning outcomes. In a study of political science majors at 32 institutions, Ishiyama (2005) found evidence in support of a structured sequential and integrated curriculum within the undergraduate major, culminating in a senior capstone. The findings supported that students would score well on the Major Field Aptitude Test and would have higher rates of application and admission to graduate programs, though not compared in the current analysis. In a study of four institutions, Schermer and Gray (2012) found that the institutions differed in terms of purpose, although the experiences shared a common emphasis on a culminating, sustained, independent act of research or inquiry, centered in the students major, with a focus on critical thinking and communication skills, and a thesis or paper.

In the summer and early fall of 2016, the researcher collected surveys from 140 regionally accredited institutions across the southeastern United States on the usage and employment of senior seminars, capstone courses, and criminal justice internships. A total of 2700 unique institutions were sent surveys for a 51.8 percent response rate. Because of the timing of the survey (late summer), respondents received up to four requests for participation. Sixty-two percent of the institutions represented were public colleges and universities; 34 percent were private colleges and universities.

The survey was created by the researcher with a sampling of questions from the 2011 National Survey of Senior Capstone Experiences created by the National Resource Center (Padgett and Kilgo, 2012). The dissemination and administration of the survey instrument was conducted by the researcher utilizing Survey Share, a web-based survey technology program. In July, 2016 the survey was launched

and there was an e-mail invitation to participate sent to 290 criminal justice faculty members at 140 institutions. The original e-mails were sent to criminal justice instructors currently on the Southern Criminal Justice Association mailing list. Three follow-up e-mails were sent in July and August of 2016. On August 7, 2016, e-mail surveys were sent to additional criminal justice faculty members at 130 public

and private colleges and universities in states within the SCJA area. Follow-up reminders were sent in August and September, 2016. Similarly, in June, 2017, e-mail surveys were sent to 200 colleges and universities in the Southeastern states. A second and third – e-mailing was accomplished in August, 2017. There were surveys returned from 103 institutions for a response rate of 51 percent.

Table 1. Number and Percent of Institutions by Type.

Type of Institution	Number	Percent (%)	Number	Percent (%)
Public College	9	6.4	6	5.8
Public University	74	52.8	50	48.5
Private College	23	16.4	25	24.3
Private University	31	22.1	22	21.4
For-Profit Institution	3	2.1		
	140	100.0	103	100.0

The instructors participating included those from public and private colleges and universities. Several responding institutions returned responses on several different types of capstone courses offered on their campuses. Overall, nearly 74 percent of responding institutions indicated that they offered at least one criminal justice senior seminar or capstone course. Similarly, 67 percent of political science faculty reported that their institution offered at least one senior seminar or capstone course. The following are major findings of this research. There were no significant differences in the usage of a senior seminar / capstone course by instructors at public or private institutions (chi-square= 1. 34, p = .25). Nor, were there significant differences between institutions reporting as colleges versus universities (chi square = 0.62, p = .43).

 Table 2. Usage of Senior Seminar Capstone Course by Type of Institution.

Type of Institution	Yes	No	Yes	No	
Public College	4	3	4	2	
Public University	41	17	26	21	
Private College	12	1	21	4	
Private University	16	6	16	6	
For Profit Institution	3	0	0	0	

2. Demographics

There were 139 respondents to the criminal justice survey (3 were for-profit institutions). The respondents were mainly from the 11 states associated with the Southern Association of Colleges and Schools and Southern Criminal Justice Association purview. 59 percent of the respondents were teaching at public colleges or universities. 38 percent were from private colleges and universities, with 3 percent from for-profit institutions. The respondents were generally more senior faculty members: 42 percent were full professors; 21 percent were associate professors; 31.5 percent of respondents held the rank of assistant professor, instructor, or lecturer.

The political science respondents had both similarities and differences from criminal justice respondents. There were 103 political science respondents from 11 Southeastern states. The sample was somewhat evenly divided by type of institution with 56 percent from public or private institutions and 44 percent from private institutions. Eighty percent of the respondents were full or associate professors; the remaining 20 percent were assistant professors or instructors.

 $\textbf{Table 3.} \ Enrollments \ of \ Respondent \ Institutions.$

	0 – 999	1,000 to 4,999	5,000 to 10,000	10,000 to 20,000	20,001 plus
Percent of Institutional Enrollments Criminal Justice	7	28	26	27	13
Percent of Institutional Enrollments Political Science	6	40	21	18	13

As depicted in Table 3, there was a wide range in the size of the institutional enrollments and the number of criminal justice and political science programs. Of those responding with criminal justice programs, seven percent reported less than 1,000 students at their institution. 28 percent reported 1,000 to 4,999 students; 26 percent taught at institutions with 5,000 to 9,999 students. 27 percent were teaching at institutions with enrollments between 10,000 and 20,000

students and 13 percent reported teaching at institutions in excess of 20,000 students. As depicted, those responding to the political science survey tended to be from smaller institutions, with nearly 50 percent from institutions of 5,000 or fewer students. Twenty (20) percent of those responding had 100 or less criminal justice majors; 54 percent had 100 to 500 majors; and, 27 had more than 500 criminal justice majors.

The number of criminal justice majors varied by institution (Table 4). Over half of the institutional respondent (55%) reported that they had between 101 and 500 criminal justice majors. About one-fourth (24%) had 500-plus criminal justice majors. About one-fifth (21%) reported 100 or fewer criminal justice majors. Conversely, the political science institutional respondents reported smaller numbers of majors. This is attributable to the faculty reporting were from smaller institutions. Fifty-two percent had 100 or fewer political science majors. About one-third (37%) reported 100 to 500 majors.

Table 4. CJ Enrollments of Respondent Institutions.

	0 to 100	101 to 500	501 - Plus
Percent of CJ Enrollments	21	55	24
Percent of Poli Sci Enrollments	52	37	11

3. Instructors

Sixty-seven (67) percent of political science respondents reported that their institution required a senior seminar or capstone courses instructed by departmental faculty members working alone. Only 15 percent supplem3nted this instruction with faculty outside of the department or community workplace professionals. Similarly, 75 percent of criminal justice faculty respondents reported that their department required a senior seminar. 98 percent reported that they were taught by departmental faculty members, 15 percent utilized outside community/workplace professionals to supplement the instruction, and eight (8) percent reported the use of outside the department for teaching their senior seminar. Those least likely to be instructors of these courses are student affairs professionals outside career centers and graduate students.

4. Course Types

Of those that indicated that they had a senior seminar requirement, 80.3 percent of criminal justice respondents and 88.1 percent of political science respondents indicated that senior seminars and capstone courses are discipline- or-department-based. Twelve percent (12.2%) of CJ respondents versus 6.0 percent of political science responses indicated that these courses are transition courses intended to focus on preparation for work, life choice, life skills, or life after college. Of the remaining respondents, 4.0 percent (CJ) versus 3.0 percent (pol sci) of senior seminars and capstone courses are career planning courses; only 4.0 percent of respondents from both disciplines indicated that these courses are interdisciplinary or some "other" type of delivery..

Respondents were asked to select from a number of varied assignments that they utilized in their capstone courses. For those that affirmed the usage of a capstone course in their degree program, a number of varied requirements were selected to include: reflective papers, service learning exercises, and discipline-specific seminar courses, capstone experiences and high- impact practices that demonstrate a students' ability to write, speak, acquire and use knowledge, solve problems, and apply a variety of skills, including time management and task analysis. Regardless of the form of a capstone experience or discipline, the demonstrative student outcomes integrate knowledge from the discipline specific and general education courses in a unique way. It is of interest to note, and will be a focus of further research, the capstone course objectives may follow the program objectives and institutional objectives which most likely will be found to differ.

5. Instructional Components

As depicted in Table 5, the largest number of criminal justice respondents (71.2%) reported that their capstone course required students to complete multiple combined projects. Seventy percent (70.2%) of respondents said their senior seminars and capstone courses require oral presentations by their students and 67.2 percent of respondents said senior seminars and capstone courses require major projects of some type. This was followed by the requirement for a term paper (54.0%) or final examination (51.5%). Less than half of respondents reported a capstone requirement of a group project (32.3%), portfolio (24.6%), thesis (24.2%), an internship (18.0%), or leadership training (14.8%).

The instructional components of political science respondents differed in the focus from criminal justice respondents. The largest number (77.8%) reported that their capstone course required students to prepare and defend a position orally. Sixty-three (62.5%) of respondents reported that their seniors complete a major project. Similarly, 58 percent reported that their students have a capstone requirement that includes a term paper. or thesis (52.5%). Of interest is that the thesis requirement reported by political science instructors is more than twice that of criminal justice instructors. Half of the respondents (50%) reported that student senior seminar requirements included multiple combined projects. Less than half of respondents reported a capstone requirement of a final exam (40.6%), area paper (26.4%), an area paper (26.4%), and explicit assignments focused on graduate school attendance (22.2%). A notable comparison is that only seven (7.4) percent and nine percent included an internship or leadership training in their capstone courses, less than half of that reported by criminal justice respondents.

Types of Capstone	Percent	N	Percent	N	
Experiences	Responding	Responding	Responding	Responding	
Thesis	24.2%	66	52.5%	61	
Final Examination	51.5%	68	40.6	64	
Major Project	67.2%	67	62.5	64	
Area Paper	33.3%	66	26.4	53	
Term Paper	54.0%	63	58.2	55	
Oral presentation / defense	70.2%	67	77.8	63	
Group project	32.3%	65	10.9	55	
Leadership training	14.8%	61	9.1	55	
Internship	18.0%	61	7.4	54	
Portfolio	24.6%	65	13.0	54	
Multiple combined projects (research project, academic essay, visual presentation)	71.4%	68	50.0	58	

Table 5. Requirement of Criminal Justice and Political Science Capstone Course.

6. Goals

Respondents were asked to rank which specific goals apply to their specific senior seminar / capstone course. The rankings were from 'most important' (1) to 'least important' (5). This included responses by those with capstone courses, with a 'not applicable' section, utilized. Respondents were permitted to rank from one to eight of the items listed. The mean was calculated based on the scale of most important (1) to least important (5).

A comparison of the mean responses revealed that criminal justice respondents ranked highest the goal of Enhancing students' preparation and prospects for postgraduate education (mean=1.77). Avery close second and third goals priorities included, developing important student skills, competencies, and perspectives developed in the college curriculum (mean =1.95); and fostering integration and synthesis within the academic major (mean = 1.96).. The fourth prioritized goal of the senior seminar was the promoting integration and connecting between the academic major and the work world (mean = 2.12). A similar prioritization was placed on the goals of improving students' career preparation and pre-professional development (mean = 2.41) and promoting integration and connections between education and the academic major (mean = 2.52). Of some surprise to the researcher were the lowest prioritized goals of: Improving students' career preparation and pre-professional development (mean = 3.16); and, the lowest prioritization of 'promoting the coherence and relevance of General Education of the education (mean = 3.41).

A comparison of the mean responses revealed that political science respondents ranked highest the goal of developing important student skills, competencies, and perspectives developed in the college curriculum (mean=1.57). The next ranked goal was enhancing students' preparation and prospects for postgraduate education (mean = 2.21) Avery close third and fourth goals priorities included, improving

students' career preparation and pre-professional development (mean = 2.56); and promoting integration and connecting between the academic major and the work world (mean = 2.67). The fifth prioritized goal of the senior seminar was the enhancing awareness-of and support-for key personal adjustment encountered during transition from college to post-college life (mean = 3.35). A similar prioritization was placed on the goals of promoting the coherence and relevance of general education of the (mean = 3.63) and fostering integration and synthesis within the academic major (mean =3.72). The lowest prioritization of political science faculty members responding was on promoting integration and connections between education and the academic major (mean = 3.89).

Respondents were able to respond to more than one 'primary' goal of their capstone course. Over three-fourths (77.5%) of criminal justice respondents indicated that the most important goal of senior seminars and capstone courses is to *develop important student skills, competencies, and perspectives developed in the college curriculum* foster integration and synthesis within the academic major. Seventy-one percent (70.9%) of respondents indicated that the primary goal of senior seminars and capstone courses is to promoting integration and connecting between the academic major and the work world while less than half (46.0 %) of political science respondents rated this as most important. The third most important goal of capstone courses reported by criminal justice respondent was promoting integration and connecting between the academic major and the work world (70.9 %)

Political science faculty respondents provided differing responses on their perceptions of the important goals of the capstone courses. They shared the same most important goal of developing important student skills, competencies, and perspectives developed in the college curriculum; however, 91 percent of respondents rated it this way versus 75 percent of criminal justice respondents. The second most important capstone course goal reported by political science instructors (75%) was fostering integration and synthesis within the

academic major. The third most important goal reported was enhancing students' preparation and prospects for

postgraduate education, with 60 percent of political scientists reporting this way.

Table 6. Capstone Goals by Faculty Rating.

	N	%	X mean	N	%	X mean
a. Promoting the coherence and relevance of General Education of the institution	97	28.5	3.41	62	17.8	3.63
b. Promoting integration and connections between education and the Academic Major	95	45.3	2.52	62	35.5	3.89
c. Fostering integration and synthesis within the academic major	101	69.3	1.96	67	75.1	3.72
d. Promoting integration and connecting between the academic major and the work world	103	70.9	2.12	63	46.0	2.67
e. Developing important student skills, competencies, and perspectives developed in the college curriculum	102	77.5	1.95	67	91.0	1.57
f. Enhancing awareness-of and support-for key personal adjustment encountered during transition from college to post-college life	95	31.6	3.16	61	21.2	3.35
g. Improving students' career preparation and pre-professional development	103	57.3	2.41	65	43.1	2.56
h. Enhancing students' preparation and prospects for postgraduate education	103	54.4	1.77	65	60.0	2.21

Twenty-seven percent (26.5%) percent of criminal justice respondents and 43.1 percent of political science respondents rated improving students' career preparation and preprofessional development as most important. Similarly, This was followed by enhancing students' preparation and prospects for postgraduate education (24.5%) by criminal justice instructors and 59 percent of political science instructors. Twenty-two percent of criminal justice instructors and 35.4 percent of political science instructors considered promoting integration and connections between education and the academic major as a most important goal of their capstone course. Only eleven percent (10.9%) of criminal justice instructors compared to 21.3 percent of political science instructors felt that enhancing awareness-of and support-for key personal adjustment encountered during transition from college to post-college life was the most important goal of the capstone course. Only seven percent (7.3 %) of criminal justice instructors versus 17.7 percent of political science instructors rated promoting the coherence and relevance of General Education of the institution as the most important goal of their capstone course.

Respondents from both disciplines were asked about the inclusion, usage, and requirements of a thesis, internship, and senior exit exam. Only 23 percent of criminal justice programs required a thesis for all major versus 44 percent of political science majors. Conversely, only nine (9) percent of political science majors versus 30 percent of criminal justice majors are required to complete an internship as part of their graduate requirements. Finally, there was a similarity in the requirement for a senior exit examination. Forty-six percent (46%) of criminal justice programs and 45 percent of political science programs required students to complete a senior exit examination.

Future analysis will compare the differences in these priorities by public versus private institutions, size of the institutions, and whether the departments are independent or combined with other disciplines. Seventy percent (69.9%) of criminal justice respondents said senior seminars and

capstone courses require students to enroll. Capstone courses at public and private institutions are equally likely to be required. Only five percent (4.7%) of respondents indicated that senior seminars and capstone courses are required for none of their students. Capstone courses at the largest institutions (over 20,000) are slightly less likely to be required than at the smallest institutions (less than 500). Courses at highly selective institutions are less likely to be required than courses at institutions of other selectivity levels.

Capstone courses at public institutions are statistically significantly more likely to be required than at private institutions; and, the responses indicated they were more likely to require group projects and final examinations in their senior seminars and capstone courses. Courses at private institutions are statistically significantly more likely than courses at public institutions to require the writing of a thesis. No other instructional components are statistically different across courses at public and private institutions.

Capstone courses at large institutions are statistically significantly were reported to be more likely to require group projects than at small institutions. Capstone courses at small institutions were found to be statistically significantly more likely to require the writing of a thesis. Courses at highly selective institutions are statistically significantly more likely to require the writing of a thesis than courses at institutions of other selectivity levels.

Through this analysis of the survey responses, there are initial insights into the various methods used to assess student learning outcomes at or near the end of program requirements. Further, detailed research of the data, combined with specific institutional information can allow future research that can focus on skill sets and whether assessment is individual, course-related, program-related, or institutional-related. There is a benefit to be gained for the program and institutions to assist in assessing the program in context with other institutions, public and private, state-wide, and across the region. Such information could also serve as

the basis for further research and on additions or modifications in curriculum, in an effort to better serve our criminal justice students.

Previous research in this area has identified the need to promote and assess critical thinking and analytical skills and written and oral communications as important outcomes for senior capstone courses. These were found to be important components of the current research, as evidenced by instructor responses. The findings from the current research may provide useful comparative data when assessing capstone needs for the institution; albeit, other factors related to the program will provide additional decision-making information.

7. Conclusions

The findings from this research project may be used as a starting point for further, more detailed research. The current research reports on a limited view of how a number of institutions assess their capstone courses in the criminal justice and political science discipline. Research of this type must be continuous and supplemented with assessment information within the departments, inter-institutionally, and intra-institutionally. For most, there is a sound rationale for the usage-of and types-of capstone courses. There are some institutions that continue to search for the needed format or the rationale for a capstone format.

The current research found support for the idea that undergraduate education for the two disciplines addressed entails more than a collection of separate, disconnected experiences and course requirements. As found, institutions vary in how they instruct their students, course contents, and in how they enhance opportunities to connect, deepen, and generalize learning beyond the immediate setting where it

The increase in the number of institutions that offer a capstone course as a culminating experiences and the focus may trend for greater institutional investment and resources in integrative learning and experiences that bring coherence to undergraduate education. This, in turn, requires more focus on ensuring the integrative potential of the capstone course. To date, there is limited research on capstones, especially in the criminal justice discipline, that supports positive outcomes for students who participate. There is a need to focus future research on this topic to educate the students and faculty members and the academy on the quality-added of these experiences and their contribution to integrative learning essential in the criminal justice program.

While the specific content of the programs surveyed varies, to some degree, there are still opportunities in each program to integrate, synthesize, and apply knowledge essential to

ensuring deep, meaningful learning experiences. The senior capstone course provides students with an opportunity to culminate the undergraduate program and graduate with a preparation to continue their educational journey in higher education or begin their career in their chosen major.

It is a responsibility of the institutions, beginning at the department level, to better understand the extent to which students' experience integrative learning and the aspects of the culminating experience that make this happen. Further research an research findings on capstone experiences, combined with institutional assessments, will be instrumental in aiding institutions in the maximization of the potential for improving the capstone experience to focus and function on the successful integrated learning and educational coherence of their students.

References

- [1] AASL Senior/Capstone Project Task Force Report, (2014).
- [2] Brownell, J. E. And L. E. Swaner (2010) "Five High-Impact Practices: Research on Learning Outcome s, Completion, and Quality. Washington, DC: Association of American Colleges and Universities. Carlson, J. L., R. L. Cohn, and D. D. Ramsey (2002), "Implementing Hansen's Proficiencies." Journal of Economic Education 33(2): 180–91.
- [3] Gardner, J. N., G. Van der Veer, and Associates (1998) *The Senior Year Experience: Facilitating Integration, Reflection, Closure and Transition.* San Francisco: Josser-Bass.
- [4] Hauhart, Robert C. and Jon E. Grahe (2010) "The Undergraduate Capstone Course in the Social Sciences: Results from a Regional Survey." Teaching Sociology 38(1): 4–17.
- [5] Henscheid, J. M. 2000 Professing the disciplines: An analysis of senior seminars and capstone courses. Columbia, SC: University of South Carolina.
- [6] Hummer, J. A. (2014) The Content and Integrative Component of Capstone Experiences: An Analysis of Political Science Undergraduate Programs, Journal of Political Science Education, 10, 222–242.
- [7] Ishiyama, John (2005) "The Structure of an Undergraduate Major and Student Learning: A Cross-institutional Study of Political Science Programs at Thirty-two Colleges and Universities." Social Science Journal 42(3): 359–66.
- [8] Kelly, M., and B. E. Klunk. 2003. Learning assessment in political science departments: Survey results. PS: *Political Science and Politics* 36: 451-55.
- [9] Padgett, R. D. and C. A. Kilgo, 2011 National Survey of Senior Capstone Experiences: Institutional-Level Data on the Culminating Experience (Research Reports on College Transitions No. 3), Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- [10] Park, Caroline L. (2004) "What Is the Value of Replicating Other Studies?" Research Evaluation 13(3): 189–95.

- [11] Schermer, T., and S. Gray (2012) The *Senior Capstone: Transformative Experiences in the Liberal Arts.* Final Report to the Teagle Foundation.
- [12] Seeborg, M. C. (2008) "Achieving Proficiencies in Economics Capstone courses, The Journal of College Teaching & Learning," February, 2008, 5 (2), pp. 61-73.
- [13] Siegfried, John J. (2001) "Principles for a Successful Undergraduate Economics Honors Program," Journal of Economic Education 32(2): 169–77.
- [14] Simon, L., D. Curley, M. A. Foley, R. Ginsberg, M. Hockenos, and D. Smith. 2006. Senior thesis assessment workshop. Saratoga Springs, NY: Skidmore College.
- [15] Sum, P. E. and S. A. Light (2010) "Assessing Student Learning Outcomes and Documenting Success through a Capstone Course." PS: Political Science and Politics 43(3): 523-31.
- [16] Wikman, Anders (2006) "Reliability, Validity and True Values in Surveys." Social Indicators Research 78(1): 85–110.