

The Effects of Institutional Classification and Gender on Faculty Inclusion of Syllabus Components

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Abstract: The purpose of this research was to explore the effects that gender and institutional classification have on the inclusion of syllabus components. Course syllabi (N = 350) written by men and women from seven types of institutions, based on Carnegie classification, were sampled and evaluated for the presence of 26 syllabus components. The gender data clearly indicated that there were no gender effects by individual syllabus component and only one gender effect by syllabus component category; that is, females included more policy information than males. In addition, while there were institutional classification effects, there were no clear patterns of effect.

Key Words: Syllabus, Higher Education, Professor Information, Course Information, Grading Information, Policy Information, Institutional Classification, Gender.

I. Introduction.

Little doubt surrounds the importance of the syllabus in higher education; however, defining what a syllabus is, what it should do, and how it should be used is less clear. Due to its multiplicity, the syllabus flip-flops between uniformity and inconsistency to serve its various purposes and audiences. While research is emerging on the components faculty members include in their syllabi, little research has focused on how institutional classification and gender may influence faculty member's inclusion of particular syllabus components.

A. Purposes of a Syllabus.

Typically, the syllabus serves three purposes: a contract, a permanent record, and a resource for student learning (Parkes and Harris, 2002). As a contract, the syllabus outlines the responsibilities of both students and teachers (Eberly, Newton, and Wiggins, 2001; Singham, 2005). By enrolling in the course, students are agreeing to the rules set forth in the syllabus. The contractual nature of the syllabus allows students to decide if they want to remain in the course, plan their time, and review their progress based on the guidelines set forth in the syllabus (Parkes and Harris, 2002). Consequently, the syllabus "contract" explains how the teacher will behave, mainly in regard to policies (e.g., grading, attendance, late work). Communicating policies in the syllabus will help faculty members resolve grievances, further enhancing its contractual appeal. Student informal complaints concerning policies that are clearly stated in the syllabus can be easily settled, while formal grievances or legal appeals can also be affected by policy inclusion in

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the syllabus since syllabi can be used as evidence in these cases (Eberly et al., 2001; Parkes and Harris, 2002).

Likewise, the syllabus's second role – that of permanent record – protects the instructor should issues surrounding accountability and evaluation arise (Habaneck 2005). As a permanent record, however, the syllabus affects faculty, universities, and students. At the faculty level, the syllabus documents the instructor's policies and assessment methods. During promotion and tenure reviews, syllabi may be examined as evidence of the instructor's teaching quality (Parkes, Fix, and Harris, 2003). For the purposes of accreditation, this permanent record becomes important as it allows reviewers to examine a course's setup and function within the college or university's curriculum (Slattery and Carlson, 2005). For students, the syllabus notes the material covered in the course as well as the level at which it was covered. This information can affect transfer credits for students who are transferring from their current institution to another, or trying to substitute a course for one they have not taken (Parkes and Harris, 2002; Parkes et al., 2003; Eberly et al., 2001).

Supplementing its contractual and record serving purposes, the syllabus creates a resource for student learning. An effective syllabus may aid students in becoming self-regulated learners (Parkes and Harris, 2002), can model the professor's "enthusiasm for the course content and convey a positive invitation to the student to explore learning in the discipline" (Habaneck, 2005, p. 63). As a resource for learning, the syllabus should be student-centered (Parkes and Harris, 2002; Habaneck, 2005), focusing on enhancing student learning, preparing students for the class, and providing context for the subject matter (Parkes and Harris, 2002). However, in addition to being a resource for students, the syllabus is essentially a teaching and organizational tool (Becker and Calhoun, 1999; Smith and Razzouk, 1993; Eberly et al., 2001). In this regard, the syllabus can be used for course and teacher evaluations (Madson, Melchert, and Whipp, 2004), which serves both the resource and permanent record roles.

In addition to its roles as a contract, permanent record, and resource for student learning, the syllabus also functions as a communication device between the teacher and students (Garavalia, Hummel, Wiley, and Huitt, 1999); that is, as an "initial communication tool" that serves administrative, course development, and interpersonal purposes (Eberly et al., 2001, p. 56). The administrative purposes of the syllabus may include documentation in cases of grievance, documentation for accreditation, and course content for transfer requests (Habaneck, 2005; Stingham, 2005); while the course development purposes may include curriculum evaluation and development, faculty initiation and professional development, and course structure and design (Parkes and Harris, 2002); and the interpersonal purposes may include the establishment of the affective tone of the course, demonstration of the professor's communication style, and explanation of the professor's expectations (Habaneck, 2005; Thompson, 2007).

A syllabus that is a contract, permanent record and resource for student learning, while also serving administrative, course development, and interpersonal purposes would be considered a comprehensive syllabus (Eberly et al., 2001). The rationale for a comprehensive syllabus is that "syllabi need to be as accurate and specific as possible in order to reduce ambiguity and the idiosyncratic interpretation of course requirements and expectations" (Madson et al., 2004, p. 551). The danger in producing such a detailed document, however, lies in the students' ability to recall and comprehend syllabi information. Smith and Razzouk (1993) found that undergraduate students had difficulty recalling information from their syllabi. They recommend distributing a concise syllabus for the first class and then giving more specific

information at later points in the semester. Smith and Razzouk also note the importance of regularly reviewing the syllabus with students to increase comprehension and retention.

B. Syllabus Design Research.

The creation of syllabi is ubiquitous in higher education, yet most professors are not trained to create them (Albers, 2003, Cardozo, 2006) and most publications and manuscripts regarding syllabus design are prescriptive (see Gifford, 2003; Grunert, 1997; Slattery and Carlson, 2005). According to Cardozo (2006), “syllabus construction itself remains a significantly undertheorized professional activity...Although we collectively specialize in a mind-boggling variety of...subjects, we lack sufficient theories of the syllabus” (p. 412). There is, however, a meaningful thread of research constructed over the past two decades that has examined the constitution of syllabi. Specifically, syllabus design research has generally addressed three themes, (a) what components do faculty include within their syllabi, (b) how do faculty and students perceive the syllabus, and (c) how do syllabi function within specific content areas.

Syllabus components. The research that has focused on syllabus components (see Doolittle and Siudzinski, in press; Eberly et al., 2001; Meuschke, Gribbons, and Dixon, 2002; Parkes et al., 2003) has generally found that while syllabi contain large amounts of information, they also lack key information. Specifically, the syllabus design research has found that the majority of syllabi contain significant instructor information (e.g., instructor name, office location, phone number, and email address), course information (e.g., course name and number, course objectives, required texts, and course topics and calendar), and grading information (e.g., grading policy and grading scale). However, one area of contention is policy information. Parkes, Fix, and Harris (2003) and Doolittle and Siudzinski (in press) examined syllabi from four-year colleges and universities and found that less than half of the syllabi contained an attendance policy and only approximately 20 percent contained late work, make-up work, and academic honesty policies. Meuschke et al. (2002), however, examined syllabi from community colleges and found that 85 percent of the syllabi contained an attendance policy and over 70 percent contained late work, make-up work, and academic honesty policies. Are there differences in syllabus component inclusion based on the type of classification of the educational institution (e.g., four-year colleges versus community colleges)?

Syllabus perceptions. The syllabus perceptions research has focused on the significance that the syllabus has for students. Garavalia et al. (1999) asked students to rate the importance of various syllabus components. The most important syllabus components, according to these students, included assignment information (e.g., assignment names, descriptions, and due dates), grading information (e.g., grading policy and scale), attendance information (e.g., attendance policy, allowable absences, and excessive absence policy), and instructor contact information (e.g., instructor office hours and office phone). Similarly, Becker and Calhoun (1999) asked students to indicate to which syllabus components they most paid attention. These students paid most attention to assignment information (e.g., exam, quiz, and assignment types, number, and due dates), grading information (e.g., grading policy), attendance information (e.g., participant requirements), and required work information (e.g., required readings and work). While Garavalia et al. (1999) and Becker and Calhoun (1999) focused on what students' value, Smith and Razzouk (1993) examined what students remembered from the syllabus. Smith and Razzouk found that 80 percent of students remembered course information (e.g., course name, number, credits, and textbook), assignment information (e.g., number of exams and term project), and

instructor information (e.g., instructor name). These three studies all support the idea that the syllabus information that is most valuable to students is assignment, grading, and attendance information.

Syllabus functionality. The research focusing on syllabus components and syllabus perceptions tends to view syllabi without distinction. The syllabus functionality research, however, views syllabi within specific contexts (e.g., content areas) or for specific purposes (e.g., technology use). For example, in order to facilitate librarians' ability to meet course demands, Rambler (1982), Bean and Klekowski (1993), and Dewald (2003) examined a wide array of syllabi to determine the amount and type of library use these courses would require. They concluded from their syllabi studies that (a) library resources are underused; (b) libraries resources most used are texts; and (c) library resources are most used for the completion of research papers, reports, and projects. In addition, Hrucaj (2006) and Madson et al. (2004) conducted syllabus content analyses for specific purposes, to determine how these courses utilized assessment techniques and computer technology, respectively. Hrucaj (2006), examining syllabi from library skills courses, concluded that the courses used projects and exams as the main source of student evaluation; while Madson et al. (2004) concluded that syllabi from a teacher education program did not often reference the use of technology skills within the course.

This previous research into syllabus design – syllabus inclusion, syllabus perception, and syllabus function – has demonstrated significant and interesting variability within the construction and use of syllabi. Within this research, however, the effects of institutional type and gender have not been examined (see Doolittle and Siudzinski, in press; Meuschke et al, 2002; Parkes, Fix, and Harris, 2003; Thompson, 2007). That is, does an institution's Carnegie Classification affect faculty member's inclusion of various syllabus components?; and, do males and females differ in their inclusion of various components?

II. Method.

A. Sampling.

Course syllabi (N = 350) were sampled via the Internet using a non-probability – purposive and quota – sampling process. The syllabi were chosen purposively such that 50 syllabi were selected for each of seven Carnegie classifications for undergraduate higher education institutions (see Table 1). These seven institutional classifications were selected to obtain a varied sample of syllabi from undergraduate institutions; specifically, syllabi from community college courses (Assoc), syllabi from institutions that focus on arts and sciences (A&S-F), syllabi from institutions that focus on professional fields (Prof-F), and syllabi from institutions that focus on a balance between arts and sciences and the professions (Bal). The final three institutional foci – A&S, Prof-F, and Bal – were further subdivided into institutions that offer no graduate degrees (No Graduate Coexistence; NGC) and institutions that offer extensive graduate degrees (High Graduate Coexistence; HGC). In addition to selecting the syllabi purposively, the syllabi were also non-purposively distributed across gender such that males wrote 237 of the syllabi and females wrote 113 of the syllabi.

The syllabi were obtained using the Google™ search engine where searches involved using the Advanced Search feature. The advanced search took the form of searching for the word *syllabus* while restricting the search to the specific URL domain (e.g., www.aacc.edu) of a specific institution within a specific institutional classification. The institution names and

Table 1. Carnegie Classifications of Higher Education Institutions.

Assoc: Associate	According to the degree data, these institutions awarded associate's degrees but no bachelor's degrees.
AandS-F/NGC Arts and sciences focus, no graduate coexistence	According to the degree data, at least 80 percent of bachelor's degree majors were in the arts and sciences, and no graduate degrees were awarded in fields corresponding to undergraduate majors.
AandS-F/HGC Arts and sciences focus, high graduate coexistence	At least 80 percent of bachelor's degree majors were in the arts and sciences, and graduate degrees were observed in at least half of the fields corresponding to undergraduate majors.
Bal/NGC: Balanced arts and sciences/professions, no graduate coexistence	According to the degree data, bachelor's degree majors were relatively balanced between arts and sciences and professional fields (41–59 percent in each), and no graduate degrees were awarded in fields corresponding to undergraduate majors.
Bal/HGC: Balanced arts and sciences/professions, high graduate coexistence	Bachelor's degree majors were relatively balanced between arts and sciences and professional fields (41–59 percent in each), and graduate degrees were observed in at least half of the fields corresponding to undergraduate majors.
Prof-F/NGC: Professions focus, no graduate coexistence.	According to the degree data, at least 80 percent of bachelor's degree majors were in professional fields (such as business, education, engineering, health, and social work), and no graduate degrees were awarded in fields corresponding to undergraduate majors.
Prof-F/HGC: Professions focus, high graduate coexistence.	At least 80 percent of bachelor's degree majors were in professional fields, and graduate degrees were observed in at least half of the fields corresponding to undergraduate majors.

Note. The institutional classifications listed above, represent only a sub-set of the entire list of Carnegie Classifications of Higher Education Institutions.

Source: <http://www.carnegiefoundation.org/classifications/>

classifications were obtained from lists of institutions available on the Carnegie Foundation web page (<http://www.carnegiefoundation.org/classifications/>) that matched one of the seven specific institutional classifications aforementioned. This type of search and subsequent selection of syllabi was not random as Google utilizes a non-random algorithm to search and display results (Google, 2006). In addition, only syllabi for face-to-face classes were included. Syllabi for online courses were not included.

It should be noted that this purposive online sampling results in limitations to the generalizability of the study itself. Specifically, since the present study addresses only 7 of the 17 Carnegie Classifications, it is unclear how syllabi from institutions within the non-sampled classifications may differ from the current sample. That said the classifications were selected carefully to include well-defined classifications. In particular, the domain of institutions is divided into five general types based on the percentage of degrees awarded to Arts and Science (A&S) majors or Professions (Prof) majors: A&S focused (A&S-F); mostly A&S, but some Prof (A&S+Prof); balanced A&S and Prof (Bal); mostly Prof, but some A&S (Prof+A&S); and Prof focused (Prof-F). We selected the A&S-F, Bal, and Prof-F classifications to represent the middle and ends of the domain of institutions continuum. In addition, each of these five domain classifications is also divided into three degree classifications, based on the presence of graduate degrees coexisting with undergraduate degrees in the same major: no graduate coexistence

(NGC), some graduate coexistence (SGC), and high graduate coexistence (HGC). We selected NGC and HGC to represent the ends of the graduate coexistence continuum. Finally, the current sample involved only syllabi from face-to-face classes that were available online. We did not sample syllabi from online courses, nor did we sample syllabi not available online, including face-to-face syllabi not posted online and online syllabi protected with a content management system (e.g., WebCT, Blackboard). However, Maurino (2005) examined both print and online-based syllabi from both face-to-face and online classes and concluded, "The fact that the syllabi were presented on paper or online does not appear to affect the inclusion of major content areas of the syllabi." (p. 232). Thus, the current study should only be generalized to the syllabi available online from the classifications addressed.

C. Procedure.

Each syllabus selected was evaluated based on the 26 syllabus components reported by Doolittle and Siudzinski (in press; see Table 2). These syllabus components were divided into four broad categories: Professor Information, Course Information, Grading Information, and Policy Information. After selection, each syllabus was evaluated for the presence or absence of the 26 syllabus components using an online utility and no effort was made to evaluate the efficacy or quality of the syllabus components. The online utility prevented any syllabus from being evaluated more than once.

IV. Results.

The following results begin the process of evaluating the three research questions; specifically, (a) What syllabus components are included by faculty members within their syllabi?; (b) What differences, if any, exist in the inclusion of syllabus components across gender?; and, (c) What differences, if any, exist in the inclusion of syllabus components across different institutional classifications?

A. Syllabus Components Included on Higher Education Syllabi.

The frequency distribution of syllabus components included in the sampled syllabi is displayed in Table 2. The most frequently included syllabus components were Course Name (95.7%), Course Number (93.4%), Course Texts (89.1%), Professor Name (86.5%), and Grading Policy (80.8%). The least frequently included syllabus components were comprised almost entirely of policies, specifically, Honor Code Policy (34.8%), Late Work Policy (25.1%), Disability Policy (23.7%), Missed Work Policy (20.0%), Supplemental Readings (17.7%), and Student Support Services (4.5%).

Cochran's Q was used to further analyze the frequency data to locate any differences between category frequencies, followed by an analysis of standardized residuals as a post-hoc test to locate specific frequency variations. Since the analyses of standardized residuals does not constitute independent analyses (Siegel and Castellan, 1988), inflation of Type I error was controlled through the use of the Sidák-Bonferroni correction (Hayes, 1994; Keppel and Wickens, 2004), resulting in significance being measured at $\alpha = 0.002$ ($z = \pm 3.10$). The Cochran

Table 2. Components Included on Higher Education Syllabi (N = 350)^a

Category	Frequency	Standardized Residual	Rank
Professor Information			
Professor Name	303	6.63 ⁺	4
Office Location	231	2.87	9
Office Hours	210	1.79	12
Office Phone Number	240	3.34 ⁺	8
Professor Email Address	248	3.75 ⁺	7
Course Information			
Course Name	335	8.28 ⁺	1
Course Number	327	7.81 ⁺	2
Course Description	222	2.41	10
Course Location	141	1.74	20
Course Time	173	0.10	16
Course Goals/Objectives	214	2.00	11
Course Require Texts	312	7.04 ⁺	3
Course Supplemental Readings	62	5.80 ⁻	25
Course Topics	260	4.36 ⁺	6
Course Calendar	209	1.74	13
Course Due Dates	156	0.97	18
Grading Information			
Grading Policy	283	5.55 ⁺	5
Grading Scale	162	0.66	17
Assignment Names	204	1.48	14
Assignment Descriptions	145	1.53	19
Policy Information			
Attendance Policy	194	0.97	15
Late Work Policy	88	4.47 ⁻	22
Missed Work Policy	70	5.40 ⁻	24
Honor Code Policy	122	2.72	21
Disability Policy	83	4.72 ⁻	23
Student Support Services	16	8.02 ⁻	26

^a Cochran Q (25,350) = 2791.16, $p < 0.000$

⁺ $p < .001$, observed frequency significantly greater than expected frequency

⁻ $p < .001$, observed frequency significantly less than expected frequency

Q was statistically significant and the analysis of residuals revealed three clusters of categories. The high frequency cluster included the professor's name, office phone, and email address, as well as the course name, number, required texts, and topics, and, finally, grading policy. The low frequency cluster included course supplemental readings, late work policy, missed work policy, disabilities policy, and student support services (see Table 2). These results are in agreement with previous research (see Doolittle and Siudzinski, in press)

B. Syllabus Components and Gender.

While the course component frequencies provide an overview of the included syllabus components, two more detailed analyses were performed. The first analysis examined the inclusion of course components across gender by grouping the course components into categories, specifically, Professor Information, Course Information, Grading Information, Policy Information, and All Information, which includes all course components regardless of category.

The second analysis examined the inclusion of course components, by gender, without any groups, examining each course component individually.

Examining component categories by gender. A score was computed for each syllabus examined, for each of the four syllabus component categories (i.e., professor information, course information, grading information, policy information), based on the number of included syllabus components with each category. These data were analyzed using a 2 (Gender) x 7 (Classification) x 5 (Syllabus Component Category) MANOVA, with syllabus component inclusion as the dependent variable (see Table 3). All follow-up comparisons were analyzed using the Tukey HSD post hoc with family-wise $\alpha = 0.05$. Only the Gender x Syllabus Component Category aspect of this analysis is discussed here; the Classification x Syllabus Component Category aspect of this analysis is addressed in the next section.

The MANOVA revealed only one significant main effect for gender, Policy Information, $F(1,336) = 5.78$, $MSE = 11.39$, $p < 0.017$, and four non-significant main effects for Professor Information, Course Information, Grading Information, and Total Information. Post hoc analyses demonstrated that the main effect for Policy Information was the result of syllabi written by females ($M = 1.87$, $SD = 1.42$) containing more Policy Information than syllabi written by males ($M = 1.53$, $SD = 1.53$).

Examining individual components by gender. While the MANOVA provides a broad overview of categorized syllabus component inclusion and gender, a series of chi-square analyses were performed to determine the relationship between individual syllabus component inclusion and gender (see Table 3). One chi-square analysis was performed per syllabus component, yielding a total of 26 analyses. In order to establish a familywise $\alpha = 0.05$, the Sidák-Bonferroni correction was used, yielding a per comparison $\alpha = 0.002$. In addition, to gain a better sense of each gender's contribution to each significant chi-square analysis, an analysis of standardized residuals was performed for each significant chi-square analysis, with significance measured at $\alpha = 0.025$ ($z = \pm 2.24$), again, using the Sidák-Bonferroni correction to control for Type I error.

Table 3. Means (and Standard Deviations) for Syllabus Component Categories by Gender.

Syllabus Component Categories	Gender		Total (n = 350)
	Male (n = 237)	Female (n = 113)	
Professor Information ^a	3.52 (1.77)	3.51 (1.84)	3.52 (1.79)
Course Information ^b	6.92 (1.86)	6.82 (1.91)	6.89 (1.87)
Grading Information ^c	2.20 (1.22)	2.41 (1.15)	2.27 (1.20)
Policy Information ^d	1.53 (1.53)	1.87 (1.42)	1.64* (1.50)
All Information ^e	14.17 (4.35)	14.61 (3.97)	14.31 (4.23)

^a Max value is 5; ^b Max value is 11; ^c Max value is 4; ^d Max value is 6

^e Max value is 26

* $p < 0.05$

The chi-square series revealed that none of the syllabus components included significant variability across gender (see Table 4). Since no chi-square analyses were statistically significant, no standardized residual analyses were conducted. These results, a lack of gender

differences based on an examination of the six individual syllabus policies, indicate that the significant policy category finding mentioned previously is an artifact of summing the total number of policy statements included by males and females. It is important to interpret these findings carefully, that is, that while there was a statistically significant difference between the total number of policy statements included on syllabi by males and females, this difference was not the result of differences in any one particular policy statement.

Table 4. Observed Frequencies (and Expected Frequencies) of Syllabus Components by Gender.

Syllabus Component	Gender		χ^2
	Male (n = 237)	Female (n = 113)	
Professor Information			
Professor Name	208 (205)	95 (98)	0.89
Office Location	157 (156)	74 (75)	0.02
Office Hours	140 (142)	70 (68)	0.26
Office Phone Number	162 (162)	78 (78)	0.01
Professor Email Address	168 (168)	80 (80)	0.00
Course Information			
Course Name	225 (227)	110 (108)	1.08
Course Number	222 (221)	105 (106)	0.07
Course Description	140 (150)	82 (72)	6.00
Course Location	105 (96)	36 (46)	4.92
Course Time	121 (117)	52 (56)	0.77
Course Goals/Objectives	137 (145)	77 (69)	3.44
Course Required Tests	208 (211)	104 (100)	1.44
Course Supplemental Readings	44 (42)	18 (20)	0.36
Course Topics	185 (176)	75 (84)	5.47
Course Calendar	150 (142)	59 (68)	3.90
Course Due Dates	103 (106)	53 (50)	0.36
Grading Information			
Grading Policy	190 (192)	93 (91)	0.22
Grading Scale	106 (110)	56 (52)	0.71
Assignment Names	131 (138)	73 (66)	2.73
Assignment Descriptions	95 (98)	50 (47)	0.54
Policy Information			
Attendance Policy	121 (131)	73 (63)	5.68
Late Work Policy	56 (60)	32 (28)	0.89
Missed Work Policy	46 (47)	24 (23)	0.16
Honor Code Policy	74 (83)	48 (39)	4.26
Disability Policy	55 (56)	28 (27)	0.10
Student Support Services	10 (11)	6 (5)	0.20

Note. For all χ^2 calculations, N = 350 and $df = 1$.

⁺ p < .025, observed frequency significantly greater than expected frequency

⁻ p < .025, observed frequency significantly less than expected frequency

* p < .002

C. Syllabus Components and Classification.

Examining component categories by classification. As mentioned previously, a 2 (Gender) x 7 (Classification) x 5 (Syllabus Component Category) MANOVA, with syllabus component inclusion as the dependent variable, was performed with all follow-up comparisons analyzed using the Tukey HSD post hoc with family-wise $\alpha = 0.05$. Only the Classification x

Syllabus Component Category aspect of this analysis is discussed here (see Table 5). The MANOVA revealed five significant main effects, Professor Information, $F(6,350) = 3.60$, $MSE = 10.96$, $p = 0.002$; Course Information, $F(6,350) = 2.52$, $MSE = 8.41$, $p = 0.021$; Grade Information, $F(6,350) = 7.66$, $MSE = 9.66$, $p = 0.000$; Policy Information, $F(6,350) = 8.03$, $MSE = 15.81$, $p = 0.000$; and All Information, $F(6,350) = 3.50$, $MSE = 57.90$, $p = 0.002$. Complete post hoc analyses of the main effects are delineated in Table 5. The results of these post hoc analyses demonstrate that syllabi from Bal-NGC, Bal-HGC and Prof-NGC institutions included more Professor Information than Assoc, A&S-HGC and Prof-HGC institutions; that syllabi from A&S-HGC and Prof-NGC institutions included more Course Information than Assoc, Bal-NGC and Prof-HGC institutions; that syllabi from Prof-NGC and Prof-HGC included more Grading Information than all of the remaining classifications; that syllabi from Assoc, Bal-NGC and Bal-HGC institutions included more Policy Information than all of the remaining classifications; and, that syllabi from Bal-HGC and Prof-NGC institutions included more Total Information than Assoc, A&S-NGC, A&S-HGC and Prof-HGC institutions.

Table 5. Means (and Standard Deviations) for Syllabus Component Categories by Institutional Classification.

Syllabus Component Categories	Institutional Classification							Total
	Assoc	AandS NGC	AandS HGC	Bal NGC	Bal HGC	Prof NGC	Prof HGC	
Professor Information ^a	3.21 ^{f,g} (2.03)	3.66 ^{g,h} (1.78)	2.68 ^f (1.97)	3.98 ^h (1.73)	4.00 ^h (1.53)	3.98 ^h (1.51)	3.14 ^{f,g} (1.58)	3.52* (1.79)
Course Information ^b	6.70 ^f (1.92)	6.94 ^{f,g} (1.86)	7.13 ^g (1.82)	6.19 ^f (1.85)	6.98 ^{f,g} (1.71)	7.60 ^g (2.04)	6.69 ^f (1.57)	6.89* (1.87)
Grading Information ^c	1.89 ^{f,g} (1.09)	2.26 ^g (1.15)	1.73 ^f (1.30)	2.19 ^{f,g} (1.22)	2.29 ^g (0.92)	3.01 ^h (1.01)	2.82 ^h (1.13)	2.27* (1.20)
Policy Information ^d	2.20 ^g (1.50)	1.44 ^f (1.37)	0.91 ^f (1.17)	2.39 ^g (1.64)	2.46 ^g (1.77)	1.44 ^f (1.21)	1.14 ^f (1.14)	1.64* (1.50)
All Information ^e	13.99 ^{f,g} (4.54)	14.30 ^g (4.42)	12.48 ^f (4.47)	14.68 ^{g,h} (4.29)	15.74 ^h (4.26)	16.04 ^h (3.43)	13.81 ^{f,g} (3.09)	14.31* (4.23)

Note: Cell means within the same row that have the same superscript are statistically similar, means with dissimilar superscripts are statistically different ($p < 0.05$).

^a Max value is 5; ^b Max value is 11; ^c Max value is 4; ^d Max value is 6; ^e Max value is 26.

* $p < 0.05$.

Examining individual components by classification. While the MANOVA provides a broad overview of syllabus component category inclusion, a series of chi-square analyses were performed to determine the relationship between individual syllabus component inclusion and institutional classification (see Table 6). One chi-square analysis was performed per syllabus component followed by an analysis of standardized residuals for those chi-squares that were significant. The Sidák-Bonferroni correction was used with both the chi-square and standardized residual analyses, resulting in alpha levels of 0.002 and 0.02 ($z = \pm 2.33$), respectively.

The chi-square series revealed that 14 of the 26 syllabus components included significant variability in the inclusion of syllabus components across institutional classification. The

Table 6. Observed Frequencies of Syllabus Components by Institutional Classification.

Syllabus Components	E(f) ^b	Institutional Classification = O(f) ^a								χ^2
		Assoc	AandS NGC	AandS HGC	Bal NGC	Bal HGC	Prof NGC	Pro HGC		
Professor Information										
Professor Name	43.3	38	43	41	45	46	46	44	8.84	
Office Location	33.0	34	36	25-	36	42+	38	20-	31.90*	
Office Hours	30.0	23	35	21-	35	38	36	22	28.66*	
Office Phone Number	34.2	32	35	22-	37	39	40	35	20.36*	
Professor Email Address	35.4	33	30	27	37	39	40	42	17.98	
Course Information										
Course Name	47.9	48	47	49	47	45	50	49	8.21	
Course Number	46.7	47	48	44	45	48	50	45	8.93	
Course Description	31.7	42+	31	28	20-	28	35	38	27.71*	
Course Location	20.1	16	16	26	17	29+	28+	8-	31.83*	
Course Time	24.7	18	26	30	23	33	33	10-	34.51*	
Course Goals/Objectives	30.6	48+	22-	9-	33	28	41+	33	81.63*	
Course Require Texts	44.6	47	46	41	39	49	44	46	15.23	
Supplemental Reading	8.9	2	6	13	8	10	7	16	17.68	
Course Topics	37.1	37	38	43	28	38	36	40	13.49	
Course Calendar	29.9	23	35	36	23	30	31	31	13.73	
Course Due Dates	22.3	12-	32+	32+	17	14	28	21	34.44*	
Grading Information										
Grading Policy	40.4	40	42	27-	42	46	44	42	29.94*	
Grading Scale	23.1	31	12-	4-	28	28	33+	26	56.70*	
Assignment Names	29.1	13-	34	36	11-	15-	49+	46+	126.58*	
Assignment Descriptions	20.7	11	21	21	17	12	27	27	15.44	
Policy Information										
Attendance Policy	27.7	36	27	15-	34	28	36	18-	35.08*	
Late Work Policy	12.6	10	19	12	16	18	4	9	18.67	
Missed Work Policy	10.0	12	3-	3-	22+	23+	1-	6	64.00*	
Honor Code Policy	17.4	25	17	10	18	20	15	17	11.07	
Disability Policy	11.9	23+	6	4-	15	19+	15	1-	45.20*	
Student Support Services	2.3	5	1	0	3	5	1	1	11.65	

Note. For all χ^2 calculations, N = 350 and $df = 6$. For all individual cells, n = 50.

^a O(f) = Observed frequencies. ^b E(f) = Expected frequencies.

+ p < .01, observed frequency significantly greater than expected frequency

- p < .01, observed frequency significantly less than expected frequency

* p < .002

subsequent standardized residual analyses revealed 15 frequencies that were higher than expected and 20 frequencies that were lower than expected. While no overall pattern for the inclusion of syllabi across institutional classification is evident from Table 6, there are a few variations of interest. Specifically, A&S-HGC syllabi included less office information (i.e., office location, hours, and phone number) than expected; and, Assoc syllabi included more course goals/objectives information than expected, but less course due dates information than expected, while A&S-NGC and A&S-HGC both included the opposite, that is, less course

goals/objectives information than expected, but more course due dates information than expected.

V. Discussion.

The purpose of this research was to explore the potential effects that gender and institutional classification have on the inclusion of syllabus components. The gender-based results indicated that there was a significant difference in the number of policy statements included on syllabi between males and females when only the average number of overall policy statements was examined. That is, males included an average of 1.5 policy statements per syllabus, while females included an average of 1.8 policy statements per syllabus. Upon closer analysis, however, this average difference dissipated when the six policies (i.e., attendance, late work, missed work, honor code, disability, and student support) were examined individually. These findings must be interpreted with care. The first finding indicates that *on average*, females include more policy information than males, while the second finding indicates that there are no specific differences between males and female when looking at individual policies. Another interpretation may be to examine these results from a statistical perspective and a meaningful perspective; that is, while there is a statistical difference between the average number of policy statements included on syllabi constructed by males and females, there is no meaningful difference between males and females as there were no differences based on individual policies.

The institutional classification effects by syllabus component category (see Table 5) revealed that across all category information A&S-HGC syllabi included the least syllabus information while the Bal-NGC, Bal-HGC and Prof-NGC syllabi included the most syllabus information. In examining the specific syllabus component categories it is evident that A&S syllabi, both NGC and HGC, contained the least amount of policy information; that Prof syllabi, both NGC and HGC, contained the most amount of grading information; and that Bal syllabi, both NGC and HGC, contained the most amount of both professor and policy information. Unfortunately, these results allow for few, if any, systematic generalizations related to institutional classification. This lack of systematic generalization is exacerbated in the individual syllabus component data. Specifically, while there were several differences within the individual syllabus component data (see Table 6), there were no meaningful patterns of variability. Thus, while it may be concluded that syllabi vary by institutional classification, one must be careful in generalizing these variations.

In addition, while the gender data indicate little or no variation in syllabus component inclusion and the institutional classification data indicate significant, though unsystematic, variation, the overall inclusion of syllabus components demonstrates a familiar pattern (see Table 2). The syllabus components most and least often included in the current sample matches the most and least often included syllabus components indicated by Doolittle and Siudzinski (in press; see Table 7). In both samples, the most included syllabus components were course name and number, professor name, required texts, and grading policy, and the least included syllabus components were student support services, late and missing work policies, supplemental readings, and disability and honor code/academic honesty policies.

Limitations. The present study's generalizability and interpretability should be limited based on five concerns. First, the sample of syllabi was not randomly attained, but rather was selected from the web based on Google searches. This selection process may have introduced an unknown bias based on the Google search engine's search algorithm. Second, all of the syllabi

were available online. Are there differences between online and non-online syllabi? Initial results from Maurino (2005) provide evidence that there are no differences between online and non-online syllabi, but no comprehensive study has yet been completed. Third, the present study did not evaluate the content or quality of the individual syllabus components, only their presence or absence. While including specific syllabus components is important, the content of these components would have a direct bearing on their value and efficacy. Fourth, while the content of a syllabus is important, how the syllabus is used is likely most important. Is the syllabus used as a *knowledge repository*, explained on the first day of class and never addressed again, or is the syllabus a *knowledge guide*, introduced the first day and referred to repeatedly during the semester as a road map to understanding? And, fifth, the syllabi analysis began with a fixed set of syllabus components. While this set of components is based on and supported by prior research (see Becker and Calhoun, 1999; Doolittle and Siudzinski, in press; Eberly et al., 2001; Garavalia et al., 1999; Habanek, 2005; Meuschke et al., 2002; Parkes et al., 2003) what might have been missed?

Table 7. The Most and Least Included Syllabus Components Compared to Doolittle and Siudzinski (in press).

	Syllabus Components and Inclusion Percentage			
	Current Study		Doolittle and Siudzinski	
Most Frequently Included Syllabus Components	Course Name	95%	Course Name	97%
	Course Number	93%	Course Number	91%
	Required Texts	89%	Professor Name	91%
	Professor Name	87%	Required Texts	84%
	Grading Policy	81%	Grading Policy	76%
Least Frequently Included Syllabus Components	Honor Code Policy	35%	Supplemental Readings	34%
	Late Work Policy	25%	Honor Code Policy	34%
	Disability Policy	24%	Disability Policy	23%
	Missed Work Policy	20%	Missed Work Policy	20%
	Supplemental Readings	18%	Late Work Policy	19%
	Support Services	5%	Support Services	7%

VI. Implications.

The current study validated findings from previous studies (Doolittle and Siudzinski, in press; Eberly et al., 2001; Parkes et al., 2003) that syllabi tend to include more professor, course, and grading information, and little policy information. In addition, the lack of meaningful differences in gender and institutional classification join the lack of meaningful differences in discipline (see Doolittle and Siudzinski, in press) to provide more evidence that syllabi are more similar than different across a wide spectrum of educational groups. This lack of meaningful differences in gender, institutional classification, and discipline indicates that the lack of policy information in syllabi is systemic.

This lack of policy information was stark, only 55% of the syllabi evaluated included an attendance policy, 35% included an honor code policy, 24% included a disability policy, 22% included at late work/missing work policy, and 4% included a student support services statement (see Table 2). That being said, should syllabi include these policy statements?

Regarding the attendance policy, Garavalia et al. (1999) determined that attendance and attendance related policies were very important to students. In a survey of 242 students regarding the importance of various syllabus components, three of the top 10 most important syllabus

components included a statement of allowable absences (#5), a statement of attendance policy (#7), and a statement of penalties for exceeding allowable absences (#8). Similarly, regarding a late work/missing work policy, Becker and Calhoun (1999) surveyed 863 students regarding to which syllabus components they paid attention. The results indicated that students paid significant attention to “Makeup Policy” and “Late Assignment Policy.” Thus, both attendance and late/missing work policies are important and/or worthy of attention to students and provide for a more student-centered syllabus (Eberly et al., 2001).

Further, the lack of inclusion of a disability policy in most syllabi is problematic given the increasing numbers of students with disabilities enrolling in higher education institutions (see Gordon, Lewandowski, Murphy, and Dempsey, 2002; Smith, 2001) and the legal requirement for higher education institutions and faculty members to accommodate students with documented disabilities (ADA, 1990; IDEA, 1990). The inclusion of a disability policy, however, goes beyond being in accord with legal statutes. According to Lerner (2003), “one of the greatest challenges faced by college students with learning disabilities is gaining and maintaining the acceptance and cooperation of the academic faculty” (p. 314). Faculty can demonstrate acceptance and encourage students with disabilities to self-identify by providing disability policy statements on syllabi, thus recognizing the rights of students with disabilities to receive needed and entitled accommodations.

This acceptance of student needs, however, should move beyond qualified students with disabilities to include all students. Student support services provide needed scaffolding for all students across a variety of needs and include reading and writing centers, tutoring and study centers, health and counseling centers, women’s centers, and library assistance programs. Indeed, Cheng (2004) stresses the vital need for faculty and administrators to collaborate in the creation of a more supportive and holistic academic community for all students. Syllabi that incorporate intercampus learning opportunities promote more effective faculty-student interactions, student affairs programming, and academic advising by creating a whole learning experience for the student (Cheng, 2004; Tinto, 1998). Thus, as in the case of a disability policy, the inclusion of student services within a syllabus demonstrates the faculty member’s acceptance of student needs and encouragement to seek out assistance.

Finally, concerns over cheating and academic dishonesty have led to several studies indicating that honor code policies help to alter, positively, student perceptions and behaviors related to cheating and academic integrity (Dufresne, 2004; McCabe, Trevino, and Butterfield, 1999; McCabe, Butterfield, and Trevino, 2003; cf. Roig and Marks, 2006). McCabe and Trevino (1997) further identified context variables (e.g., pressure to succeed, competition, peer culture) as more likely to lead to academic dishonesty than personal variables. The presence of an honor code statement on the syllabus reinforces that academic integrity is a valued component of the course context.

The current research has provided additional evidence that the components of course syllabi are similar across a wide range of domains and institutions, as well as across genders. This research has also provided additional evidence that policy information is severely lacking on most syllabi and that this policy information should be included.

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