The Role of Faculty in Undergraduate Curricular Development: An Exploration of Influences and Ways of Knowing from Departmental Chairs and Directors

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Abstract

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At most American universities, faculty hold curricular authority and are responsible for undergraduate degree requirements, but the literature review revealed little from the faculty perspective. This dissertation research focused on the faculty perspective on undergraduate curricular development by conducting eighteen semi-structured interviews of chairs and directors from eleven different departments that completed significant curricular changes from 2005 to 2011 at a large undergraduate college in a Research Extensive University. Departmental chairs and directors were chosen since they hold final signatory authority on curricula for their department, and are in faculty leadership positions. This research identified similarities in the faculty chair experience at this university, regardless of field or background. It was found that their experience from the leadership responsibility for curricula was the main contributor to their knowledge about curricular development, and they often referenced other programs for models. They cited that the main influence on curricular change was the budgetary system and monetary resources of the university, and barriers to change were the inertia of the faculty and processing time. Other significant findings were: the use of professional advising staff as a resource; the importance of collegiality and consensus among the faculty to enact curricular change; and the influence students, program size, and professional societies had on curricula.

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Chapter 1: Introduction

At most American universities, faculty have responsibility for the curricula, from the content of what is offered to overall degree requirements. This responsibility includes many administrative processes, especially at large research institutions, including creating new programs to changing current requirements. This involves coursework offerings, as well as degree requirements at both graduate and undergraduate levels. The focus of the literature related to faculty and undergraduate curricula has been on coursework, teaching, and other faculty functions, while very little has been published on the broader curricular responsibility of faculty, especially on their perspective and ways of knowing.

Since there is so little in the literature from the faculty perspective, a new voice was needed for future research about curricula. The resulting perspective and voice may also help to improve processes for developing curricula, point out training or assistance that may be needed, and provide a faculty context in which to ground discussions of undergraduate curricula.

This led to the research questions in this dissertation, and has become an exploratory qualitative case study of what departmental faculty chairs and directors know about creating and changing undergraduate curricula. This research leads to a further understanding of how undergraduate curricula is developed at the departmental or unit level, general thoughts of the faculty leadership on curricula, and a bettering of the system of curricular development as a whole. It also gives a new perspective on the process of curricular change, and will arguably help to improve the process by increasing understanding of the common themes and influences that come to play when changes are being implemented.

Purpose of the Study

The purpose of the study was to study faculty as a group, the unit of analysis, and explore the ways of knowing, opinions, influences and experience with undergraduate curricula. As a part of their position at a large research University, faculty are responsible for the structure and content of the curricula in their department, and for all undergraduates, the content of the major program of study. Within each department, a faculty chair or director must sign the final curriculum approval form, so they were chosen as representatives of their departments for the purpose of this study. With much written about the history, structure and innovation of undergraduate curricula, the key element of the perspective of those responsible for creating and changing it is missing from this literature.

The research contained herein asked faculty chairs, directors, and undergraduate curriculum directors in departments that significantly changed or created new undergraduate curricula from 2005 until 2011 at the University of Washington about the curricular process. The interviews were conducted in-person and were semi-structured to obtain answers about their roles, knowledge and influences. More specifically, the main topics queried were: experience and roles with curricular development; their knowledge about curricula; how their curricular knowledge was obtained; influences on curricula and its effects; opinions on barriers to curricular change; resources used and needed to make the change; interactions of departmental faculty involved; the role of leadership in the process; and an exploration of the university structure as it relates to curricula.

The units involved in the study were from humanities, arts, sciences and

social science divisions within a large college, so the diversity of the faculty training and background was substantial. Even so, similarities and themes were revealed from the transcriptions and notes following the eighteen interviews. These answers give a voice to the faculty as a social group with a shared responsibility, thus achieving the purpose of this exploratory case study research.

Key Research Question

Leadership in the faculty, the goals of the faculty, and the relationship of the faculty to administration are important elements of faculty and university governance (Bogue and Aper, 2000). At most universities, faculty members have control over the academic curricula. The classes that are required and the content of those classes that a student takes—from what fields to how many—are generally in the hands of the faculty of the academic unit. In undergraduate programs, this can vary from individual courses, to entire programs, including majors, options and minors. The quality, quantity and content of programs and courses of study can greatly influence student outcomes.

The primary research question explored was: what do university faculty know about undergraduate curricular change and development? Related to the primary question, the following questions were also explored: What curricular training, knowledge and experience do faculty obtain? How did they gain their knowledge? What role do they think or know outside influences play in their curricula? What do they identify as barriers to curricular change? What resources do the faculty use for curricular change and development? How do the faculty interact as a group about curricula? What role does leadership play at different

levels? How does the structure of the department or university affect curricula? Are the faculty satisfied with their curricular offerings?

Data Source

This research investigates the role faculty play in undergraduate curricular change and development, and explores their knowledge, training and experience for such responsibilities and how they exercise their curricular authority. Since this research was exploratory, the focus was on gathering richer data through qualitative research, and concentrates on faculty leadership of several units in one large college, Arts and Sciences, at a west coast research-intensive university, the University of Washington. The Arts and Sciences College was chosen because it is it the main source of undergraduate education at the university. The college has over 20,000 undergraduates, over 900 faculty, and in excess of 100 undergraduate major programs, varying from fine arts to basic science, offered in 39 different departments. The research sought to discover what the key informants know about undergraduate major program creation and change; how they gained the knowledge they have; what helps and hinders the process; how faculty group dynamics, culture and norming operate within different units; which outside influences may be at play, if any; and their perception of their own competencies relating to curricula. To accomplish this, a list of departments that made curricular changes was obtained from the university registrar's office, and faculty from the twelve most recent units to revise their curricula were chosen for interviews. Semi structured interviews were conducted of the faculty chairs, directors, and undergraduate program directors of the units, then transcribed and analyzed.

Significance of the Study

The research conducted in this study is quite significant to all of higher education. The bachelor's degree is considered a standard worldwide, and contains a major program of study, which the faculty who teach and research in the area have developed. Many established majors have been around for over a hundred years, some even longer in the United States and Europe with many developing in the mid 19th century (Bogue and Aper, 2000). From the overview of the literature on curricular history, it has been a responsibility of the faculty to develop and deliver these programs.

This research brings the voice of those responsible to the forefront, and asks not only what their formal roles are in the curricula, which is prescribed by their faculty duties, but also informally about what happens from their perspective. It demonstrates where their frustrations lie with the process, as well as what worked well to get their revisions completed. It explores their opinions on influences and university structures, which can be significant to all faculty, as well as university administrators and faculty leaders. It establishes a line of inquiry for how faculty obtain the knowledge to achieve the task of curricula, and demonstrates that this could be an area in which new or junior faculty could use support from experts on curricular design and function.

Foundation Literature

There is little written in the literature that directly addresses the faculty perspective on curricula development, but there are a few foundational pieces of

literature that helped to develop the research. In the concluding chapter in a book about curriculum development, Hughes argues,

> "…faculty must develop a significantly broader skill set and knowledge base than has traditionally been the case. Faculty must become adept at working in teams, facilitating change, project management, and facilitating learning, to name a few of the skills needed. They must also become knowledgeable about curricular assessment and development processes and learning-centered or constructivist pedagogical theory. This point has profound implications for the training and development of the future professorate…" (Hughes, 2007, p. 108-9)

These ideas were integrated into the research, especially when exploring how the faculty involved in the study obtained the skills and knowledge needed to construct curricula. Similarly, Slaughter (2002) argues that many market forces influence curricula, most especially in certain science and technology fields, and Chait (2002) makes similar arguments about the political economy at play in curricula. This led to questioning about influences the faculty saw on their own curricula, both internally and externally.

Diamond (1998) wrote a guide for faculty on curricular development, arguing how important the task was for student outcomes, yet very difficult to accomplish. He points out barriers to curricular change, including university structure and lack of rewards for faculty taking on the task of curricula in addition to their regular duties. These important themes were explored in the research.

Roy, Borin, Justra (2007) explore what makes department level curricular change successful, and identify factors that are key to success. These ideas, like consensus, were explored with the departmental leaders in this research. The authors describe the role of the individual faculty member as either being an

initiator, implementer or cultivator of the new curricula within the department, so faculty were asked about the specific roles they had in their curricular change.

Chapter 2: A Review of the Literature

There is much written about the topic of undergraduate curricula, from its history to calls for change and modernization. The area of undergraduate curricula is broken down into themes as an orienting framework, as well as to provide a place in which the research will contribute new knowledge to the on going dialogue about U.S. undergraduate curricula. Broad literature themes include: the evolution and history of the U.S. undergraduate curriculum; the influence of accreditation; faculty and their curricular role; and undergraduate curriculum structure and influences. Each of these sections highlights the literature in each of these areas. No literature was found that focused on the faculty as the unit of analysis, unlike the proposed research. Even so, each section provides important background information, context and models that relate to the role of faculty in creating and changing undergraduate curricula.

Evolution of the U.S. Undergraduate Curriculum

The evolution of the U.S. curriculum implicates past influences and the present structure. It also has broader importance, as Rudolph contends,

> "…the curriculum has been an important arena in which the dimensions of American culture have been measured, an environment for certifying an elite at one time and for facilitating the mobility of an emerging middle class at another. It has been one of those places where we have told ourselves who we are. It is important territory." (Rudolph, 1977, p. 1)

The foundation of what now is a very large and diverse system of higher education institutions had very meager beginnings, starting with the founding of Harvard College in 1636 in what was then the British Colonies, and evolving to what Kerr (2002) termed to be a 'multiversity.'

Higher education in what is now the United States of America started with Harvard in 1636. Yale was founded in 1701, modeled after Harvard, and Princeton was modeled after Yale. "Harvard, Yale and Princeton were the consequence of good Calvinists doing what they expected of themselves. William and Mary in Virginia and King's College in New York were similar in being the work of concerned Anglicans." (Rudolph, 1977, p. 26) Harvard, and all the colonial colleges, were founded for the purpose of educating clergy, and offered a very strict and rigid program of study, focused on the classics. Admission to the colonial colleges was not a standardized affair nor did it require a certain preparation. "Ability to read Latin and Greek was long the only admissions requirement, until Yale added arithmetic in 1745." (Rudolph, 1977, p. 52)

During the next hundred and fifty years, "…the course of study was transmitted essentially unchanged from early Harvard to the era of the American Revolution." (Rudolph, 1977, p. 53) After the revolution, "Fad and fashion entered the making of the American college curriculum for the first time…" (p. 51). This was seen from the influence of the French, who were popular from their assistance with the revolution. French language began to be seen in the courses of study, even substituting for the traditional Greek in certain cases.

Ben-David (1972) points out that during the colonial era, "…the aim of college education in the United States had been to shape the character of the student according to a rigid model of a pious, righteous, and educated gentleman." (p. 52) This was accomplished through disciplined study of the classics and mathematics, along with strict control of student behavior, and was restricted to white males of certain stature or accomplishment. In this curricular model, the

president of the institution often taught moral philosophy, often considered to be the summit of the undergraduate program. Ben David argues that "The purpose of college studies was not scholarship—that was not generally encouraged—but the acquisition of correct habits of thought and the 'right' concepts and values about moral and religious matters." (p. 52) Even though no professional education occurred at these institutions, "…it was considered an eminently suitable background for the acquisition of professional skills." (p. 52) So, college education would be followed by apprenticeship or further study in the professions.

The degrees offered were stagnant during this time, as Bogue and Aper point out,

> "From the opening of Harvard in the middle seventeenth century until the Civil War, the American college offered only one degree, the bachelor of arts. The Bachelor of Science degree was added by Harvard in the middle of the nineteenth century. During the colonial period, the bachelor's degree represented prescribed studies in the classics—philosophy, religion, language, mathematics—with the aim of preparing learned clergy…" (Bogue and Aper, 2000, p. 63-4)

However, this quiet time was about to end—the nineteenth century was a time of great change in higher education curriculum.

Rudolph pointed out that in 1800, "The colleges were not essential to careers in medicine, law and the ministry, only to those young men who intended to outdistance their peers and be the leaders of those professions." (1977, p. 100) He stated out that the apprenticeship system was where most professionals received and most professions provided training, and higher education was very narrow in scope at the time. This soon changed, starting early in the nineteenth century.

Thomas Jefferson, as governor of Virginia in the early 1800s, made attempts to change the College of William and Mary from the colonial and religious

curriculum to what he envisioned as a modern curriculum with a wider focus, especially including science. He was only slightly successful, with only a few new subjects being added to the program of study. Jefferson was disappointed that his whole scheme of a university was not adopted, but he was later able to enact it in the founding of the University of Virginia (Rudolph, 1990).

Thomas Jefferson was a man with a vision—a vision for a university and an educational system in Virginia, his home state. He writes a letter to Peter Carr in 1814 about his vision (Jefferson, 1814). Jefferson was seeking to establish his university during a period of great educational expansion as described by Thelin (1994) in the early half of the nineteenth century. In fact, "Perhaps as many as seven hundred colleges tried and failed before the Civil War." (Rudolph, 1990, p. 47) I believe this is why Jefferson makes a plan he hopes to "…select from their different institutions the materials which are good for us, and with them, to erect a structure, whose arrangement shall correspond with our own social condition…" (Jefferson, 1814, p. 38) He stresses the importance of science, and proceeds to outline the entire educational system, and who should attend each level of education. The University of Virginia, the result of his vision, was established in 1825.

Jefferson received his higher education at the College of William and Mary, which was a religiously affiliated institution. Jefferson did not seek the same type of system for his University, which is congruent with his other accomplishments. For example, Jefferson signed the Bill for Religious Freedom in 1776, which separated the church and state in Virginia, and was eventually included in the U.S. Constitution (Rudolph, 1990).

When discussing education, Jefferson defines three levels. In the first level of education, Jefferson immediately divides the masses into the "laboring and the learned." (1814, p. 39). He does not say how these groups evolved, or who decides if you are 'laboring' or 'learned', even though they have not learned anything as of yet, which may indicate some classism. Even so, Jefferson did believe that everyone should receive the elementary level of education, but then the 'learned' would proceed though college, which would be divided into Professional and General Schools. He then believed that the wealthy only needed to complete General School, because they "may aspire to share in conducting the affairs of the nation, or to live with usefulness and respect in the private ranks of life" (1814, p. 30-40), while those "destined for learned professions" (1814, p. 39) would go on to Professional School.

Jefferson was not the only one founding a college during this time. Thelin (1994) states that several hundred new colleges were founded by state governments between 1800 and 1850, especially in the south and west U.S., which showed a great interest in higher education, as well as an interest from the states in promoting growth and development. During this era, Thelin (1994) explains that these new colleges were very dependent upon attracting students as well as donors for the purposes of survival, and they often had a lot of church and community support to go along with it. He argues that this environment led to, "…a college president and board continually had to assess its curriculum and other proposed activities in terms of popularity in a market economy…" (1994, p. 26-7). However, at the same time, there was, "a peculiar paradox: American's zeal for college building as a part of civic boosterism surpassed public interest in the substance and

relevance of the college curriculum." (1994, p. 27) This was the start of what was soon to be curricular change.

A move away from the religious curriculum happened gradually and over a long period of time according to Ben-David (1972), without "…any deliberate program or ideology" (1973, p. 53), and no particular event that was causal. Rather, he argues, it was almost imperceptible to those involved in it. It may have started in the late 1820s with the fraternities, which were not religiously based, and he states that there is a significant decline in religiosity in higher education during the 1850s and 1860s, and student chapel attendance was dropping rapidly. Ben-David argues there had to be an alternative to religion to really promote the change that happened, and "Such an alternative emerged, starting from the 1860s, in the rise of interest in a scientific, scholarly, and technological education." (p. 54) Change was not sudden, however, and Harvard did not eliminate mandatory chapel attendance until 1886, and there was never an official separation of higher education from religion, even though non-religious institutions were founded during this era.

Ben-David (1972) discusses the probable interplay of several groups in the move toward secular institutions. The withdrawal of student interest, combined with the rise of science and scholarship-oriented intellectuals and the influence of their German research university education, combined with motivated university presidents to create the environment for change during the 1860s, he argues. Thus, many changes resulted in the undergraduate curriculum, the most significant being the elective system. This system was started by Harvard and Cornell in the late 1860s, which by 1884, Harvard had: "only seven out of sixteen freshman

courses were required: all the courses in the subsequent years were elective." (1972, p. 56) Ben David criticizes this elective system as a way of avoiding decisions and a clear-cut educational philosophy that would replace the old disciplined religious one, and it was quite effective in doing so (1972).

The influence of the elective system was seen by Brubacher and Rudy, "In 1870-71 courses were listed in the Harvard catalogue for the first time according to department rather than class…" (1997, p. 112). They also point out that the new elective system, "…made possible a tremendous expansion and broadening of the American college curriculum…there was a seemingly endless proliferation of courses." (1997, p. 116) They conclude that during this time of great expansion and the start of university research, "…science had become the guiding star of higher education, as it had of modern civilization." (1997, p. 117)

Thelin (1994) identifies the Morrill Act of 1862, which established land grant colleges in the U.S as another influence in shaping higher education. However, he states that this act, although greatly changing federal involvement with universities and firmly establishing the idea of the public university, was not the impetus for curricular change, which was already starting to happen at the traditional schools like Harvard. Thelin argues that this great curricular change to what was viewed as more 'useful' studies, greatly contributed to the rise in popularity of colleges from 1880 to 1920. Thelin states, "The single most important feature of the relation between American society and higher education was that 'going to college' came to be viewed as a way of 'getting ahead.' It was a cultural phenomenon that had little, if any, connection with higher education's government relations and public policies." (1994, p. 29) This was definitely a major change in attitude toward

institutions that were formerly elite and religious in their curricula.

Rudolph describes the influence of Europe on higher education during this era, stating, "In the nineteenth century the great German universities were the centers from which spread a gargantuan appetite for research and scholarship as well as a profound regard for the scientific ethos that defined it." (1977, p. 10) He states that this had a definite influence on Henry P. Tappan, who wrote in 1851 about *University Education*. Tappan is very enamored with the German University system, and wanted to use it as a model for the U.S. system. He, like Jefferson, outlines his vision of the U.S. educational system, but mainly focuses on the University model (Rudolph, 1977). Tappan seems fairly religiously devout, even though non-denominational, and states that the constitution of his ideal University "…should acknowledge Christianity to be the only true religion…" (Tappan, 1858, p. 507).

Tappan uses the German system as an example for the United States. In Germany, "Without the Gymnasium, the University would be of little worth" (Tappan, 1858, p. 488), making the point that the preparation of U.S. students is inadequate, and much remedial education is going on at the college level. He describes that in Germany, "…no one below the second grade is permitted to enter the University. The Gymnasia thus guard the entrance to the Universities." (Tappan, 1858, p. 489). Similarly, in England, where the U.S. system was imported from, he argues that the same problem exists.

Tappan does mention the importance of access to higher education to those prepared and interested, stating that in the current college system, "…readiness to educate for nothing those who will submit to be educated, but who cannot pay. "

(Tappan, 1858, p. 492) This implies that those being educated are not the rich. Perhaps this is because, he argues, "While gaining knowledge, they are losing the opportunities to gain money." (1858, p. 491). In general, Tappan is more interested in making his case for the University to be established, rather than the rest of the educational system.

In both Tappan's and Jefferson's plans, they define four faculties. The one in common is what Jefferson calls the "Language and History, Belles Lettres, Rhetoric and Oratory" (1814, p. 43) and Tappan calls "Letters and Arts" (1858, p. 505). However, the rest are different. Jefferson would like "II. Mathematics pure, Physico-Mathematics, Physics, Anatomy, Medicine and Theory, III. Chemistry, Zoology, Botany, Mineralogy, IV. Philosophy" (1814, p. 43) and Tappan states, "Faculty of Philosophy and Science…Faculty of Law, and a Faculty of Medicine." (1858, p. 505). This can be explained by Jefferson's known interest in science and emphasis on science education; whereas Tappan was more interested in following the German model or was perhaps influenced by the social developments 37 years after Jefferson.

Jefferson mentions something very interesting in his discussion of the Professional School--a technical school for those 'laboring' people that only had an elementary education. He mentions "…these lectures should be given in the evening, so as not to interrupt the labors of the day." (1814, p. 42). He also insists that this portion of education be publicly funded. Tappan, in contrast, believes such education lies outside of the University, and the common schools should be expanded to include "productive professions." (1858, p. 496).

Women’s education is not mentioned much in the literature until the

twentieth century, and even then it is not as commonplace until the last half of the century. Even so, there were some institutions providing access to women during the 1800s, and there were public conversations about women's education as well. For example, Emma Willard (1819) came up with a plan for female higher education, which is separate and different, and justifies it by stating in a speech, "…but if the female character be raised, it must inevitably raise that of the other sex: and thus does the plan proposed, offer, as the object of legislative bounty, to elevate the whole character of the community." (1819, p. 6). At the end of her speech, "Does not every American exult that this country is his own? And who knows how great and good a race of men, may yet arise from the forming hand of mothers, enlightened by the bounty of that beloved country…" (1819, p. 35). Little did she know how much things would change in the following hundred years.

All in all, change was the order of the day during the last half of the 1800s in curriculum, except as Rudolph points out, "…the persistence of the Catholic colleges in resisting curricular change, in standing outside the main curricular movements until well into the twentieth century. The 1905 catalogue at Holy Cross resembled Yale's catalogue for 1828. " (1977, p. 16)

The twentieth century was a time of great changes in higher education, explains Rudolph, "The death of the classical course of study opened the way to a curriculum burdened with such a diversity of purpose, style and institutional form that the word curriculum became a concept of convenience rather than precision." (1977, p. 245) This is because as Ben-David (1972) argues, by 1900, "…all the major universities and better colleges felt compelled to introduce a growing number of new scientific, scholarly, and professional subjects into their curriculum, and

allowed their teachers and students some choice." (1972, p, 57) Some of this is very likely due to the industrial revolution and increased communications that went with it. For example, Bogue and Aper state, "…the major explosion of knowledge is a phenomenon primarily of the twentieth century….the dramatic expansion in knowledge and fields of study…." (2000, p. 64) This expansion, in turn, resulted in a growth in the faculty from one of general educators to one of specialists in specific fields.

Weingartner (1992) states that undergraduate curricular change which led to the development of the major as a component of the curricula has only been around for about a century. The development of the major, he maintains, also corresponds with the organization of the faculty into departments or units and the great expansion of professional education. This would make sense, for in order for a specialized area to be taught to an undergraduate, specialists in these fields would need to be present.

Rudolph (1977) described the current system of higher education by pointing out what Clark Kerr said about it, "…we are no longer a university, we are a multiversity, a complex of competing purposes and expectations, with all of the threats to accustomed procedures and expectations that the coinage of a new concept suggested." (p.271) Even with these new pressures and concepts making the modern university far more complex, there are arguable similarities across the nation. Bogue and Aper describe the modern undergraduate program in the U.S. as follows,

> "Today's undergraduate student completes a 'general education' component designed to develop fundamental intellectual skills, such as communication and critical thinking. This component may also represent other goals: understanding different modes of thought, and

> ways in which we access truth or acquire cultural, historic, and economic sensitivity. The second component is the 'major', in which the student develops in-depth knowledge of a single field of study. Finally, there is an 'elective' component that encourages the student to take a selection of other courses that may complement his or her major or that represent other interests and learning goals of the student." (Bogue and Aper, 2000, p. 64-5).

While this is a somewhat universal model in the U.S., it is not without contention. Shapiro (1997) in his brief overview of the history of U.S. undergraduate education, states that there has always been a disparity between educational ideals from the critics and what actually happened in the institutions, and there was no great era or age in which curriculum was considered ideal. He also argues that some historians recall the post World Ward II era as ideal, but it was definitely not. During this time, the disadvantaged had no opportunities, shared values were not the norm, the curriculum was called too specialized, and there was no uniform set of values, just to name a few problems of the time. He states that many of these problems are still around today, but many have healed. However, the idea of specialization seems to still have curricular impact—faculty may have emphasized discipline-based instruction too heavily, which he believes has hurt breadth in undergraduate programs (Shapiro, 1997).

Other Historical Influences

Economic, societal and political pressures on higher education have been around since the colonial era, but have shifted greatly over the years. Rudolph pointed out that the curriculum had economic influences, even as early as the 1800s, when,

> "…businessmen have an easy of a time of it, even at Harvard, where, partly in response to pressure from Boston merchants and Massachusetts manufacturers, the course of study was redesigned to accommodate orthodox economics, the natural sciences, and the

> useful social sciences. At Union College in 1894 an expanded curriculum in electrical engineering was a gift of the General Electric Company." (1977, p. 20)

Political pressures show up from the international scene, as Brubacher and Rudy (1997) argue. The shock of the launch of Sputnik was felt in the US colleges and universities in the 1950s and 60s, which "…created considerable intellectual anxiety because the United States had been beaten at its own specialties, science and technology. The colleges and universities demanded excellence in order to catch up." (1997, p. 285) However, in the late 1960s, student movements put considerable pressure on the institutions to break the ties with industry and the military, and to accommodate the disadvantaged, especially minority students. They also demanded new methods of evaluation and grading, which eventually resulted in the founding of such non-traditional colleges as U.C. Santa Cruz and Evergreen State, which do not grade students in any traditional manner, rather, summary performance reports are written from faculty for each student in each course. This was not a new phenomenon, however. Rudolph (1977) wrote about the students of Harvard petitioning to get a course in socialism in 1910, and again a coursework in Marxism in the 1970s. Thus, it can be seen that students themselves have been, and continue to be, quite influential to the curriculum over the years.

In the 1960s, the expansion of the junior college system and its 'open admissions' policies created new pressures on higher education curricula, Brubacher and Rudy (1997) point out. With these new students "…came a challenge to assumptions underlying the traditional curriculum." (1997, p. 261) They pushed for more practical courses, and the offerings further proliferated under this pressure.

The students being taught no longer fit the traditional description as Baird states, "…college students are young; they major in liberal arts; they attend school full time; they are supported by their parents; and they are concerned with ideas as well as with success." (1996, p. 517) Instead, these students could come from any social class, be of any age, and have varying influences that drove them to attend college. The curricula would again change, as Harada (1994) describes,

> "The curriculum history of American undergraduate education has largely been a reflection of the shifting perceived needs of society. While the curriculum, like education itself, has functioned as conservator and disseminator of what society has valued, it has continually been prodded to accommodate a fundamental trait of the American character: pragmatism." (1994, p. 1)

The Rise of Accreditation and its Influence

The historian Rudolph (1977) discusses the start of accreditation of higher education in the U.S. as a very contentious and difficult process. The government did not really want to be involved, so, "…the Association of American Universities in 1913 reluctantly took on the responsibility of accrediting American colleges and universities when it found no one else willing to." (Rudolph, 1977, p. 221). Before this, Rudolph pointed out that the Carnegie Foundations' list that defined a college was very influential, and pushed several institutions to change, including: the way in which they admitted students; how many credits were required to graduate; what the required educational achievements of the faculty were; how large of a library the institution had; as well as many other factors (1977).

Boyd (1973), like Rudolph, discusses the development of accreditation, which started in the early twentieth century. He states,

> "The Association of American Universities (AAU) was engaged in accrediting activities form 1910 to 1948. The Association's initial concern involved the conditions under which students might become

> candidates for graduate degrees or might receive advanced credit in one institution for work completed in other institutions." (Boyd, 1973, p. 189)

Like Rudolph, Boyd argues the AAU did not want to do this task; rather, it tried to encourage the U.S. Bureau of Education to do it, which never did happen, but it did start publishing a list of accredited institutions of higher education, which it still does to this day as the U.S. Department of Education. So, after the AAU gave up the task of accreditation in 1948, state and regional agencies took over as the accrediting agencies for higher education. There are five basic purposes of accreditation, as follows,

> "1. Service to the public. 2. Instructional improvement—this purpose encourages and forces self-study. 3. Facilitating transfers. 4. Raising professional standards. 5. Informing prospective employers about the quality of training a graduate has received." (Boyd, 1973, p. 191).

The conclusion is that accreditation does have an affect on curriculum development, but it varies by institution. In some it may cause improvement, while in others, it may stifle innovation. Curriculum development should be a continual process, not one that is done only when accreditation comes around, and that accreditation requirements should be minimal standards at best. Lastly, he claims faculty are concerned with accreditation and its affect on academic freedom, especially because a large number of the members of the accrediting agencies were administrators, not regular faculty (Boyd, 1973). Thus, the influence of administration, considering accreditation, may even be stronger on the faculty than in previous history.

Faculty and their Curricular Role

There are many possible barriers and strong influences on the faculty to performing their roles in curricular development and change. This is important to understand, because as Diamond argues, "Engaging faculty in this crucial work is not an easy task. Curriculum design is challenging, and it usually results in very different resource needs, departmental priorities, and faculty assignments and roles." (2002, p. 136)

Academic freedom, and the professionalization of the faculty, has had significant influence on the curriculum and faculty curricular authority. Academic freedom is central to the discussion of faculty and curricula because with academic freedom came with the responsibility of curricular design. Bogue and Aper (2000) point out that "This design work is the central responsibility of the faculty and the heart of the collegiate enterprise. It is also the locus of major debate and dissent within colleges and universities." (2000, p. 62). They indicate that at the beginnings of higher education, trustees were the main authority over the curricula, followed by college and university presidents in the 1800s. Then, after the formation of the American Association of University Professors (AAUP), "faculty began to assert their responsibilities more strongly, especially in matters related to program and personnel matters." (2000, p. 38). They point out that currently, more than 90 percent of institutions of higher education have a form of faculty governance, where "…decisions of policy and program are debated and resolved in discussions among peers, who have both the academic competence and interest to resolve matters on basic academic freedoms—what is to be taught, by whom, and how." (2000, p. 38-39). Bogue and Aper clarify the structure in place, stating that

"An administrator may approve or disapprove a course or curriculum but the administrator does not deliver a course or curriculum." (2000, p. 39) Thus, because of this structure, the administrator tends to follow the suggestions of the faculty for curricular design, although this may not always be the case. This demonstrates a bit of tension between the faculty and administration, and is likely a strong influence on curricular offerings.

Rudolph (1977) maintains that the practice of academic freedom was brought to court several times in the 1890s, so it was not a new idea when it was institutionalized in 1915. Rudolph states that the concept was good for students as well,

> "The curriculum as experienced by students the professionalization of the professors also brought significant benefits. One of these certainly was the establishment of academic freedom and tenure as characteristic goals and expectations governing the college and university environment. These conditions, so supportive of the right of the professor to move into a world of ideas that might be contrary to the wishes of the governing authorities, were institutionalized in the formation of the Association of American University Professors in 1915…" (1977, p. 157).

He indicates "Although academic freedom achieved only a precarious and incomplete hold on academic practice, it was often a source of curricular vigor." (1977, p. 157) This would indicate that although there was still a structure of power within administration, significant power, especially over the curricular offerings, was shifted into the hands of the faculty.

Hook (1970) defines academic freedom as, "…the freedom of professionally qualified persons to inquire, discover, publish, and teach the truth as they see it in the field of their competence." (1970, p. 34) This concept of academic freedom was not a U.S. invention, but, rather, a European import. At the European

universities, even during the medieval era, many ideas and subjects were discussed that would not have been allowed in the church or other institutions. From this, and during the rise of the German research university, emerged "…the twin traditions of Lehrfreiheit (freedom to teach) and Lernfreiheit (freedom to learn) essential to its mission." (Lucas, 1994, p. 68). Hook (1970) also points out that this freedom is relatively recent in US curricular history, first being introduced at Johns Hopkins from imperial Germany in the late 1800s. However, Hook argues that the U.S. system only adopted the 'freedom to teach' part of the German system, and didn't pay much attention to the 'freedom to learn', which is discussed further in the curriculum section of this review.

O'Brien (1998) discusses academic freedom and tenure. He makes the point that there is a lot of confusion and combining of academic freedom and tenure, when they are actually two distinctly different concepts. He argues, "The institutional expression of academic freedom became entangled…with a rather different concept: academic tenure, that is, a guaranteed contract for employment." (1998, p. 10) Both tenure and academic freedom are very important to the current faculty structure, and they do interact as times since tenure is not always granted to those seeking it, but for the purposes of curricula, it is argued that academic freedom is the most important. Bogue and Aper state,

> "Perhaps the single most powerful and critical foundation principle under girding the American college and university is the commitment to unfettered investigation of questions and problems without restrictions based on political ideology, religious doctrine, or popular opinion—the concept of academic freedom." (Bogue and Aper, 2000, p. 165).

The concept of academic freedom, held by the faculty, is a key concept to the faculty and their curricular roles.

Hughes (2007) discusses the role of faculty in curricular assessment and development, and she argues that this activity is exceedingly important to support, and has implications for academic freedom. Synthesizing other research on how to best support curricular change, she highlights the importance of a long-term vision, a collaborative, faculty-driven process, creating a climate conducive to change, and empowering faculty champions. While others suggest a data driven process, developing a scholarship of curriculum practice, identifying and removing institutional barriers, and developing learning outcomes, she contends that all of this has large implications for the role of the faculty. This includes developing a broader skill set and knowledge base about curricula and assessment of curricula, learning how to work in teams and build consensus, all of which would require new faculty development programs and institutional support. Faculty should also adopt a new, more scholarly approach, to teaching and service activities, and, most importantly, consider the implications on academic freedom, since defining course level outcomes would limit how courses are developed and delivered by the faculty, according to Hughes (2007). Instead, the outcomes, especially at the course level, should just provide a framework in which faculty could operate, thus maintaining academic freedom (Hughes, 2007).

Faculty Organization and Support for Curricular Work

Diamond (1998) wrote a guide for faculty called *Designing and assessing courses and curricula: a practical guide.* This publication was specifically written for faculty with the purpose of helping guide them through the task of courses and curricula, even though this task has existed for almost a century.

In this book, Diamond explains problems with the current faculty

organizational structure, because,

> "Faculty members who take a major role in curriculum development or undertake the revision of an existing course or the design of a new one have often done so at their own risk. These time-consuming projects take faculty members away from those activities that have traditionally been most highly recognized in promotion, tenure and merit pay decisions: research and publication. As a result, non-tenured faculty often avoid such activities. The message on many campuses is clear: if you wish to advance your career, this is not an activity on which you should spend your time." (1998, p. 6)

However, Diamond does note that this may be changing because some consider curricular and course change as scholarly work, which he argues should be the case. This would then reward faculty under the current promotion, merit and tenure structures at U.S. universities.

Faculty development and training programs would be a common place for support and education about curricula at colleges and universities. Svinicki (2002) writes about faculty development programs, stating that it is an important component of an institution to keep faculty productivity and vitality high. She describes traditional programs that focuses on the discipline, providing research and travel support, and shifting in the 1970s to focus more on teaching and instruction, and describes, "Programs that are termed faculty development tend to focus primarily on the faculty member and his or her development." (2002, p. 213) This is presented in contrast to the idea of teaching or instructional development, where Svinicki states, "it is more likely to focus on the course or the curriculum as a unit of analysis and interplay between faculty and students, rather than on the faculty member alone." (2002, p. 213) Svinicki suggests that different programs or combinations of programs are best designed to fit the particular institutions, with large institutions most likely better served by departmental level programs, and

that the best development program is the one that responds to the changing needs of the faculty and institution. The program components Svinicki argues are important, however, do not involve curricula; rather teaching, grant support, and tenure support were the main components highlighted. Svinicki also points out that the development program should have training opportunities and less formal training methods, including resource support, which may include curricular support. Svinicki concludes by stating that faculty development programs can create necessary changes, but the progress, especially in large institutions, will most likely be quite slow. Thus, faculty development programs, especially as currently structured, are not necessarily the answer to problems with faculty and curricula.

Faculty socialization is an important factor to consider when faced with curricular tasks. Tierney and Rhoads (1994) discuss faculty socialization, and point out that much of the training for what life is like as a faculty member happens during graduate school, especially from peers and mentors during this time. However, the graduate school environment and particular institutions may differ greatly from the institution in which the new faculty member gets employed, which can cause great tension for new faculty.

> "The cultures of the discipline and the institution have several possible avenues for framing experiences in such a manner that would be helpful to the tenure-track faculty member. In particular, institutions that offer graduate training need to rethink the nature of graduate education. We are not calling for a dramatic upheaval of graduate training. We are suggesting that more conscious direction and structure be given to graduate education." (1994, p.74)

A few examples are provided, like diversity training, teaching seminars and training, and demonstrating examples of faculty service activity. These training opportunities are key to good preparation for the socialization that the graduate

student will soon go through upon becoming a faculty member, and will most likely lead to a much smoother transition to the new organization.

Tierney and Rhoads (1994) also discuss another important part of faculty training, and that is for leadership. This is the type of training that would be a part of professional advancement for post-tenure faculty.

> "The kind of activities that might be beneficial are training sessions for faculty governance, an overview of the manifold problems that confront academe, and many of the latest changes that are being implemented in colleges and universities. Unless one's area of interest happens to be higher education, faculty do not have much of an understanding of the diversity in higher education and the array of governance arrangements that exist. To the extent that senior faculty can develop a comparative perspective about the nature of their institutions, they will be better able to understand differences and create change." (1994, p.59)

This concept of leadership training is an excellent one, especially given the complexities of leading faculty, who are largely self-governed and have employment contracts in the form of tenure. Leading in this complex managerial structure is uniquely challenging.

Austin (1994) argues that it is important for leaders in higher education to understand the concept of faculty culture and climate as well as what their particular culture and climate is in their unit, and in order to do this, it is important to use regular assessment tools.

> "Faculty are essential to the work of a college or university, and the ways they understand, interpret, and act on events and circumstances have great import for the quality of an institution of higher education. Understanding the concepts of faculty culture and unit climate as perceived by the faculty is important for deans and department chairpersons striving to lead their units, to make good decisions, and to support the work of the faculty." (p. 47)

Thus, the social context of the faculty as a group, and how they interact with their leadership, is essential to understand.

Diamond (2002) gives direction to academic leaders about the administrative issues with faculty, curricula and courses. He recommends appointing a carefully chosen faculty committee to help solve these issues, including a fairly neutral party as the committee chair, assuming understanding of the current faculty history, social structure and culture. The academic leader should "…not assume that your chair knows much about curriculum design, assessment, research on teaching and learning, or associated issues that must be addressed." (2002, p. 140). He suggests finding out the level of knowledge, then educating the committee chair, which can in turn educate the curriculum design committee. Diamond points out that in order to embrace a new curricular design or plan, "Faculty ownership in the process is an essential element for success." (2002, p. 53) This ties in well with other authors who make a similar point in the context of academic freedom, especially since faculty are the ones delivering the curricula in the classroom.

Finkelstein (1984) discusses the academic profession in depth through a social science perspective, describing the many organizational and attitudinal factors come in to play with curricular change and faculty work. Faculty who are more open minded, flexible and oriented toward students and teaching were more receptive to curricular change in Finkelstein's opinion. However, even when these factors are present, faculty are sensitive to specific curricular innovations, and are not generally accepting of all change, indicating that faculty evaluate change on multiple dimensions, especially those that benefit their own personal interests. The organization had some influence, nonetheless, when there was significant financial pressure, but, all in all, "…faculty participation in innovation is a function of an internal standard—how such participation squares with personal and professional

needs…" (1984, p. 131) These are important factors for academic leaders to be aware of, especially when the goal is curricular change. In a similar way, Finkelstein shows how academic politics come to play in the life of faculty, most especially during committee service. "…Political ideologies and processes are more likely to determine their behavior than either rational argument or academic values…" (1984, p. 136) Thus, the task of curricular change becomes a socially and politically complicated one for the faculty and academic leadership.

In Howard and Franklin (1969), Howard argues that the problems of running universities are not surprising with the diversity of faculty, and a president should really be the one that runs the show. "A good university faculty is about the most inherently fragmented body ever devised by man…To a significant degree, each man is in opposition to all the rest." (1969, p. 22) The power needs to be centered in the president. In contrast, Franklin, a Marxist, argues that the universities should be run by the working class, which will also include the faculty over time, because he was seeing a change in the class background of the faculty during the twentieth century. Neither of these suggestions has been implemented forty years later, but it can be argued that the organizational issues are still the same.

The organization of the faculty and how they relate to leadership and management is a key element in support for curricular work. As Winston (1996) states, "It is hard to manage a place if you don't know what's going on." (1996, p. 493) which was in response to how the faculty are often quite independent of their leadership. Similarly, Massy states, "The heterogeneity of goals within higher education institutions represents another source of concern: groups within the institution may work toward different and sometimes conflicting goals." (1996, p.

61). One of these conflicting goals can be seen in management of institutional data, which can help guide change, and the politics involved. Friedman and Hoffman (2001) point out, "Too often in moments of crisis, faculty and administrators are locked in a battle over what is "true". Consensus is impossible when essential facts are in contention." (2001, p. 52). This shows that there are tensions in the relationship of higher education administration and faculty, and as Lueddeke (1999) states, "Too often new approaches are introduced by executive fiat or through a centralist management strategy, or at worst through ad hoc and hurried planning interventions in response to years of benign neglect." (1999, p. 236) These authors demonstrate that there are issues in the current faculty organizational and leadership structure that can affect curricula.

Another important element in curricular development is the role of faculty leadership, which is often formal through a dean or chair. In Montez, Wolverton and Gmelch's (2002) study of deans, they examined the roles of deans through survey research of over one thousand deans. They found that "Ill defined responsibilities, mixed messages about how much authority deans actually have, unclear or unstated expectations and goals, and a lack of clarity about what is to be done and how much time should be spent doing it leave deans in a kind of leadership limbo." (2002, p. 250) This shows that the structure and function of the leadership itself is a difficulty in the organizational structure, especially in how it relates to curricula.

Another factor that can greatly influence faculty organization is that of academic capitalism. Slaughter and Leslie (1997) describe and define the idea of academic capitalism in institutions of higher education. They define it as, "…institutional and professorial market or market-like efforts to secure external

moneys…" (1997, p. 8) This can have impact on the curriculum and the faculty first through the structure of universities, in which "…academic capitalism presses for decentralization of power to the operating units." (1997, p. 238) The administration willingly relents to this demand, largely because of the influx of resources the structure can then generate. However, this also results in greater inputs from the administration to generate more funds, thus creating a disparity with other, less profitable, units. These poorer units are important, but not valued, even though they "…recruit large numbers of students, and teach service courses for the technoscience and business services fields." (p. 238). Thus, the pursuit of profit has a profound influence on the faculty organization and support.

Tierney (2003) argues that in his large-scale study of governance and faculty work, "Academic issues such as a concern for the curriculum, general education, or rethinking promotion and tenure policies to enable more civil engagement were generally absent." (2003, p. 5) This could be partially due to the lack of social capital in academic communities, where trust, networks and norms facilitate cooperation and collaboration, and "…refers to the willingness of faculty members to participate in the academic life of the institution and their community." (2003, p. 5) This social capital is what facilitates change in the organization, and if it is so lacking, then change will be very slow to happen. The lack of social capital is likely related to the merit and tenure process, in which this sort of engagement is not routinely rewarded, and thus, not fostered within the institution overall. This would be an area for organizational leaders to pay important attention when trying to get support for changing curricula.

The tenure and merit process is discussed as problematic in the literature.

Huber (2002) explains that even though new models of scholarship may be discussed and encouraged among new faculty, it can be a big problem when it actually comes time for tenure, which is extremely stressful and can be one of the more contentious battles in the faculty. She states that tenure decisions "…seal the fate of individuals while also sending powerful messages about exactly—in a particular environment—scholarship can mean." (Huber, 2002, p. 81) Thus, new faculty will tend to stay away from curricular reform, and spend their time on known reward systems, like research.

Instead of the contentious merit and tenure process, Dooris (2002) suggests a model that uses institutional research data to monitor and evaluate faculty performance. These data have not traditionally been used this way in many institutions, rather for departmental or administrative decision-making. However, Dooris maintains that, "Culture and norms have great power in colleges and universities, perhaps more than in most nonacademic organizations" (2002, p. 94) making change a difficult thing. However, using this type of centralized, objective data would be helpful to faculty that are fearful of the tenure process, and may actually free them up for contribution to curricular change.

The size and complexity of many modern universities can be a problem for faculty and curricula. O'Brien (1998) argues that the issue of who really runs the university is not well defined, and blames much of the current institutional problems on this lack of clarity. "…The rise of the disciplines…presents a problem—largely unsolved—when trying to establish a cohesive sense of the very 'institution' in which these disciplines find lodging." (1998, p. 30) In the historical colonial colleges, ideology and a lack of breadth actually held the faculty and the institution

together. Chancellor Robert Hutchins of the University of Chicago is quoted stating, "The University is a collection of departments tied together by a common steam plant." (1998, p. 30) Thus, the sheer size and diversity of the organizational structure can become a hindrance to curricular development.

The Changing Professorate

Bogue and Aper (2000) argue that the professorate has changed greatly in the U.S. since the colonial era, when faculty were bound not just by subject matter, but also religious beliefs.

> "The primary role of the professor in early American colleges was as teacher authority, parental substitute, and spiritual exemplar. A large portion of the faculty in antebellum American colleges was composed of clergymen, consistent with the conception of liberal education as a means of cultivating religious piety and moral rectitude." (Bogue and Aper, 2000, p. 157-8).

This was definitely a more defined role for faculty, especially compared to the modern pressures found at most large research universities, where there are expectations for research, teaching and public service. In the current structure "…the extent to which these roles are well balanced remains a contested issue…" (Bogue and Aper, 2000, p. 159). Thus, the professorate has changed greatly in its own structure along with the curriculum.

In their chapter on defining faculty work, Braskamp and Ory (1994) describe how much the professorate has changed since its inception in the US. The faculty at first followed a clergy model with a very defined curricula, however, as the industrial revolution began, it changed the nature of the institutions, and thus, the nature of faculty work to "…a professional role in which service and applied research joined teaching as a part of their work." (1994, p. 33) Then, after the Second World War, the social and economic pressures caused the faculty to yield to "…becoming

more involved in research productivity" (1994, p. 33), which is now the main way in which faculty work is assessed. The primary focus of the faculty has taken a major shift away from curricula and teaching to the rewards of research, which is most especially evident at research-intensive universities.

Similarly, Ben-David (1972) in his discussion of the history of the U.S. higher education curriculum describes a shift in the make up of faculty resulting from the shift in curriculum during the 1860s. The new elective system demanded for subject specialists, which were "grouped into departments representing recognized areas of science, scholarship, and professional competence." (1972, p. 58) The number of faculty greatly expanded, from a role as an educator that taught a myriad of courses, which was the main duty, to specialists that now conducted research, which, in turn, took time away from teaching, as well as narrowed their ability to teach a variety of subjects. Institutions found a need to greatly expand the number of faculty, which, fortunately, went hand-in-hand with increased attendance in higher education, as well an increased revenues from research.

The shift in the professorate from a generalist to a specialist came with differences in credentials over time. The credentials required to become a faculty member were not always a doctoral degree or academic research. Bogue and Aper point out that in the antebellum period, "…relatively few college professors held degrees beyond the baccalaureate." (2000, p. 158) They also discuss graduate education, which was not even well defined or even available until the last part of the 1800s, largely due to the movement towards research and scholarship.

Sykes (1988) accuses the professorate of being the root of many of the problems in higher education, including the curriculum. "They have distorted

university curriculums to accommodate their own narrow and selfish interests rather than the interests of their students." (1988, p. 5) He attacks the curriculum in higher education, stating that it is bloated with junk courses, a lack of standards, and poor quality teaching. The curriculum keeps students, "…reasonably pacified, while demanding as little as possible from either students or professors." (1988, p. 79) However, no reasonable solutions to the problem are proposed, just a complete restructuring with a focus on "…the intellectual tradition of Western civilization..." (1988, p. 260), which would ignore today's diverse student population.

Criticisms like his may be in part due to what Dressel (1971) claims to be the problem with faculty and curricula.

> "Faculty members usually recognize that the college exists to educate students. Driven by the administration to restudy curriculum, they feel obligated to state (or restate) objectives. Bewildered, disturbed, and exhausted by the time and energy expended in reaching an agreement, the faculty finally issues a statement of pious hopes and exhortations rather than a program of curriculum review." (1971, p. 21)

In this case, the faculty feel pressure to create or modify something in which they have little experience or training. Dressel acknowledges, "…faculty members think primarily in terms of their own courses…" (1971, p. 21), and thus, have a hard time constructing an entire undergraduate program, especially since some of the coursework lies outside their specialty.

Another criticism has to do with the work of the faculty. Shapiro (1997) argues that research has hurt the undergraduate curriculum, mainly because it has taken time and attention away from improving the curriculum, thus allowing it to lag behind society's needs. In the same way, Rudolph (1977) discussed the difficulties with curricular changes and reform, and how student needs are often not

considered, and contends that "…the institution is really not for the students, after all, but for the professors." (1977, p. 3) The criticism is again that the focus of faculty work is not on the students or teaching, rather, their research.

Another criticism is that academic specialization leads to problems with seeing the larger picture of the curriculum. For example, Diamond (1998) cautions faculty to not forget that their course is a part of an entire curriculum at the institution, stating, "…we tend to lose sight of the fact that each course is but one element in a learning sequence defined as curriculum." (1998, p. 49) Similarly, Rudolph argues that "The faculty stranglehold on the curriculum was a function of intellectual specialization and academic professionalization: with the Ph.D. went a kind of competence and authority and power that an earlier academic community did not have." (1977, p. 18) However, there is no literature about development, training or professional assistance with curricular design for the narrowly trained faculty.

Undergraduate Curriculum Structure and Influences

Curriculum is a topic of substantial literature in higher education, yet no clear directions or answers emerge. Curricular criticism and calls for change are not new:

> "While the purposes of the colonial colleges were not narrow, the charge was sometimes made against them that their curriculum was stultifying, unimaginative, inadequate to the times—a veritable baggage of subjects, methods, and attitudes almost certain to keep the student and his world at a standstill. No curriculum, whatever its merits, has been spared comparable complaints." (Rudolph, 1990, p. 23)

The focus of the literature can be categorized as: general education and the major; future directions and guides for curricular change; and modern curricular influences

and models.

General Education and the Major

An undergraduate program generally consists of a major area of study and general education or distribution requirements. General education, as a component of the undergraduate program, is an area in which Miller (1990) predicts that there will be more change in the future. As general education is a difficult thing to define, since each institution of higher education approaches it uniquely, but it is consistently about one third of the undergraduate program, and can contain a core set of courses or sets of restricted electives. It generally contains learning skills like composition, a distribution or breadth requirement, and integrative learning, like civilization, great books, or U.S. history. This type of structure for the undergraduate program has been around most of the twentieth century, but it seems to have some large weaknesses. First, Miller notes several are like a cafeteria with no direction about which choices are best for the student. Secondly, "Many general education programs are the result of excessive political compromises, often at the expense of program soundness and conceptual design." (1990, p. 126). Third, those who teach these courses often consider them to be not as academically challenging; and fourth, there is often no one on campus 'in charge' of general education. General education can also be a place to put faculty that show a lack of performance, and can give some departments a big advantage if they have these courses to generate numbers, and the college or university uses this for their cost-effectiveness system. Lastly, Miller maintains that since general education is considered to be a good tradition, and is often rationalized by exposing students to a breadth of disciplines, the courses and program are often not

evaluated regularly.

Similarly, O'Brien (1998) argues that the idea of distribution or general education of the undergraduate is not necessarily good for the institution or the student. These requirements are superficial and too broad, as well as not often appreciated, "Why not abandon the notion and vote for the departmental major straight off?" (1998, p. 79) O'Brien acknowledges that freshmen sometimes use these requirements to find more obscure fields of study that they may not have considered, but the current structure is just a gesture at getting at diversity and a well-rounded education. Miller does not propose possible answers were to this problem; rather, he just argues that it is a major problem with modern undergraduate education.

On the other hand, Weingartner's (1992) discussion of undergraduate education focuses on the major or concentration in undergraduate programs. "The term 'major' or 'concentration' refers to an institutional practice, not to an educational goal." (1992, p. 68) The major dominates undergraduate education in many ways, from students spending a great deal of their time taking courses in the major to ideological domination of the student's learning. It is important to examine the major not just as its own thing, but as an integral part of an undergraduate program, and where it fits and links with other requirements of the student's learning. This specialization is often designed to train undergraduates for highly specialized graduate training, but relatively few undergraduates continue on for such training, so the major should be responsive to this fact. Weingartner argues that the major specialization should not dominate, rather,

> "…if one puts the demands of the major into the broader perspective that includes, on one hand, all the proper goals of undergraduate

> education and sees undergraduate education, on the other, from the perspective of an entire lifespan, one is inevitably led to limit specialization during four years or so of college study." (1992, p. 81)

Weingartner's argument is in contrast to O'Brien and Miller, who would rather see expansion of the major, whereas Weingartner would like to see it shrink in relative importance to general education.

Future Directions and Guides for Curricular Change

Diamond's book, *Designing and assessing courses and curricula: a practical guide* (1998) is focused and designed for faculty to use for the important task of curricular and course change. Diamond states that, "...a quality education requires a level of orchestration seldom found at colleges and universities and also the active involvement of a faculty that that is paying a great deal of attention to structure, content, and process. It requires hard work." (1998, p. 49) Starting curricular design by taking a look at the basics, or what you would want all students to know in both the 'survival competencies' and the discipline specific areas. His research suggests that a curriculum committee will find "…far more agreement about basic competencies than one might first expect." (1998, p. 51) He states that as the design process progresses, it is important to keep in mind the population of students that will be enrolling in the program, because it will help determine whether the goals of the curriculum can be reached.

Diamond outlines research findings on curriculum design, and outlines four main points: most curricula are unfocussed, not defining outcomes or giving the intended results; certain conditions will foster college competency, including challenging courses, defined objectives communicated to the student, and high expectations; too many options can be counterproductive, the most effective

programs tend to have a structured core; and effective curricula provide opportunities to apply and practice what is learned. (1998, p. 85) The last main point that Diamond makes about curriculum is about important factors to consider when developing a proposal for curricular change. These factors are: accreditation requirements; credit restrictions; fiscal and staff constraints; effectiveness of existing courses and programs. Faculty should turn to the administration for assistance in these areas, and involve them early in the process, so that an entire proposal is not developed that turns out to be unfeasible. Diamond concludes his chapter on curricula and course design by giving some resources that would be useful for faculty, but most of these are course related, with the only one useful for curricula being the system design model, which assesses the entire system of courses as a curricular unit. Unfortunately, further reading and research is recommended by Diamond, and no additional specifics about the model are presented, this guide for faculty proved lacking, for it tended to focus more on courses and only give this brief framework for curricular design (1998).

In his later work, Diamond (2002) outlines the features of a strong curriculum proposal. The first feature, in his opinion, is outcome or goal statements for all levels of the curriculum. There should be three levels of learning goals in undergraduate programs: the broad general education; program or major; and course-level goals. Secondly, it should have curricular competencies for all students upon graduation. Third, the proposal should ensure that goals would be reached; no matter what path a student takes through the program. Next, it should address prerequisites and advanced students, as well as new technology and internships. It should also include an assessment program that is ongoing and built

into the program. Lastly, it should include a clear rationale for the suggested changes, including specifics on courses. Diamond argues that curricular proposal is just the first step, and implementation is complicated and will require time and budgetary resources.

Diamond continues his discussion by pointing out that higher education curricula are extremely important because, "…curricular strength and suitability most directly influence the outcomes of higher education." (2002, p. 135). He maintains that "…there is one element in our academic program that tends to be overlooked, it is the design and assessment of this road map for learning: the curriculum and its constituent courses." (2002, p. 135) Lastly, Diamond demonstrates that many authors agree about "…the primary structure of educational experience at many if not most institutions requires review, repair, and a major restructuring." (2002, p. 136) Accreditation pressures and increased competition between institutions may be creating some of the pressure to change, but students, economics and politics are also major change factors.

Likewise, in his discussion of the future of universities and their curricula, Shapiro (1997) reasons undergraduate curricula need improving overall to keep up with societal demands, and faculty need to expend more effort on the curricula to accomplish this goal. He states that universities, "…will certainly have to conduct a searching reexamination of their programs in the light of contemporary realities, but their unique potential for learning…and their continuing ability to challenge the familiar will make them indispensable assets for the future as it unfolds." (1997, p. 99) Shapiro is another voice for change in the undergraduate curriculum, but still a supporter of the institution of the university.

Emans (1990) in his discussion of challenges in undergraduate education describes many efforts to rethink curricula. In his research he found that there were five types of curricula used at U.S. colleges and universities, which can be used in combination. The models he found and presented are as follows: required core, where students take certain specified courses; distributive requirements, where student select courses within disciplinary constraints; great books, where students are required to study certain books considered significant; integrative approach, where students follow an identified theme; and competency expectations, where certain skills and modes of thinking are identified and stressed. There are many challenges to each of these models, and many of the challenges have been around since the turn of the century, and there are no easy answers to what curricula may be best. "The challenge of attempting to balance students' needs for learning to earn a living and learning to live will always be present." (1990, p. 10)

Unlike Emans, Dressel's (1971) earlier work actually outlines three approaches to curriculum development, the first being a structure for curriculum analysis, the second based on educational philosophy, and the third uses defined objectives, educational experiences and evaluation methods. He outlines these methods because he argues that many discussions of curriculum are "…too often preoccupied with means rather than ends, with details rather than structure, and with courses rather than learning." (1971, p. 21) In the first approach, he suggests examining the curriculum along four continuums: individual student versus disciplines; problems, policies and actions versus abstractions, ideas and theories; flexibility and autonomy versus rigidity and conformity; and integration versus

compartmentalization. Each of these continuums, and where the curricula should lie on it, should be examined methodically, and then a plan developed for implementation and needed resources. The second approach uses educational philosophy, and examines each of the three main views: traditionalist, eclectic and relativist. The names of each of these philosophies is irrelevant, rather, the curricular choices will imply the philosophy. This method may magnify faculty ideological differences and may not work well for some units. The final approach focuses on objectives, which is described with a diagram. This approach has four steps: first, definition of objectives; second, selection of objectives; third, organization of experiences; and fourth, evaluation of the curriculum. This approach is, "lost in a profusion of objectives as in a proliferation of disciplines and courses." (1971, p. 42) In the end, Dressel favors the first approach, a structure for curriculum analysis, and says that is the model that he believes to be the most effective for curricular development.

Bergquist, Gould and Greenberg (1981) give approaches to designing undergraduate curricula, proposing:

> "…a generative system for the categorization of collegiate curriculums. This system more clearly identifies and isolates six generic dimensions of all curriculums…By rearranging these six curricular dimensions, or variables, it is possible to free up the curriculum design process and to be more creative and more explicit in curriculum development." (1981, p. 5)

These six curricular dimensions are: time, which is the duration and schedule of instruction; space, defined as the use of instructional and non-instructional areas; resources, which is the use of people, situations and materials; organization, which is the arrangement and sequencing of courses and administration; procedures, defined as the planning, implementing, evaluating and crediting courses; and

outcomes, which is the desired result of the program. The authors state that these six dimensions are in a hierarchy of sorts, going from easiest to change to the most difficult to change and define. Each dimension is investigated systematically, identifying subcategories and tables to help guide the curriculum committee through each of these steps. They suggest assigning each dimension to one or more members of the committee, who will study it and come up with a range of possible options. For assistance with this task, a list of suggested options for each dimension is given; either examining each dimension one at a time in the committee is suggested, or looking at all the dimensions at once, which would require constructing a matrix (they also provide an example of this). Examining all the options will "…stir up new curricular images and expand the vision of the group members about viable options." (1981, p. 300) Alternatively, selecting random numbers on the matrix to see what sort of combinations of dimensions can be created, and "…ideally, six to eight hours should be set aside for this exercise." (1981, p. 300) Lastly, the committee or group should ask if these are important questions to determine if they are viable, which ones need to be eliminated, what new ideas have been generated that should be kept in mind, and lastly, what ways can the structure or nature of the academic program be modified to accommodate the new ideas. Then, the authors state, they "…can proceed with new vision to the last of preparing the design for a new or revised academic program." (1981, p. 301) This approach seems interesting and creative, but largely unrealistic given the time demands placed on most faculty in higher education, since it is extremely complex and time consuming.

A different approach that uses institutional research to achieve good

curricular reform is the focus of Gentemann, Fletcher and Potter's (1994) work. The authors call for changing the process of academic program review to focus on student learning and to use institutional research and regular assessment tools to achieve this task. This is important because "…higher education has failed to recognize and respond to changes sweeping through American society." (1994, p. 31) The process for changing curricula under this model should be as follows:

> "The program faculty must review the accumulated data, determine what in the curriculum should be changed (if anything), and design a plan of action for the improvement. Plans should be made to collect new data to determine the extent to which any program changes affect student learning." (1994, p. 42)

Under this model, "The locus of the curriculum becomes the students' performances, not simply the disciplinary structure." (1994, p. 42) Using this model, the responsiveness of the curriculum to demographic shifts in students would greatly increase.

Roy, Borin and Kustra (2007) describe a model of curricular change that focuses on the department or disciplinary level, arguing that "…change is more likely to be significant and lasting if it grows out of a departmental consensus." (2007, p. 22). They contrast this to the top-down university wide changes or course level changes, both of which were not as well received or permanent as the departmental model, in which they gave grants to help departments create change. Twelve main factors are identified that encourage successful departmental curricular change: development of a long term vision; change Is not just an individual's work; respected colleagues playing key roles; a history of consensus; a focus on how students learn; several departments collaborating simultaneously; remaining grounded in scholarship of teaching and learning; a history of a scholarly

approach to teaching; an external review process of curricular plans; assistance of a consultant; stability of the personnel; and differing needs for support by discipline and unit. The role of the individual faculty member is described as either being an initiator, implementer or cultivator of the new curricula within the department. Departmental grants are used to encourage this change, and that this is the best model for lasting undergraduate curricular change.

A similar model by Devine, Daly, Lero and MacMartin (2007) describes faculty members in their departmental curricular change experience, which is a unique perspective. They contend that that change was facilitated by building consensus, developing a vision, getting a consultant to help with the design process, and grounding the new program in teaching and learning objectives. The authors describe what they learned in the process, from dealing with competing pressures, cultivating a climate for change, and finding ways to mobilize leaders, which resulted in successfully launching their program. Zundel and Mengel (2007) describe a major curricular change process, and argue that effective change requires defined assessment and learning outcomes, support for change from all members of the community, a scholarship of teaching and learning, and support of the implementing faculty. This process takes a significant amount of faculty workload, and the support of the university administration for this work made it possible. Pittendrigh (2007) in her description of the reinvention of a core undergraduate curriculum mentions the importance of administrative support, as well as funding, to give resources and time needed for curricular development. While the process was slow, it required community support for successful implementation. Similarly, McNertney and Ferrandino's (2010) description of core

curricular revision maintained that university community support and cooperation was key to success.

In Litzinger, Koubek and Wormley's (2009) description of undergraduate curricular reforms at a large public university, the authors give an administrative perspective, and discuss changes at department, college and university levels. They acknowledge barriers to change, including "a lack of acknowledgment and reward for faculty who undertake curricular reform and the fact that major curricular reform requires substantial effort and time." (2009, p.45). College level reform requires strong committed leadership, buy-in and widespread involvement of the faculty, and necessary resources, and the resulting curricula would require an assessment and evaluation process in place. Likewise, departmental level change required similar elements, and engaging experts, supporting a core group of faculty, being flexible in planning and aligning the department with the college were key elements for success. On the faculty level, course-level changes are described as well as the importance of identifying and meeting faculty needs to implement changes. The most important elements to successful curricular reform is a supportive climate, strong leadership, inclusiveness, recognizing competing faculty demands, providing necessary resources and support, and assessing the impact of the reform or change (2009).

Moving away from the guides on curricular change, Miller (1990) describes a significant shift in US curricula during the 1980s toward more international affairs and interdisciplinary programs, especially in the non-research universities. At seventy five percent of four-year institutions, these courses were required as a part of the general education curriculum.

> "The focal point of the 'new wave' of curricular reform that is currently taking place in higher education is the emphasis being placed on interdisciplinary connections and skills for a changing world. Specifically, aspects of the curriculum that have received the greatest emphases are interdisciplinary linkages, advanced learning skills, the clarification of personal values, and the broadening of student perspectives through the study of women, minorities, the disadvantaged and international viewpoints." (1990, p. 76).

This is a result of the change in student and faculty demographics along with renewed emphasis on world issues, which, in turn affected undergraduate curriculum. This is similar to what Gentemann, et al, (1994) stated should happen, and it does seem to be happening even without perhaps an overt plan for curricula.

Few of the writings on undergraduate curriculum gave prescriptions or exact remedies to the problem of curricular change, even though many thought the current curricula was problematic. Milne (1990) discusses undergraduate education from the lens of philosophy, with only a small discussion of curriculum, but it seems quite relevant. "Curricular offerings at the undergraduate level must be a blend of knowledges gleaned from the pluralistic roots of American culture and the skill development needed in the realistic international and intercultural world of the present…" (p. 26)

Lastly, Franklin, a Marxist, argues in Howard and Franklin (1969) that the university should move away from the competitive, capitalistic bourgeoisie 'multiversity' (a term developed by Clark Kerr) to a new working class university that is run for and by the working people, with curriculum reflecting this change. This change has not happened, but the diversity of economic backgrounds of the faculty and those that run the university has changed, as Franklin suggested it would, largely because it is no longer required to be upper or middle class to achieve in higher education. This is arguably due to the extensive federal financial

aid systems that have been in place during the last fifty years.

Modern Curricular Influences and Models

Bogue and Aper (2000) point out that there are many external challenges to curricular development and change, many of which are quite historical, like the traditional political, social and economic influences of government funding, accreditation and business, to some that are more modern, like "increasing international independence and the need to understand and appreciate cultures beyond our own" (2000, p. 73) and new economic forces of "international economic competition and the uneven distribution of scarce economic resources in the world" (2000, p. 73). The authors point out that gender, race, and the general composition of the population applies pressure to the curriculum, as does space races, environmental concerns, and new technologies. However, these pressures allow for new curricular opportunities, such as distance and Internet courses, as well as the ideas of service and experiential learning, which combines theory with practice. These new opportunities are challenging to curricular development, because as they point out, "…faculty responsibilities for selecting and organizing learning experiences may call on extensive philosophic and theoretical literature." (2000, p. 75) The myriads of pressures on curricula have a direct effect on those assigned the task of developing and changing it.

It is clear that students have had a big affect on the curriculum, to which Hook (1970) argues they should. As Hook stated in the earlier section on history, the U.S. only adopted the 'freedom to teach' part of the German academic freedom idea, and has largely ignored the 'freedom to learn' portion. Students should make demands of the institution, including having input on the structure of the

curriculum, grading systems, tuition, and basically all parts of the institution that affect a student. Hook is careful to clarify that this is consultation and input only, not meant to undermine faculty decision-making. This is essential because it is part of the professional duty of faculty, and because they have a "...life-long commitment. Students come and go every four years." (1970, p. 65) Hook also makes another point that students should have "…the right to the individualization of the curriculum as far as possible within the resources available—and where not available, the right to request the reordering of educational priorities to make it feasible." (1970, p. 69) Ideally a tailor made curriculum would exist, but understands that this is unrealistic. This argument was definitely a product of the times of student unrest and unhappiness with the curriculum, and it did result of the opening of many committees to student representation, which is still in place today in many institutions.

In a more modern point of view, McMillan (1994) contends that it is important for leaders in higher education to understand the changing demographics of students, as more women, people of color and economically diverse students enter the higher education system. She maintains that understanding the demographics is not enough, because changing student needs comes hand in hand with understanding the needs of different types of students, and this will be essential to assess regularly. She concludes, "Information on who is being served, who should be served, and who are the potential students become critical components of departmental assessment and planning." (1994, p. 29) Who the students are does have a great affect on curricular needs, and faculty and curricular innovators should respond accordingly.

Even though Altbach (1994) mostly discusses problems with the academic profession, he brings up the influence that students have had on curricula in higher education. "American higher education has traditionally responded to changing student curricular interests by expanding fields and departments—or by cutting offerings in unpopular areas. Student 'consumerism' is a central part of the ethos of American higher education." (1994, p. 241) Students do have a profound and lasting influence on undergraduate curricula.

Slaughter (2002) extensively discusses the modern influences on the curricula, and begins her chapter by pointing out that "very little has been written about curricular formation and change." (2002, p. 260). Slaughter argues that the dominant narratives of curricular formation are incomplete, and poses an alternative model that concentrates on the influences of professional organizations, social movements and external resource providers, and provides revised models of curricular formation and change.

Slaughter (2002) outlines the dominant narratives of curricular change in three sections: histories of the disciplines, institutional accounts, and market forces. The histories of the disciplines point to great researchers and the pursuit of knowledge as the source of the curricula. The institutional accounts, on the other hand, see the curricula as being influenced by demographic change and requirements for new cognitive skills. Lastly, the dominant narrative of market forces as a curricular force suggests that students are influencing the curricula by making choices about which programs and institutions they attend. Slaughter poses that all these narratives are incomplete; they ignore the faculty interests in "prestige, position and resources" (2002, p. 263), they do not explain the

mechanism for change, and "overlook the social structures of power and status that shape market influences." (2002, p. 267).

In response to these dominant narratives, Slaughter outlines alternative approaches to understand curricula. In the first section focusing on professional organizations, she argues that the rise of these organizations during the Progressive era (from the 1890s to the 1920s) helped to support the professional class and give rise to the ideology of professionalism, giving the individual expert the control over the curricula. She maintains that this "obscures the extent to which professional judgments take place in a context shaped by many forces other than the idea-driven progress of knowledge." (Slaughter, 2002, p. 268).

In her next narrative on alternative approaches, Slaughter concentrates on the influence of social movements during the 20th century. These movements have historically changed curricula, such as science entering the American university during the Progressive movement. She demonstrates that the common idea of science entering the university because of its explanatory power is not the reason; rather, the power of the outside social movements led to its inclusion. The same arguments are made for Black Studies and Women's Studies programs, which did not get incorporated into universities until significant social unrest. In more modern context, the neoconservative movement also has had some impact, but mostly in the areas of professional studies.

Slaughter's next alternative approach to curricular formation focuses on external resource providers. All the disciplines are dependent on organizations and groups to provide support for them, and "these organizations and groups can and do influence curricula." (2002, p. 272). These providers guide research, through

both corporate and government activity, and that there is a relationship between academic fields and the political economy. "Direct ties between curricula and external organizations raise the possibility of academic knowledge as the servant of power, ministering to special interests at odds with the public good." (2002, p. 273). This view questions the view that science and scholarship is independent of such influences.

Slaughter creates a new model of curricular change, in which she outlines a macro view of the process, complete with both competing and cooperating interests, varying levels of curricular formation, and an overall expanded social construction approach (2002, p. 273-4). As examples, detailed figures and explanations of curricular formation processes are presented in the fields of physics and women's studies. In the physics figure, professional, government, defense contractors, foundations, accrediting and testing associations, bridge groups, and social movements exert influence upon the university, the department, the professors, the students, and the learned discipline (2002, p. 276-7), which is far more detailed than the women's studies program, where the influences come from professional organizations, government and foundations. This is part of why fields like physics are more powerful, because, "institutional commitment to fields and departments with close links to those organizations in the larger society with status, power, prestige and resources." (p. 282).

Slaughter concludes by stating that her approach looks beyond the immediate actors to the broader context of curricular formation. New programs, to be successful, must provide "prestige and resources for faculty and well-paid professional careers for students." (2002, p. 283). She asserts that physics, even

with declining student enrollment, is still vital due to the powerful outside organizations that support it.

Chait (2002) discusses the influence faculty power and political economy on the curricula. Faculty power, he argues, increased with the idea of the 'academic revolution', which was coined in 1968, and he argues was "The most fundamental shift was the ascendancy of the faculty to a position of unprecedented power, especially at research universities, now the dominant template for higher education." (2002, p. 293). In this model, the faculty have shared governance model over their areas of responsibility. Even so, some faculty express a sense of loss of power over the last few years (2002, p. 304-308). Chait says this is because of "The greater the emphasis on corporate, as opposed to collegial, models, and the more resource-dependent the institutions, then the more the weight of governance will shift from faculty and a power of expertise to public agents and the power of the purse." (2002, p. 311) Chait concludes by saying the internal infighting over power between the faculty, the administration and the board is not the real problem (2002, p. 314-316), instead, he states, "If the board, the administration, and the faculty do not coalesce, and maybe even if they do, the 'market revolution' will supplant the 'academic revolution.'" (2002, p. 316)

An additional curricular development model was from Conrad and Pratt (1990), which had a focus similar to Slaughter (2002) in that it concentrated on academic capitalism as the driving force, and modeled how these major themes relate to curricular decision-making. In contrast, Bartlett (2002) outlines a model that he calls the "guinea pig" model used at University of Pennsylvania, where curricula are 'tried' through a pilot program in which students volunteer to

participate. The students are then going to be evaluated in the test group versus the other students to help guide the new program development. Bartlett identifies problems with the more common model of curriculum formation, stating, "Curriculum reform is often hashed out in committees. The 'what ifs' live and die on the table, and what emerges from the process is a more half-hearted compromise than grand experiment." (2002, p. A14).

A newer curricular development, especially in the last decade, is that of interdisciplinary education. Stefani (2009) discusses developing assessment models for these programs, and points out problems with faculty tensions around curricular development, especially since it was a newer field and concept, and did not relate as directly to the traditional specializations. She concludes that faculty should "develop a sense of ownership over the curriculum" (2009, p.55) so that these new types of programs can be developed and assessed well. Similarly, Justice, Rice, Roy Hudspith and Jenkins (2009) in their account of integrating new pedagogy into the curricula from the perspective of administrators, discuss the importance of developing faculty ownership, especially since without it, there were barriers to change.

Barnett and Coate (2005) argue that higher education curricular development has not been seriously considered as a practice as a whole. They explain that there is a lot of ambiguity around what a curriculum is or should be in the modern context, and that curricula needs to be reengaged to become a regular scholarly practice. In their concluding chapter about engaging academics, or faculty, they contend that curricula are often invisible as a whole, and new spaces, strategies, and a scholarship of curriculum, not just of teaching, need to be

developed to fully engage the faculty. It will require excellent leadership and engagement of the entire institution to accomplish (2005). This is also similar to what Hubball and Gold (2007) maintain: a new scholarship of curriculum practice, which "is an approach to higher education programming that integrates curriculum and pedagogical research in the disciplinary field of study." (2007, p. 9) Curricula are complicated systems, but traditional approaches, "…are often characterized by well-intentioned, select committees making ad hoc decisions about adding, modifying, or 'tinkering' with individual course offerings." (2007, p.8) Curricular scholarship would engage the entire faculty and would be key to good learning outcomes and quality curricula.

This concept of faculty curricular collaboration is further explored by Briggs (2007) in interviews of faculty active in departments undergoing successful curricular change. The common themes of social capital, shared expertise, many informal interactions, voluntary initiative for change, shared ownership of curricula, and existence of departmental subgroups are said to be key to their success, and cautioned against leadership that was too hierarchical or top-down. Instead, she argues for leaders to be facilitators that help to foster what is already a part of the community. Briggs separates the processes she found as different than teamwork, since it was often more organic and not as deliberate as a planned project or strategy. Steele (2006), in her case study description of a general education curricular change that took many years to implement, instead argues that leadership is key, stating that "…the success of an institution's curriculum depends ultimately on the support and skill of its administrators. Institutions that ignore this fundamental fact are doomed to an eternity of curricular wars." (2006, p. 184-185).

She claims that there are five administrative components to curricular change: backing of the chief academic officer, involvement in a critical mass of faculty, demonstrated feasibility, negotiating and bartering, and good 'packaging' of the proposed change (Steele, 2006). Hawthorne, Kelsch and Steen (2010) describe the process for a major change in general education curricula, which requires consensus and community building, and results in renewed faculty interest and engagement in the new curricula. This outcome is similar to what Lee and Ash (2010) describe, where they argue that undergoing a major undergraduate curricular change required consensus, and resulted in increased the unity of the faculty at a large research university.

Sugawara (2009) introduces the concept of social capital and its influence on curriculum change in the field of social work. Social capital is a concept that includes social relations that "generate power, resources and capacities" (2009, p. 447), which was found to be statistically significant in curriculum development. This concept actually reinforces others that mention faculty ownership and consensus, which would be part of what would happen when social capital is used to create change.

Instead of an experimental design, Conrad (1990) uses grounded theory to approach the research questions of, "What are the major sources of academic change? What are the major processes through which academic change occurs?" (1990, p. 338). Based on his observations at four different institutions, the social structure produced pressure for change, which resulted in conflict and interest group intervention, then administrative intervention, policy-recommendation, and finally policy making. Mayhew, Wick and Hoffman (1990), discuss general

education changes at a large research university, and the process involved in the change. The processes involve the constraints, development of the program, securing support and faculty involvement, and finally, passage of the program. They do not bring in the perspective of the faculty, even though they were the ones involved and responsible for the curricula. Fuess and Mitchell (2011), on the other hand, do bring in this perspective, although using the lens of a 'lesson learned' in the process of curricular reform, where administrators learned that faculty ownership was necessary, and battles over faculty and departmental 'turf' had to be avoided to ensure success. The administrators in this case used a focus on student outcomes and a decentralized process to accomplish these tasks (2011, pp. 11-13).

Conclusions

The literature describes the evolution of the U.S. curricula, the role and issues around faculty and curricula, and illustrates many possible influences on and models for curricular formation and change. This research will further examine the roles of faculty and curricula, as well as some of the possible influences on curricula outlined in the literature, including: professional organizations; social movements; external resource providers (both corporate and government); shared governance and committee structures; and management structure and administration. The existing literature does not fully examine these roles and influences from the faculty perspective. This research can provide this unique perspective. The research may reinforce the literature, suggest alternative models, or perhaps illuminate more about the process of curricular change and development.

Chapter 3: Description of Methodology

Introduction and Purposes of Qualitative Research

To explore the primary research question about what university faculty know about undergraduate curricular change and development, qualitative interview research methods were used. Since there is little literature and research in the specific area of faculty knowledge about curricula, this research is exploratory and the richness of the data gathered can potentially give new perspectives and spawn further research. Strauss and Corbin (1990) in their discussion of reasons to conduct qualitative research point out that some areas of study are better researched with qualitative methods. These areas might include, "…for instance, research that attempts to uncover the nature of persons' experiences with a phenomenon, like illness, religious conversion, or addiction. Qualitative methods can be used to uncover and understand what lies behind any phenomenon about which little is yet known." (p. 19) Due to the exploratory nature of the research, the richness of the expected data, and the proposed scope, qualitative interview methods were used to uncover the knowledge of the faculty about undergraduate curricular change and development, and the related research questions about .

In order to conduct this research, application to and approval from the university's human subjects division was required, and an exemption was granted (see Appendix One). Faculty responses were kept anonymous and confidential, consistent with the human subjects approval guidelines.

Design specifics

The researcher primarily chose to study the faculty at the University of Washington because of ease of access to in-person interviews while maintaining a

full-time staff position on campus. The University is considered to be good example of a large, public, Research University with over 5,756 faculty appointments in Autumn of 2011. Of the faculty appointments, 4,103 are 'teaching' faculty, engaging in the classroom as well as in research (University of Washington, 2011). In 2013, the University of Washington had a basic Carnegie Classification of RU/VH, which means it is a Research University with Very High Research Activity, one of 78 other public universities in this classification (Carnegie Foundation for the Advancement of Teaching, 2013). As of Autumn 2011, the University has 29,821 undergraduate students, with 27,582 in the College of Arts and Sciences, making it the largest undergraduate college. The researcher chose the College of Arts and Sciences for this research because of its size and diversity, sampling from its 39 departments (University of Washington, 2012). It was also appropriate because the researcher is employed at the university in a separate college than the subjects.

The study subjects' departments were obtained by collecting data on the University's undergraduate curricular program changes and new programs from 2005 through 2011. It was further restricted to the College of Arts and Sciences. This population consisted of twelve different departments, eleven of which were ultimately included in this research. They included departments from each division in the College of Arts and Sciences: two humanities departments, three arts departments, three social science departments, and three science departments. Demographic data were gathered on each unit, including the number of faculty, the number of undergraduate majors, and the number of years the chair or director held the position as of Autumn 2011(see chart in Appendix Two).

The faculty chairs or directors, curriculum committee chairs or undergraduate

program chairs of the selected departments were contacted via email with a request to be interviewed. The chairs or directors were chosen to be interviewed for this study since they have final signatory authority on the curriculum change form required by the University (see Appendix FIVE). The final sample size of interviews was determined by the constant comparative method (as outlined in Glaser, 1965), when similar themes and answers arose during the interviews. This perspective guided the research, helped with the development of the interviews, and added to the richness of these data.

For the actual interview, the department chair or director was contacted via email and asked to schedule an in-person interview, and asked to name the curriculum chair or other key faculty in undergraduate curricular development, who was contacted in the same method. The human subjects exemption form and the consent form were attached for review in the initial email. Four of the selected units had less than ten faculty, so only the chair or director of those units was interviewed. All of the faculty chairs or directors included were tenured professors (either associate or full professors).

When the researcher arrived for the interview, the human subjects consent form was presented for review and signature. It was again explained to the professor that participation was voluntary, and a copy of the consent form was given to each professor at that time (see Appendix Three). Each interview was digitally recorded at that time, and the researcher took written notes. All files were then securely stored on the researcher's personal computer, as per human subjects protocols. The interview files were professionally transcribed and deleted from the transcriptionist after delivery to the researcher. The researcher transmitted the

transcriptions to the interviewed professors for review, as per protocol. Half of the professors made edits to the transcripts, which were mostly grammatical and added some clarity to their speech. Some also added to the transcription with a few short notes. All of the final versions were used for analysis.

Interviewed professors were allowed to withdraw at anytime, and those that participated did so on a voluntary basis. Their transcripts and information were all handled with confidentiality and according to the approved human subjects protocols. The participating professors were given informed consent, which explained that their participation is not considered anonymous since leadership in a department is public information. Also, because all of the participants were tenured teaching faculty and state employees, the research topic is considered a part of their professional role. However, to further protect the participants' privacy and confidentiality, their responses were coded by their Arts and Sciences Division: Humanities (H); Social Science (SS); Natural Science (NS); or Art (A). They were then assigned a number, like SS1, SS2 or SS3, and each interviewee was either A or B respondent from the unit, with a final coding of SS1A, for example.

A total of eighteen interviews in eleven different departments were included in this study. One departmental interview was not included in the research since the role of the interviewee was not appropriate and the department was not included in any way. All of the interviews were conducted in a period of two academic quarters, Spring and Summer of 2012, so these data were all gathered during the same or similar university administration and leadership structure.

To conduct the interview, a semi-structured set of interview questions that are open ended were developed. The professors were allowed to expand upon any

related and relevant topic, but if they got off topic to one that did not apply to the researcher they were redirected back to an applicable topic for the research. The researcher consciously tried to use a friendly and professional tone, as well as refraining from any personal commentary, to produce the most successful and revealing interviews. All of the interviews were digitally recorded for later transcription.

The interviews inquired about the professors' roles in the undergraduate curriculum, their feelings and perceptions of their knowledge about curricula, their experience with curricular change and development, ranging from the course level to overall undergraduate curricular development. They were asked about what staff, tools and resources they used to work on curricula, as well as what staff, tools and resources they found helpful. They were asked what influences they felt are affecting their curricular programs, and to identify perceived barriers to curricular change. Lastly, the interviews explored their sources of their knowledge, and interviewees were asked to elaborate in any areas they felt were important or relevant.

The professors were asked about influences to investigate what role they may have played in the curricular decision making process. Examples of these influences included professional societies, the state or HEC Board, faculty senate curricular councils, and university administration and budgeting authorities. These groups can largely dictate what is required in curricula or just give general approvals, and how faculty interact with or feel about the influences was queried. The influences from donors, corporations, and budgetary authorities were also explored.

The age of the department or program was considered a variable, largely because the requirements in the curricula that are well established could be far different than in new fields of study. For example, a new major could have had a different structure than that in a more traditional department like art, chemistry or psychology. Thus, different ways of approaching curricular change and development were explored.

Finally, during the interview process, the professors were asked about their feeling and roles in undergraduate curricula, especially in regards to peer pressure, abilities to cooperate and work as a team, group culture, where the impetus for the program came from, and if they felt the original goal of the curriculum was accomplished.

Data Analysis

To analyze the data gathered during the interviews, the transcriptions were read by the researcher, and analyzed for themes based upon data commonalities. Several themes were discovered, and Microsoft Excel was used to organize quotes and related sections of the interviews. The nine main themes were as follows: gaining curricular experience and leadership roles; faculty knowledge about curricula and how knowledge was obtained; influences on curricula and its effects; barriers to curricular change; resources used and needed; interactions of departmental faculty; the role of leadership; university and departmental structure; and satisfaction with curricular offerings. The semi-structured interview questions greatly assisted in these themes since each one relates to at least a question in the interview, and insured that all subjects were asked the same questions (see Appendix Four).

Importance and Limitations of the Study

Concepts of leadership in the faculty, goals of the faculty, and the relationship of the faculty to administration are all important elements of faculty and university governance. At most universities, faculty members have control over the academic curricula. The classes that are required and the content of those classes that a student takes—from what fields to how many—are completely in the hands of the faculty of the academic unit. In undergraduate programs, this can vary from individual courses, to entire programs, including majors, options and minors. The quality, quantity and content of programs and courses of study can greatly influence student outcomes, thus a benefit of this research should help to determine what faculty need, like training or resources, to design curricula to meet the desired outcomes.

The results of this research, since it is an exploratory case study using qualitative methods, have limited generalizability beyond the scope of the research. It adds to the dialogue and clearly demonstrates the need for further research in the area. In addition, this research could be limited due to the variance in faculty groups as well as university structures, policies and procedures. The applicability of the findings to other settings with the same research question is unknown, but this research will again add to the dialogue about faculty development and training, faculty leadership, and academic structures. Lastly, as with all new and exploratory areas of research, the results of this research will potentially generate more research in the field of faculty and undergraduate curricula, which could then lead to larger conclusions about the findings herein.

This research outlines issues and frustrations in curricular development, and

more attention may be able to be given the faculty curricular voice that has not traditionally been heard. Greater information about the effort, time, commitment and preparation of faculty leadership to do this critical part of their job were uncovered. Overall, the greatest benefit of this research is to spawn further research that will assist faculty in their responsibility for undergraduate curricular development.

Chapter 4: Discussion of Findings

From the analysis of the results, nine main themes emerged. The themes will be presented in the order in which they were explored in the interviews, which somewhat follows the semi-structured interview instrument (See Appendix Four). The themes are: gaining curricular experience and leadership roles; knowledge about curricula and how it was obtained; influences and their effects on curricula; perceived barriers to curricular change; resources used for curricular development; interactions of faculty as a group about curricula; opinions on leadership in the area of curricula; the university structure and curricula; and satisfaction with curricular offerings. These themes emerged from the analysis of the data, and within each of the themes there are several topics and ideas that are shared across departments.

Gaining Curricular Experience and Leadership Roles

The first theme of leadership emerged from the responses to the first two questions in the interview structure. These questions inquired about the faculty member's experience with curricula and then further probed the specific role each played in curricular change in the department. There was a large amount of variance in the types of roles and experience even though eleven of the eighteen professors interviewed were departmental chairs and the remaining seven were curriculum or associate chairs of undergraduate programs. Because all of the subjects held prescribed faculty leadership positions, the most common way they gained curricular experience was when they became a departmental leader, which fourteen of the eighteen described. Thus, the theme of gaining curricular experience simultaneously to attaining a leadership role became prominent.

Curricular experience was also gained by studying or researching student

data, with seven professors mentioning approaching curricular issues in this method, followed by five stating that they researched other institutions' programs. Other methods of gaining experience were serving on curriculum committees, other institutional committee experience, experience as a student, realizing that faculty needed to be involved as well as advising staff, working with advisers, pressure from funding issues, and just 'being more involved.' Almost all of the responses related to their leadership roles or assignments relating to curricula, which made the leadership experience and role with curricula intertwined into one theme.

Variance was also found within the seven departments in which two professors were interviewed. For example, in the Natural Science Division 1 (NS1) department, professor NS1A stated that she had little involvement with the department's curricular change, and that the departmental priorities were not currently focused on curricula. She was also the only professor that mentioned not having a role with curricula as a chair, stating:

> Well, as formal role, I don't have anything as chair. There's an undergraduate education committee that is ostensibly involved in curriculum change.

However, she did teach some core courses in the department, and elaborated on other curricular topics. In contrast, in the same department, professor NS1B was very involved in researching solutions to a curricular problem. He described the problem as well as what he did to approach it:

> …(T)o maintain a very high quality of students that graduated from the degree, and so at the end of their studies, they require a 2.8 in order to graduate. Many students then caught into the dilemma that in the middle of their fourth year, they realize that if they're not going to make the 2.8, they're not going to graduate with the degree. In the middle of the fourth year, they have to look for an alternative to change major which is extremely difficult because then all other

> majors will have different requirements, prerequisites. They're going to be delayed in finishing.
>
> As a result, I carried out a study trying to identify if there's any possibility that we identify those who are likely to fail so we can look on early ahead of time that don't continue. You need to look for an alternative before it happens on the fourth year. I asked the college…From that came up the idea of then we give the students an alternative, so that was how the [new NS1 degree] came to being.

NS1B when asked if previous curricular experience helped with the endeavor, replied:

> No, at that time I was just looking into it… if we want to propose a change in the curriculum, we need to have good reasons, and no reasons is better than actually doing the research and show the data.

On the other hand, in the Natural Science 2 (NS2) department, both professors had significant experience with and roles in curricular change. Professor NS2A discussed the various roles he held, including being a faculty member and later associate chair before becoming chair, as well as the structure of the NS2 department:

> Usually as a regular faculty member you have some sense of what you do and a vague sense of what people in your field in the department are doing and pretty much no idea what everyone else is doing. I wasn't much help then. I reacted to other people's initiatives rather than thinking much about the curriculum as a whole, but then I became an associate chair in charge of the undergraduate program and then of course, you do look at the whole program.

Similarly, Professor NS2B had a lot of experience with departmental and curricular administration, stating, "Historically, besides department chair for a long time, I've been on every committee and I've chaired most major committees." He also spoke of his work on the current curriculum committee, where he is leading new efforts for curricular revision as an associate chair.

In the Natural Science 3 department, Professor NS3A, who was currently

chair, described his experience and the leadership role he held when working on curricular change, as well as what he thought the usual faculty experience was with curricula:

> It's only just through the department here. I was associate chair during this time when we were thinking about these changes, and so I think you'll find most people's experience just comes from the programs or when they were students. So they'll try to take the best of the various programs and their experience. Or some…were faculty at other institutions before they came here, so they see what other places have done and get some idea of what's worked, what has not, and then just try to do the best you can.
>
> I was associate chair for the undergraduate program, and so I was trying to get various committees, people to talk to one another, and was partly a spokesman for the ideas at faculty meetings and the person the chairman relied upon to see that things were moving forward.

Similarly, Professor NS3B was also in a leadership position on curricula, and described her work on approaching curricular change:

> I'm the associate chair of Undergraduate Affairs and I chair Majors Committee. That's why it landed in my lap. The idea had been around for a while [to change the major]…we are one of the five or so largest undergraduate programs in the country.
>
> It started with doing the research over the summer of what our peer institutions offer. We found that very few of our peer institutions still had a one-size-fits-most major; most have various tracks. We realized that it was time for us to create something like this…

In the Social Sciences division, the experience and role of the Social Science 1 (SS1) department professor SS1A was unique, since the department was founded and the entire curricula was developed during the last decade, and Professor SS1A was the chair of the program during the entire time. He described the approach used:

> When we were going through this process of developing a major or developing a department, the first thing we did is we looked at the

> structure of other [SS1] programs throughout the country and Canada.
>
> The next thing is we imagined kind of the platonic [SS1] Department, what would the perfect [SS1] Department be, and what would be the courses that that department would offer? …Looking at how to set things up and how to sustain a department that could teach to all those different demands was part of the challenges also, but when we went through this process of imagining other courses that we wanted, the individual faculty developed courses…the faculty collectively developed over 40 brand new classes. That was a big part of the structuring of [SS1] as well.

His approach was not entirely unique since other units also researched other programs, but the approach of the 'perfect department' was unique. This was not surprising considering new departments are not formed very often on established campuses.

In the SS2 department, Professor SS2A described the experience gained from his role quite well:

> I never had the view of it that I had as associate chair which that really makes you see how the whole thing sort of works because you have to juggle stuff…I got to really get a better sense of the way the curriculum is actually structured on course offerings are structured…

Professor SS2B, who mentioned that the role of SS2A was coupled with a professional staff position that was also involved with curricula, further described the departmental curricular roles in SS2:

> We have two people that are involved with that. One is an associate chair, which is a faculty member that takes the lead on all that. Then like many units, larger units at least, we have a full-time professional staff person, that's the director of academic programs.

He also described his role as chair of SS2, and how he was not as directly involved with curricula, since it was assigned to the associate chair:

> Well, you know, that's multiple roles. One is to encourage faculty to think about innovation and new ways of doing things, so somewhat on a pedagogical level, but also in terms of keeping the focus. I mean, we really talk much more in the department about the educational experience for undergraduates …

Professor SS2B did mention his experience with curricula as a faculty member creating new courses, but direct involvement and experience was not mentioned.

Similar to other departments, in the SS3 department, the associate chair SS3A stated the following about her experience with curricula:

> I got to know things mostly through being involved, being responsible for organizing them. There's a whole heck of a lot that was invisible to me as someone just teaching classes. I didn't know the shape of the beast; the whole thing how it looked and all the moving parts and what depended on what. I just didn't have that perspective until I started having to try and organize it.

Professor SS3A also described her role as associate chair like "herding cats" when she was trying to organize the faculty and curricular assignments. Her chair, Professor SS3B, described the method in which the curriculum evolved and how she started changing the undergraduate curriculum:

> We had had between 300 and 330 majors each year for the longest time. It was just very, very steady and so it got me thinking about who is it that we are not serving? I've been at [SS3] departments at different places…Thinking about the comparisons of who were the students in the undergrad of each of these places, a large number of the undergrads at Northwestern were pre-med or pre-nursing, some pre-health professional. We started doing an exit survey among our undergraduates and I just had a lot of conversations with them and we were not getting the pre-health professionals. They did not know [SS3] was a place that you could get training that's relevant for pre-med and other places.

The blending of her former experience, asking questions about who the students were, as well as looking at other institutions was unique among the

responses. This was also true of her description of the eventual shifting of roles between the faculty and staff in the SS3 department:

> The person who was asked to do that to look big picture at the whole thing was staff, not faculty. Until we had this foundations course [initiative] there was nothing really prodding us to look at the undergraduate curriculum…It became really obvious then that we can't have the attention to the undergraduate curriculum and the undergraduate experience be a staff matter only - that the faculty need to be completely involved in this as well.

In the Art division, the A1 department is divided into divisions, each with a faculty leader. Professor A1A led one of these divisions, and she described the former leader and a curricular change he implemented as her main experience with curricular change:

> I've been here for 15 years, so there have been several different budget crises. I think we were also trying to get ahead of other problems in some ways…To be honest, not all [A1 division] faculty were behind the curricular change, because [A1] faculty were used to teaching in these 25-student sections. [the former A1 faculty leader] was like, "Okay, you'll have 120 kids now with two TAs." Some faculty said, "I never signed up for that." Some of the older faculty members really didn't like that idea. But he pretty much forced it upon us.

She then described her current role as leader, which she approached differently than the former leader:

> It's very democratic in our [A1] division. Due to my personality, I would probably not insist that our [A1 division] faculty do something. I more or less think about and respond to things that both the students and the faculty say. At some point, situations arise and I think, "Well, maybe we should change this." We have a faculty meeting every month, where all [A1 division] faculty meet and discuss a variety of issues.

She did describe the division's curriculum in detail as well, even providing a diagram of the coursework. In contrast, her chair, Professor A1B, was more expressive about his experience and roles, and also mentioned the influence of budgets on curriculum, which is explored further in another theme:

> I think that it's really important to be abreast of where we need to be within [A1] with regards to where the demand is from the students that really do have a lot to do with the mission of the college and the mission of the university but also within our own mission too and where we have the faculty that are capable of teaching those classes. There's a delicate balance between both of those things.
>
> In doing so, we're constantly revamping our curriculum. It's changed though in that the way that the structure of [A1] was when I started to become a director back in '96, the way that students…had to take foundation classes. That's pretty well traditional up until the nineties in most universities, it's the first year foundation class; but with the reduction of faculty and with the need to move the students through quicker…I think that it was pretty well something that the university and the legislature was really concerned about it because the dollars …Then it became a problem…It often does come down to money.

In contrast, the A2 department is very small, and Professor A2A explained her role and experience in this setting as well as her unique interest in curriculum development:

> Well because I am chairing a very small department and have been doing so since 2001 I am really in charge of the curriculum. It's a faculty discussion always when we revise anything or add or change, but I'm the person who fills out all the forms, writes the justifications. I just do all the paper work.
>
> I've always been interested in curriculum development. I've looked at it from a number of angles and I'll try to explain those. I came in at a time when we were being asked to do strategic plans…That series of conversations led us into revising both our BA curricula and our [A2] graduate program…We added things; we gave more time for other things.

Professor A2A's personal interest in curriculum development was unique among the eighteen professors interviewed.

In the A3 department, Professor A3A had over thirty years of experience as a chair. She described her experience and role as a chair, more so than her direct experience with curricula:

> Sometimes, it's very difficult to get faculty to embrace the idea of change. As a Chair, speaking as a Chair, times change, faculty change. I also think our knowledge changes, our understanding of how things work. But it is hard for many faculty to want to change. Our BA Curriculum that was essentially in place in 1983, when I arrived on the faculty here, it really didn't change a great deal until just recently.
>
> My role is to lobby and advise and perhaps even inspire...because you cannot tell faculty what to do. Right, I try to persuade. You might even call it cajole, nudge, whatever it is, but I have, over the years, I try, and it's usually through individual conversations, with individual faculty members, I ask them to think about my point of view and to support it. Sometimes I'm successful. I'm pretty good at it, but often their response is, I don't want to do it that way. It's rarely I philosophically disagree with you. I am being totally candid here about things with you I think, often, it's more a question of certain faculty have certain ideas about how they want to do things. And they are not interested in change, or modification.

Her response could be in part due to the structure of her department, with Professor A3B being assigned as the head of the undergraduate program. Professor A3B depicts his experience and role very well:

> I became the head of the BA program last year. Part of my work has been to compare our BA program with other BA programs around the nation, our peer institutions, study the nature of our current BA in relation to larger educational initiatives here at the University of Washington.
>
> It's ad hoc, but here's what I would say: I work very closely with the undergraduate advisor…who is my source for data, history, projections, class sizes…Obviously I work with every faculty member that teaches an undergraduate class. It's the whole faculty.
>
> The head of the BA of course is responsible for being both the facilitator and initiator of curricular change and evolution in the program as each generation sees it fit to adapt their curriculum to the current learning culture in our country. That's probably the primary formal job.

Two department chairs in the Humanities division were interviewed, both from relatively small departments. Professor H1A was quite philosophical in his response:

> There is always curriculum change and development or you have a stagnating department and a stagnating program…In this department, as elsewhere on campus, the faculty is in charge of the curricula. Now, a department chair is, of course, both a faculty member and a representative of the administration. According to the principles of shared governance, it is the faculty that makes the decisions in curricular matters. Now, chairs formally have as their obligation to assign courses to people, but which courses are to be created and offered and which programs are to be offered and so on, that's up to the faculty. As a member of the faculty, I have an equal voice with everybody else.
>
> I guess I had the same involvement as everybody else on the part of the faculty. When it comes to curriculum matters, of course, the chair is a faculty member and participates as a faculty member and also has, of course, the responsibility of providing leadership as chair. We work as a group.

His response was unique in that he was the only one to mention shared governance, which is a key process in faculty curricular responsibility. In the other Humanities department, Professor H2A was more expressive about the pressures of resources on the curriculum, along with her role and experience:

> I mean, we teach courses, we obviously learn which courses are more popular and why. We are striving to get more students enrolled in our courses. We follow the trends in humanities, and in my case, all over the country. That's obviously how I know about it; the curricula and then from first-hand experience.
>
> So, sometimes what we are doing is not necessarily the best possible thing to do academically but we know because of the shortage of resources or some other things, and we are also we are trying to be ahead of the curve making sure that we respond to new realities and new demands and all that…sometimes following the trends, and sometimes anticipating the trends. We do like to anticipate the trends.
>
> Well, my role has been … I've been the Chair for 12 years…I'm also interested in not just my department, but humanities in general.
>
> Actually as a Chair, I encourage my faculty not to teach strictly within their specific areas, but to teach the kind of courses that they feel the students want so that we can educate as many students as we can.
>
> Overall, in the theme of gaining curricular experience and leadership roles,

all except for one professor were involved in the curricular change, and their leadership role was the main conduit of experience.

Knowledge about Curricula and How it was Obtained

When the professors were asked about what they knew about curricular development, especially about creating or modifying entire programs and how they obtained their knowledge, eight of the professors reported that it was 'on the job' experience providing their main source of knowledge. Six professors mentioned researching other institutions, five reported other institutional experience, and several mentioned professional advisers and senior exit surveys. Four also mentioned that they 'knew nothing' or 'not a lot'. Even so, some knew more than they admitted. For example, in the NS2 department, Professor NS2A stated a lack of knowledge, but then proceeded to describe the entire undergraduate curricula, and its structure in detail. He did mention how he gained his knowledge, which was through multiple conduits:

> Oh, no, I definitely remember. I mean I would say that the primary conduit for information was a former department chairs both in [NS2] and in the predecessor departments. We've always had a lecturer who sort of manages the day to day operation of the undergraduate program…They know everything…I learned awful a lot from them.
>
> Then the other group that I've learned a lot from is the advisers because they talk to students all the time.
>
> Finally, when I was associate chair for the undergrad program, we formed a student advisory board…I guess I would describe it as sort of a focus group…We got a lot of really valuable feedback that way. Then I read the senior exit surveys which we've been given been given for quite some time and lately we've been modifying those to try to gather more useful data.

The other department faculty member, Professor NS2B, had demonstrated his knowledge in a similar way by illustrating the entire NS2 curriculum structure.

He describes obtaining his knowledge from experience as well as from his teaching:

> At San Francisco State, I actually knew quite a lot about the curriculum and I was helping teach…when I was still an undergrad. I really went into education to teach. That's what I wanted to do. When I wanted to teach at university level, getting a Ph.D. was a requirement, so I did that. That wasn't a problem. I didn't' care what the research was in…When I went to the University of Toronto I did a lot of work on structuring the introductory curriculum for that group. I worked as an adviser and I was there five years…Then, I worked a lot with the [NS2 related] department undergrad curriculum for a long time. I had a good understanding of it. I also was department chair for a long time, so I really knew that curriculum pretty thoroughly. Then we expanded it. The whole curriculum has gotten larger, and the fields of [NS2] have greatly increased.
>
> One of the things I've always done since I began teaching, is to spend full-time in all the lab sections…When you see those students and you interact with them and listen to what they're talking about, what they're doing, you get a pretty good sense of what undergrad education is like. If you don't do that, you're just lecturing, and you're walking out of the lecture, with little further engagement with the students.

In the NS1 department, both professors described a lack of knowledge, with Professor NS1A stating she knew 'almost nothing' about curricula. She did describe how she did obtain the knowledge needed to make a curricular change, which was unique because of the departmental structure:

> We talked to the folks in [a related NS department]. I think we did everything through [them], because they administer our major. So we always end up working closely with them, but advisors in [the related NS department], undergraduate advisors, are very knowledgeable.

Even with the unusual departmental structure, Professor NS1A mentioned the advisers, which was similar to other departments. Her colleague, Professor NS1B, who was more directly involved in the department's curricular change, described how he obtained his knowledge:

> I looked into the curriculum in other institutions…We have graduate students that come from all over the place. They all have gone through an undergraduate program…and so we got feedback from them. I

> wrote to a lot of universities and some of the instructors would even give me their syllabus so I can take a look exactly into the depth that we go into and the topics that they cover, and things like that.
>
> In [NS1], there is a society…which has been in existence forever, but they have policy announcements. They have members in the society who are actually members of the National Academy of Sciences and they have opinions on education. They have published papers for announcements as to what a curriculum in [NS1] should include. Basically like a syllabus that you should cover these areas and that a curriculum in [NS1] should include a laboratory section so the students get hands-on experience.

However, when he was asked about what he knew, he said, "Not a whole lot other than just looking into what other institutions were doing."

In a similar way, both professors from department NS3 obtained their knowledge from examining what other institutions were offering in their curricula, but had slightly differing responses to what they knew personally. Professor NS3A stated:

> I'd say I have an idea of what the standard curricula looked like and what the graduates programs expect the undergraduate program to have, but as far as any kind of philosophy what's actually the most effective…I haven't spent any time looking into that…not so much for curriculum development, but more to learn what's working and what's not working.

In contrast, Professor NS3B described the pressures to change curricula more than her own knowledge:

> We all have our opinions as to what was essential and what was not. The trick is, reaching a reasonable consensus … how could you call yourself a [NS3] when you haven't taken X, okay? The problem is that there is X, Y, Z, and Q that different members of the faculty all believed…There is not a standard thing across the country if this is what you require for one or the other.
>
> There's a growing recognition that we need all of these majors to keep the dean happy. It's perfectly good to have a Liberal Arts education that prepares you for the world. [NS3] is a Liberal Arts degree. I guess maybe I came from the Liberal Arts College that's part of my belief

> that … what you learn in [NS3] is how to solve problems and that's the skill you need no matter where you apply it.

This result may be because Professor NS3A is the chair while Professor NS3B is currently in charge of the undergraduate program, so she is more actively involved in the pressures on the curricula.

In the Social Science division, department SS1 was unique in that is was more recently formed. Professor SS1A described the process as 'daunting', but did not admit much knowledge about curricula, stating that he obtained his knowledge by experience:

> Knowing about it and going through it are two different things. I had quite a bit experience on the individual course level, but not experienced on developing a new major.

This was a similar response to both of the other Social Science departments, SS2 and SS3. In SS2, Professor SS2A described knowing 'not very much' and the process of doing it within his departmental context, as well as his sources of knowledge:

> It's like the rollercoaster when you're building the track out ahead of the car at top or the bottom of the hill. There's a lot of inertia. Another thing about [SS2] departments; this is true across disciplines but particularly in [SS2]; some of them are very badly divided and there are big problems with people getting along who are or a big methodological divides and we have avoided that...actually I know this because it's one of the things I learned at the office of educational assessment; we do really well relative to other departments.
>
> I think that anything that's specifics I really had a staff for because they're the ones that really know stuff and so I learned a lot just from staff. It's mostly I learned stuff when the issue comes up. That's when I'll think about it.

In the same way, Professor SS2B described his knowledge as 'experienced-based', but the sources of knowledge he identified were different, including: exit surveys, ten-year reviews, professional journals and conferences and pressures from the

college level.

In the SS3 department, the responses were similar, with Professor SS3A expressing little curricular knowledge, and stating her knowledge from experience and 'very pragmatic stuff." This was similar to her department colleague, who also highlighted her experience as her source of knowledge. However, she also expressed some frustrations with this, stating, "I wish I had more training on this earlier on." Professor SS3B also mentioned the advisers as having a "tremendous amount of knowledge" and being very involved in SS3 curricular development.

In department A1 in the Arts Division, Professor A1A expressed a high level of knowledge about A1 curricular structure, mostly gained through experience. She elaborated that this knowledge made her comfortable reviewing as well as designing entire curricula, and described her process of obtaining her knowledge:

> Obviously your first experience is that you go through in your own field, whatever curriculum your own school has developed…Then of course, you meet other colleagues and they have gone through other schools and they discuss those curriculums. Then you get involved a little bit in the literature. There are people in our field who write about issues of curriculum in [A1] education…There's a professional society of [A1]…They've had for many years a subcommittee on [A1] education. They've held a variety of interesting summits trying to understand the competencies of the [A1] of the future, and things like that. Probably, unlike some fields, there's a great deal of professional connection...
>
> But fitting all the requirements/desirable knowledge into a curriculum is quite difficult…It becomes a puzzle in terms of how those skills and knowledge can be slotted in.
>
> You also see different models of how people manage just the process of developing a curriculum. Even seeing [another A1 faculty] go through this and trying to get alignment from different faculty members, seeing how the College of Arts and Sciences has their approval process…There is a curriculum committee looking at our proposal…There is a procedural knowledge on how to make a curriculum change, too.

In contrast, Professor A1B did not express a lot of knowledge, but highlighted experience as well looking at graduate school applicants to compare curricula as the source of his knowledge.

In the A2 department, Professor A2A again expressed her knowledge as being experiential, calling it "a baptism by fire." She also expressed her interest in curriculum, student exit surveys, as well as her experience going through the particular curriculum herself as her sources of knowledge. This was a very unique perspective among the study group of professors.

In the A3 department, Professor A3A stated about her curricular knowledge, "I'm not sure I really know very much", and did not really express much more about curricula. Instead, she elaborated more about her leadership role as a chair, and gaining her ability to work with faculty from her experience working with volunteers. This could be because her department colleague, Professor A3B has more direct responsibility for the curricula. He talked about his background and experience as his main sources of knowledge, as well as being a part of the college:

> I was educated in a classic liberal arts background…I've seen a very wide range of approaches to teaching [A3 specialties]. I also spent many, many years in the profession. I have a relationship to what the nature of teaching [A3 specialties] in the university system has to do with the profession itself, which is sort of an interesting and complicated situation.
>
> I've also been a guest artist at other universities…for quite a while. I've seen different methods; I've seen different approaches.
>
> I'm a big believer in if we are a BA, then our BA has to serve that larger goal from the College of Arts and Sciences, which is to educate young leaders who have in this area specifically the ability to be leaders but through creativity, which is what the [A3] is all about.

In the Humanities division, again both professors expressed that gaining their knowledge about curricula to be experiential. In the H1 department, Professor

H1A described his knowledge and approach to curricular change as being one of examining what other departments are doing:

> It's really an apprenticeship kind of a thing, because we are all apprentices for longer or shorter periods of time, and it is, by its very nature, extremely conservative, because almost everything you do, you base on your past experience. In the absence of theory, pedagogical theory, you have to rely on your practice. You end up being conservative and you also usually end up doing something that turns out very good.
>
> What you do typically, in a case like this, is you look at what is done in other [H1] departments. We didn't do that in great detail because we felt very confident that what we were doing was for good… [we look] nationally in a lot of cases, because [some] universities, have historically operated on a different model than here.

This approach was very similar Professor H2A's response. She spoke of consulting other peer institutions as well as her curricular knowledge coming from being the chair of H2.

Another theme relating to curricular knowledge that arose was the lack of knowledge about the entire curricula by faculty overall. Professor NS2A, who was the chair of NS2, commented:

> It would be a pipe dream, but it would be nice, if all faculty, I mean I care more than most about how things work and even when I was regular faculty member, I didn't know that much about the curriculum but it would be nice if everyone understood enough about the curriculum to sort of see where they fit into it.

This was similar to Professor SS3A's thoughts, pointing out some possible root causes of the problem:

> I guess I would just reiterate that I think a lot of the … the shape of the curriculum as a thing in itself is not readily apparent to the faculty, most of them. I think they think about … from the point of view of the faculty, it's like, "What am I doing? What is my research? What are my classes? What's my year look like?" They don't necessarily know what other people are doing or what the experience of the students is or what difference it makes for the students whether its' taught this quarter or that quarter, what the students are trying to balance it with,

> and what kind of … there's all kinds of stuff coming down on advising that we're not aware of.
>
> I think there may be actually a downside of one thing which we try to do which is protect junior people before they come up for tenure. We try to protect them from too much service work, so we tend not to have junior people involved in organizing the curriculum because it's a huge hassle and headache and a lot of work. One upshot of that is that nobody knows anything about the curriculum in particular.

Professor A3A had similar comments:

> I think the thing that is the most ... that is the weak point in the way we do things, is that we hire people because they're good at whatever it is they're supposed to teach. It doesn't mean they've ever really thought about how to teach it or how to educate people in our field.

To summarize the theme of how knowledge about curricula was obtained, there was no mention of training or mentorship by any of the professors. Almost all cited experience as their main source of knowledge, and even then, many were not confident in their knowledge. Another common thread was researching what other departments were doing around the nation, as well as related professional societies or professions in some cases. Lastly, there was a suggestion that there was an overall lack of curricular knowledge by faculty which was continued by the entire structure of faculty hiring and promotion.

Influences and their Effects on Curricula

When asked about what influenced their curricula the most, many (13) professors responded that the top influence was the budget, followed by nine mentioning students, then seven mentioning program size or faculty. Five professors mentioned societies or professional organizations as influences, and then the variance increased, with mentions of influences as research, graduate or professional school, the location of the university in a large city, other departments, co-teaching with other faculty, the mission of the university, deans or leaders, the

community, the required ten year reviews, the college curriculum committee, the corporatization of the university, and educational assessment. They were then asked if these influences benefitted or harmed their curricula, and most thought that the influences of outside professional organizations were positive, while most thought the budget issues harmed their programs.

The budget issues mostly related to the recent budget cuts the university had received along with the newly implemented Activity-Based Budgeting system, or ABB. Some mentioned it as a very large influence spawning curricular change. For example, Professor A3A explained,

> What really finally got the faculty to look at revising the curriculum were the budget cuts, because we couldn't continue to do what we've been doing. We didn't have the resources anymore. Budget cuts are huge.

Professor NS3A also mentioned the budget it as 'the biggest reason for the curriculum change" in her department.

Larger class sizes and enrollments due to budgetary constraints were mentioned by Professors A1A, A1B, A2A, H2A, SS1A, SS2A, NS3A, NS3B, NS2A and SS3A, who described, "It's been very clearly communicated to us and we have understood that butts and seats will result in dollars in pockets in the department." This was slightly different than Professor H1A, who explained it as more of a trade-off in courses:

> These days, you mind your Ps, Qs, and enrollments. If you don't have good enrollments, you're not going to have the position that you need to have in the college that you belong to. That is a problem, incidentally, with a language such as [H1 language], which is the language that I teach. These are less commonly talked languages. You are never going to have very large enrollments in these kinds of courses. That means that if a department is going to be able to fulfill its core mission by offering courses like that, you had better have

> some large enrollment classes that balance them out…You are dressing up like the rap star and you are trying to talk like Socrates.

This was very similar to Professor A1B, who described,

> If the dean is scoping around and seeing where the credits are generated, they're not going to come to the [A1] where there's only one faculty member that's got five students. It doesn't make sense and I understand that too. That's a big driver on what we can offer but we also have to be able to balance that too and if there is a program that is an excellent program, that there is interest maybe not the greatest interest but the quality is there and there are great contributors in other ways then that's worth standing up for.

In contrast, Professor A3B expressed a very different perspective on budgetary influence:

> …the budget thing isn't really a problem only because we are considered "budgetary dust." The department of [A3] could vanish tomorrow or be here for the next 100 years, and no one would notice on any ledger anywhere at this university…We're so tiny it's absurd…Whether we have a little more one year or a little less, we can adjust. The foundational teaching can survive.

The only department that did not mention the budget at all was NS1, which has a unique undergraduate curricular structure that is administered by another department, and its main source of budgetary support is research grants.

When considering whether the budgetary influences were beneficial or harmful to their curricula, eight professors said the budget influences were harmful. For example, Professor SS3A stated, "I think larger classes are just in general I feel are harmful to students…I think you just can't do in a large class what you could do in a smaller class…" which was similar to Professor H1A's response:

> The more students we can serve, the better it is, up to a point. If you get to a point where the quality of instruction suffers, then you will

> discover that you basically made a bargain with the devil. Those bargains are hard to get out of. Not particularly beneficial, as you know.

Two other professors agreed with the sentiment of serving more students as being beneficial. Professor SS2A expressed a different view on the benefits and harms of budgets by giving context to the state of the university at the time:

> SS2A I don't think it's harmful in it being like sinister or a negative thing. It's the resources problem. The university doesn't have the resources to do everything that it would like to do and that also has affected our staffing because we've lost people due to them getting outside offers and we haven't been able to replace them. Salaries haven't had raises in a long time, which means that we're getting raided by private universities, raided of our faculty. That's all tied into the resources thing and tied into keeping to things…I think it's just the reality of where the economy is, where the university is, what we can actually do with what we have. Generally I think our feeling is that we do very well with what we have but it's not. If you take a step back and think what's the ideal way to educate people who are 19 to 21 years old about [SS2]? There are ways in which we fall short of that ideal.

No professors said the budget situation was in any way directly beneficial, but two mentioned that it was both beneficial and harmful. For example, Professor NS2A indicated:

> Budget cuts, I would put as a two-edged sword. I mean they have obvious problems because you have fewer resources. They do force you to rethink and that’s not always bad.

Overall, the professors felt that budgets were very influential on their curricula.

The next two most influential factors mentioned by nine professors were students and faculty. In regards to the student influence in the social science division, professors from each of the three departments mentioned

student demand, but Professor SS3B also had an additional interest in students:

> …I was interested in who are we not serving before it became a budget issue. I was just curious about why are we not getting the [a certain type of student] here and I had just informal conversations with a couple of my colleagues.

Similarly, professors from all three natural science departments mentioned students as influential. Professor NS3B mentioned student outcomes, with specific attention to their performance on the GRE as being influential. Both Professors NS2B and NS1A mentioned that who the students are was shifting teaching methods, but for slightly different reasons. Professor NS2B mentioned the increased diversity of student backgrounds as well as the skills they bring with them has shifted markedly over the last 30 years. Professor NS1A expressed the difference in students as:

> …in terms of their expectation for how to learn, I think, is really changing. That's something we're going to need to adapt to…I'm not sure where it's happening, but they're coming in with more interest in group learning and in working together. Discussion in the lecture. A lot more people willing to talk in lecture, even though the lectures have 300 people willing to participate in a real way. It's interesting…

Lastly, in the art division, students were mentioned as influential by their outcomes and professional placement, and Professor A2A elaborated that the curriculum was, "…student-centric…we do ask them a lot what they think and what they want to learn."

Mentioned as often as students, faculty were also viewed as influential to the curriculum, with nine professors indicating that faculty were the main drivers of the undergraduate program. Professors NS2A, NS2B, SS2A, SS2B, SS3A, A1A, A1B, A2A, and A3A all had slightly different perspectives on

faculty influence. For example, Professor NS2B expressed that while faculty were influential overall, not all individuals were interested, "…some faculty that I think have a very poor understanding of what's going on in the [NS2] curriculum. That's probably true here as well as anywhere else. It's just the nature of faculty." In contrast, Professor SS3A indicated:

> I think faculty want to teach courses on things that interest them. I don't know about other departments, but our faculty actually are eager to develop new courses and also to change and kind of update the content of courses that they teach regularly. There's one whole side of it which is what the faculty want to do, what the faculty find interesting.

Similarly, Professor A1A described faculty influence as positive in her division of A1, but it could also be negative:

> I think faculty influences our curriculum more than anything else, what faculty beliefs and desires are for the curriculum. You try to avoid negative faculty influence, because some people want to teach something just because they're personally very into the topic, but it's not really important or relevant for the major overall. You see that kind of distortion happen at weaker programs, I think…

So, in this context, faculty influence could be beneficial or harmful, but only one professor mentioned a lack of faculty consensus or cohesion as being a harmful influence on curricula.

Program size was also mentioned as an important influence by seven professors, including Professors H1A, A1A, A1B, A2A, NS2B, NS3A and SS2A. Two differing perspectives were given by Professors SS2A and A1A, where Professor SS2A stated,

> We service a lot of students. We have a lot of very large classes. Even our so-called 400 level seminars sometimes will have 50 students and none. A lot of our majors graduate with maybe taking one class that has fewer than 50 students in the major.

Whereas Professor A1A's major was smaller with admission limits, so she explained this influence,

> There's 300 people each year who want to be [A1] majors, and we take 60. We could take more, but there's also a limit to what can be absorbed out in practice. We don't want graduates who can't find jobs. It's extremely competitive in the [A1] field.

As far as the size of the program being beneficial or harmful to the curriculum, larger classes and the need to use more temporary teaching faculty were mentioned as somewhat harmful, whereas reaching more students was mentioned again as a benefit.

The profession and/or related professional society were mentioned as an influence by five professors, all of whom also said the influence was positive. Not surprisingly, three of the Arts division professors, A1A, A3A and A3B mentioned the related profession. Professor A1A stated the professional association was beneficial, but with caution:

> …I think in the [A1 Association] case there's a good organization there, very forward looking. They have a lot of history of working with important [A1] educators. I respect what they've come up with, and I feel that's a good input. [Not all are this way]…I guess what I'm saying is that these externals groups, each one has their own…It's important to look at what they're asking for … with a sort of critical eye, I suppose.

In contrast, the respondents from NS3 department stated the related society was viewed as very helpful to their curriculum and in helping them understand their student success. Professor NS3A describes,

> …there's this whole [NS] education sort of component of the [NS3] Society…that do studies on how well students learn and all these units come up with reports on best practices. We had a visit a year ago from the American Institute of [NS3] who were studying [NS3] majors getting jobs in [NS3] in industry within one year from the time of graduation, so they were comparing different institution's success

> rates…and it turns out we're one of the most successful in the country, which we didn't know.
>
> They came out and they wanted to know what are we doing, and our answer was "We have no idea. We don't know why, what the reason is." But then they looked at our program and came up with a lot of suggestions for things we did a little bit differently that may have impacted it…It's actually a requirement in the major, three credits of independent study. Just that experience gives them something to put on their resume that possibly lets them stand out from someone who didn't have that kind of experience.
>
> …It really makes you think hard about reaching all the students. Yeah, it took awhile, but they just sent me the report… I actually have to go back and revisit it, but it was a way to hear what other places were doing and visiting many universities, we were the last one, and their view of what we were doing different, what we were doing well, and I think we actually had some suggestions for places we could improve as well. I'm going to send it to the dean…the report was very positive about our department.

This was a unique response among all the professors, and a very positive outcome for the NS3 department's curriculum.

The influence of professional and graduate school on curriculum was cited by Professors NS1A, NS1B, NS2A and SS3A. Professor NS2A described the influence of professional and graduate school on curriculum as bigger than just the impact on her department's program:

> … we look at things like what are the guidelines for admission to professional and graduate school but have we weight it towards the health sciences. A lot of the courses that we teach and a lot of way that we structure education not just in [NS2] but across the sciences here is driven by medical school admissions requirements.

Professors NS1A and SS3A also mentioned medical school requirements as being influential, but Professor NS1B described the push for more undergraduate research in their program as being driven by graduate school:

> Part of some of the things we change also in the curriculum is not only for the B.A. but also for the B.S. degree was to encourage students to go into undergraduate research…That has been kind of important in

> the last 10 years or so that when students consider in going into graduate school…the department recognizes that it is important and so then we see a lot more of undergraduate students willing … faculty willing to take on undergraduate students. That I see was also a significant change.

Professor NS2A thought the influence of medical school was somewhat negative on his program, but no other professor expressed an opinion about harms or benefits of these influences.

Research was mentioned as a curricular influence by Professors NS2B and NS1B, which was not surprising in the division of natural sciences. Professor NS1B mentioned that the field was moving very quickly, and Professor NS2B described how the undergraduate curriculum could not keep up with research:

> Over a long period of time, you can probably predict the general structure and content of the courses in the undergrad curriculum by what's going on in research. It's never going to be ahead or even with research, but if you look at how courses have changed over time they're really driven by research and how research information gets into the curriculum.

After research, there were various other influences on the curriculum described by individual professors, including: the setting in a large city and the bio-tech industry by Professor NS2B; the messages from the deans and provost by Professor A3B; the related community and its educational needs by Professor SS1A; the feedback given at ten year reviews by Professor H2A; the mission of the college and university by Professor A3B; the slow moving university and being a scientist and questioning the curriculum by Professor NS2A; the College Curriculum Committee by Professor NS3A; and seed money for new programs not being followed by continued funding by

Professor A2A. Related somewhat to budgets, but yet broader, Professor H1A spoke of the corporatization of the university:

> …I do think that our curriculum decisions have been greatly influenced by the corporatization of the university. We are becoming very business-like, entrepreneurial and so on in how we do things. We go out and we sell what we have to sell. We can do that in various ways. We can do that by nurturing an already existing interest in the language and culture of one of the countries that we teach about, or we can try to sell what we have to sell on the basis of whom does the work in a department like this…

These other influences mentioned could be noteworthy, but were all only mentioned by one particular professor, so they did not constitute a consensus result in this study.

Perceived Barriers to Curricular Change

When asked about barriers to curricular change, the inertia of faculty was cited by seven professors, the processing time and bureaucracy of change by six professors, resources and funding by four professors and the lack of faculty time for curricula was also mentioned by four professors. Other results included gaining consensus, training of faculty, lack of space and classrooms, the breadth of the field, technology and the number of faculty.

Illustrating the barrier of faculty inertia, Professor NS2A states:

> There's built in inertia of faculty. In such faculty we have complete control over…I mean if it weren't for that inertia you could change things as often as you want…In fact we modify our curriculum a lot. I know on an ongoing basis. The limiting factor is faculty acceptance of change. People, they like to do what they've always done and getting them change could be hard on them

Similar responses were given from Professors SS3A, A3A, NS3B, NS3A, A1B and NS1A, with only the humanities division not being represented. Related to faculty

inertia, Professor NS2B mentioned the slow process of gaining consensus among the faculty as a barrier to curricular change.

Six professors specifically mentioned the processing time and bureaucracy of the university system as a barrier to curricular change. Professor SS3A stated, "Those forms are such a drag and it takes forever. I hate it." Professor A3B thought it was not just a barrier, but that the system was outdated:

> … bureaucracy makes it slow. It's too slow now for the world we live in. That's just a fact. We are not able to respond in the tempo of the world we live in. I don't think anyone would see that as earth shattering. The fact that it takes me a year and a half to change something in the general catalog is…it's absurd…That's part of the problem of being in a large, research run institution. There's so many layers that one has to deal with that sometimes you just feel like our time is passing, we're losing out. If we can't respond efficiently, we'll lose students or we'll fall behind…

Professors SS2B, NS3B and H2A also mentioned it being very slow and time consuming, as well as somewhat difficult. This was well illustrated by Professor SS1A:

> SS1A Most people, if they know what they're getting in to, they'd think twice because it is very demanding to go through the process that is set up here at the University of Washington….These things change depending on who is on the committee…it's difficult too because you have people from other disciplines evaluating someone else's discipline…they don't quite understand what we're doing as well. Here though, they don't come right out saying this…

The barrier of the slow bureaucracy also relates to the barrier of faculty time, since the process was described as so time consuming. Professors H1A, SS3B and NS3A all identified faculty time as a barrier, and Professor SS2A described it well:

> When I've had these administrative roles that's encouraged me to think about that stuff but that's really the only time I ever do to be honest…I guess what I would say is we're all really busy. Almost all of us are very productive researchers so we just don't have a lot of leftover energy for fighting about the curriculum. It hasn't been a priority and I don't think anyone thinks our curriculum is perfect.

This also relates to resources and funding, because many faculty have time constraints due to additional pressures for funding. Professor A3A described the problem and her approach to solving it in her department by seeking donors:

> …it all comes back to funding. It comes back to resources…at some point, being clever is not going to be able to solve the problems. Always there's going to be problems, and the people, the departments that are going to thrive are the ones who have the big donors. I really spent the past 15 years, 12 years, 12 to 15 years, because I'm in year 18 of being a Chair, being a fundraiser. With raising money being my principal activities, I made it. I said, "No one's going to take care of us so we better take care of ourselves and we don't raise millions from grants." We raise thousands annually from individual donors, and it makes all the difference between first class and second class.

Resource barriers were also mentioned by Professor SS2A, SS2B and A2A, mostly relating to the lack of ability to hire more faculty for innovative curriculum.

Physical space was perceived as a barrier to curricular change by Professors NS3A and A1B, even though they are from very different departments. Professor A1B stated, "We don't have the space. We're busting at the seams." Similarly, Professor NS3A identified the barrier as university wide:

> We're out of space. The lecture halls are all over-subscribed. The university, as a whole, has a big problem, so it's a barrier. It just means you think carefully about doing anything before you do it just because of the repercussions.

Professor A1A illustrated several barriers to curricula as a complex problem that is inter-related:

> It's just hard. I think the hardest part is figuring out what to do. It's a design problem, in a way. There's limited resources, there's constraints —you've only got the students for so many years, for so many classes. It's a constant struggle because everybody wants the graduates to know more and more, but there's only so much time.

> Also in our field, technology has had such an impact. It's very difficult to keep on top of it. Every faculty has to learn new technologies. Not only that aspect, but how the new technology should be used or thought about. Each new technology brings up a lot of questions how it should be dealt with…[and] not lose important core values, yes. We try to focus more on fundamental things that the students need to become [A1] thinkers, because the technology changes so much so quickly…It's trying to figure out what students need to know now, and how to make sure they can keep learning in the future.

There was a unique response was from Professor NS1B, who stated that he thought there were no barriers to curricular change. He explains:

> I think when we consider changes and if they are reasonable and they are for the benefit of the program, for the benefit of the students, I don't think that it's going to be a problem…and I think if we have good reasons, convincing reasons, to make those changes, there's no problem to it.

Resources Used for Curricular Development

When approached with the task of curricular change, the professors were asked what resources they used, if the resources were adequate, and what other resources might be helpful for curricular change and development.

The most commonly used resource by professors was staff, either professional advisers or the dean's office staff. Professors A1B, A2A, NS1A, NS2B, A3A, A3B, SS1A, SS2A, SS3B and H1A all mentioned the staff as very helpful and an essential resource. As Professor SS2B illustrates:

> There's always been an associate dean or an assistant dean for undergraduate education, so the current individual…he's been a good sounding board, and occasionally that office will come up with resources of one kind or another. Our professional staff director of academic services is well connected with other people and other programs…so she's been very effective in terms of gathering ideas and experience from those kinds of people…So relying on those kind of resources and advice has been helpful in experience in that regard. That's pretty much it.

Professor NS3A also described why the advising staff was so important as a resource for curricula:

> It's mostly just faculty. Primarily, in this case, an undergraduate advisor who sort of knows the problems students encounter…she's often the first to know when the problem arises that two courses are starting at the same time and they need them both to graduate, and then she takes it down to the faculty undergraduate advisor and then if it makes it here then we scramble to find a solution.

The second most commonly used resource was to research other departments' curricula, with eleven professors responding that they used this approach (including Professors NS3B, SS3A, A3B, SS1A, NS1A, A2A, NS3A, and H2A). Professor NS2A described this approach, "…[I] talk to other department chairs especially those who run other big programs…we didn't want to reinvent the wheel especially didn't want to reinvent a flat wheel." Many professors mentioned using websites as well at talking to faculty at conferences, but Professor A1A had a unique resource to access other departmental information:

> When we were developing the A1 program, one thing that we did is that we got a grant from the College of Arts and Sciences at that time — to have a group of five different leaders in the field speak to us about this (then) new field. We had a symposium, and we invited other people too…Actually that activity helped us decide that we were going to hire an A1 person, and try to help define the A1 field relative to the other majors we have. That was a huge thing.

In the Natural Sciences division, some unique resources and structures were identified. Professor NS2A said, "...we did get help in the form of extra TAs from the college…Yes, financial resources." In the same department, Professor NS2A described the lecturers as a key resource:

> That's like in the single most important resource is I would say our cohort of lecturers for whom undergraduate classroom teaching is the reason that they get up in the morning…They say, here's what our students were able to do when we taught it this way. Here's what

> they were able to do when we try this new method and here's why we think that works and here's the papers and science and the NSF grants that support all that. When we're a bunch of scientists it's pretty hard to deny the evidence

Also, department NS1 used the administrating NS department as a resource, which is a unique structure among the departments.

When the professors were asked if the resources were adequate, nine of them thought they were, including Professors NS2A, A3A, H1A, H2A and A2A. Professor NS2B described that the resources were currently adequate, but had not always been that way:

> There are now. If I would've done this last winter I would've told you they're not, but I think the way that the money's being distributed now for the gateway series and also for some majors, at least in the College of Arts and Sciences…What I can say today is that we have more resources because of the tuition based budgeting…

Both Professors SS2A and NS1B thought the resources for curricular development were adequate, but implementation of curricula is where the resources were scarce, as the response from Professor NS1B illustrates:

> The limit is actually what happens after you put a new curriculum into place, how are you going to carry it out. In other words, the classes and the number of TAs and that kind of thing.

Professor A3B thought the resources were adequate for a unique reason, stating:

> I think I would use adequate. I'd say it's not inadequate but it's not … I don't see it as either…The reason I say it's adequate is I also have watched enough goings on to know that department faculty can be more creative than they'd like to believe they can in the face of realities.

In contrast, eight professors replied that they thought there were not adequate resources for curricula development, and Professors SS3A, SS3B,

SS2B, SS1A and A1A all stated that recent budget cuts hurt the resources that were previously available, as Professor A1A describes:

> …I feel basically you have to do things on your own. They [the administration] don't give you money for that…they used to…I think when we were developing an [A1] course we had a grant for a summer salary for some people to work on it, but I think all that stuff is gone.

Similarly, Professors NS1A, NS3A and NS3B mentioned curriculum development being an added task to their regular faculty and administrative work and there weren't adequate resources. For example, Professor NS1A stated,

> I don't think there are any resources available for developing curriculum…We don't have any release time. We don't have anything like that…Yeah, it's just extra burden…More time.

The professors were divided about the adequacy of resources, and either relied on staff or researching other departments for curricular ideas and models. However, when asked what they could use, the most common answer was more funding, especially in the form of release time for curricular tasks.

Interactions of Faculty as a Group About Curricula

When curricula are created or changed, the university requires that the faculty of the department vote to approve the proposal. This process is explored in the interview by asking the professors if their voice was heard, who brings up topics about curricula, and if they felt it had enough discussion (Questions 11 and 12, See Appendix Four).

All of the professors responded that they felt their voice was heard. One reason given by seven professors is that the departmental faculty are collegial. Professors H2A, NS2B, NS1A, A3B and A3A all used the term, and A1B even

described this process as being helpful:

> Oh, yes. We always read comments. It sounds pretty collegial. Oh, yes, absolutely…You hash it out. We're really quite congenial in the sense that … and collegial and that if we see that somebody's teaching too much of one thing or there should be a balance that should take place because we don't like to plot people in. We don't want to have them stuck in a situation where they don't like what they're doing. We really try to help each other out that way.

Similarly, Professor A3B described his department as "…an unusually collegial department from what I hear, unusually collegial." This could be due to Professor A3A's effort to make the department collegial (she is the chair):

> …and because playing nice with others is part of our discipline, we're awfully good at it, actually. For years, there really has been an active pursuit of collegiality. People who are cranky and annoying aren't hired. It's like, "I don't care how famous you are, and how accomplished you are, if you aren't going to be a nice person, we don't want you," and the same is true with the [grad] students. We just don't ... you just don't take somebody you think who's probably going to be difficult and temperamental. We have to have nice people. We argue with each other and then go out to lunch together.

Collegiality was also mentioned along with consensus by Professor NS3B:

> Oh, it's very collegial…we do everything by consensus. If I had an idea, it would be heard, but there would also be a lot of discussion because there are people who may not agree with those opinions. Because when you go through the process and you get the consensus by discussion, you actually unearth a lot of problems that you probably wouldn't have if you wouldn't have gone through the process. So you find positive things, negative things, things you thought you were going to do that turned out to be terrible ideas, and then you come up with some new ideas.

While not mentioning collegiality specifically, Professor SS2B described a very similar environment in his department:

> … we're relatively democratic department that looks for things to be vetted and come up from through discussion or consensus as opposed to formal voting and other sorts of things like that.

Professors in almost all the other departments described similar faculty interactions.

Professor SS3A noted, “We don't micromanage each other and I think if we did, we would run into a lot of resistance.” Professors NS2A, NS1B and SS1A had similar accounts, but Professor SS2A explained a different way things were done, “If one faculty member really cares about it, everybody else is indifferent then. You can make something happen. It will get done.” This was in contrast to the description of Professor SS2B, who was in the position of chair. Two other Professors, SS3B and NS3B expressed that their departments were not always collegial. Professor NS3B said it was partially due to faculty being “independent operators”, and Professor SS3B said it was a complicated issue at the time, but they had “recovered now”.

Eleven of the professors were chairs of their departments, so it was not surprising that the position of chair was mentioned when asking about their voice being heard among their peers. Professors H2A, A1A and A3A all stated that being a chair was key to being heard. Professor A3A also expressed her opinion that the field also makes a difference to how the chair position operates:

> Being a chair has more weight? It has more weight, of course. It’s like I have to two or three votes. Over the years, I’ve come to believe that that’s appropriate. There was a while there when I was very careful about somehow, I didn't want to try to tell people what to do and I realized, “Wait a minute, you’re the Chair.” One of the things that comes with longevity is there’s a lot of experience, and there’s a lot that I’ve been part of, but I think it’s tricky, because I also am fortunate. I feel like I do understand what each of the specialties need to be taught within our unit. I understand them well enough to evaluate their needs. I don’t think every Chair necessarily can say that. If you are in a really big unit, and I’m sure there are parts of Chemistry and Physics or ... that even the best, most experienced chemist has no idea, really, what their colleagues are doing, just because it’s such a vast … it’s a much bigger field.

Exploring further about the departmental faculty interactions, the professors were asked if they felt the topic had enough discussion. Ten professors (Professors H1A, H2A, SS2A, SS2B, NS3A, A2A, A3A and A3B) reported that they thought it did, and was mostly discussed in faculty meetings. All departments were in agreement except those from NS3. Professor NS3A remarked:

> … we have a graduate committee whose primary function is to stay on top of the graduate curricula, and then a majors committee, which has the same responsibility for the undergraduate program. That's where most of the changes come through, those committees. Then there's a committee for the general education courses which are not for [NS3] majors, but for the sort of people on campus who want to take a little bit of [NS3], and then a separate one for the entry level [NS3]. That's … so a lot of people thinking about the program all the time, and curricula is often a big part of it.

Professors SS3A, SS3B, SS1A, NS1A, NS1B, NS3B, A1A, and A1B all thought that curriculum did not get enough discussion for various reasons including faculty inaction, lack of time during meetings and overall resources. Again, all the departments were in alignment except NS3, and to illustrate, Professor NS3B said:

> I don't think they do. If someone has a curricular idea, it will get heard. If someone says, "I think we should offer this class but I don't want to teach it", then it doesn't happen. If you have something that you believe in and you're willing to put the time and effort into trying, I don't think anybody is going to stand in your way as long as there's room in the teaching assignments … you might have to get in line to teach special topics class. People are generally open if you've got an idea for curriculum…and then when you step on somebody's toes, they scream at you and then you learn how to tread a little more lightly and…I've been doing this for twenty-five years, after a while you learn when to wear heels and when to wear socks and slippers, right?

Two faculty members, Professors SS1A and A1A had similar responses about administrative things getting in the way of important curricular work.

Professor SS1A mentioned:

> Even the chairs meetings that I get, even at that level, how much those meetings are structured with … We're going to have this person come in and we're going to talk about this, and we're going to have this person come in and so and so, and there's no time for the people to brainstorm or talk and how rarely we ever talk about a curriculum.

And Professor A1A commented:

> I wish we had more time. We spend more time talking about emergencies that come up, or inconsequential policies…I saw this diagram that talked about types of work. Milton Glaser, a famous designer, said, " There is bad work, good work and great work." I think curriculum design is great work, and it's usually a really small proportion of our time. I don't even mind the good work things. I get my class organized, I do things that maybe I don't enjoy but need to be done, like writing letters of recommendation and things like that…I think curriculum design is great work…I don't know why my day is spent doing non-effective stuff.

No faculty member mentioned a lack of interest or importance of curriculum, just an overall sentiment that more discussion was needed.

The last question relating to faculty group interactions was about who brought up curricular topics. Three respondents (Professors A1A, A3B and NS2A) stated that it was brought up by faculty, students or staff. Professor NS2A's comment is illustrative:

> I'm sure you could get a wide range of opinion on this. It can come up from anywhere. It can come from the student advisory board. It can come from the advisers. It can come from faculty at any title or rank. It can come from senior surveys from students. There's a lot of input mechanisms to consider curricular change.

Eight faculty (Professors H1A, H2A, A1A, A1B, A3B, NS2A, NS1A, and NS3B) mentioned that curricular topics were brought up by any of the departmental faculty. Three professors including A3A, SS3A and SS3B, indicated that the chair

brought up the discussion and four professors, including Professors NS2B, A3B, SS1A, NS3A, cited the departmental curriculum committee, Students were significant to Professors NS2A, A3B and A1A. Professors SS2A, NS2A, A3B and A2A specifically mentioned professional advising staff as the key initiators of and contributors to curricular discussions. Professor A2A describes:

> …[Staff in A2] is our administrator and undergraduate advisor and I would say 100% her voice informs our conversations, spurs changes. She is crucial to bringing up topics and bringing a unique viewpoint to our conversations on curriculum because she meets her students, she sees the difficulties, she sees what's not working, she hears some complaints, things that we wouldn't necessarily know. Her outlook, her viewpoint, her perspective on everything to do with curriculum is incredibly important in this department, really valued. I think it's because they talk to her, she does our DARS report, she knows that they're double majors and we necessarily might not. She sees the scheduling conflicts or the time of degree issues or the fiscal issues. She might be much more aware of their GPA and will know what we gave them in our class, but how are they doing in the department? She has a much broader view actually. We might know how they're working in class and their progress; she sees how they're situated in the university and progressing through the degree.
> She sees them in a different way and we're in the trenches. She's in every faculty meeting. [Staff in A2] is taking notes and she's got things on the agenda too. Sometimes it's her agenda item and she brought up the discussion about the dance studies major. She's like, "I'm not sure we're getting the students we want." Then the faculty we were like, "I think we actually are." She was thinking something different, so that led to a conversation about that.

In the same way, Professor SS2A illustrates the role of the advising staff:

> Most of that is actually done by our [SS2 staff]. The associate chair works very closely with [SS2 staff]...when I have an idea and think why don't we do this, I call [SS2 staff] and explains why we can't do it because [SS2 staff] is the person that really has the handle on how different kinds of things will affect enrollment and capacities, and which courses are actually taught, and which courses we have staffing for, and which courses we have graduate student staffing for, as just as part of this process with a faculty member proposing something. I think [SS2 staff] at some point is going to have a voice in that and some of these things get killed that way because the faculty might think at first this is a great idea but then [SS2 staff] will explain if you do that, you won't ever have anyone to teach this course. It will be

> major or something and so this unpractical thing that people don't necessarily see the implications of it in the same way that she does.

This theme illustrates that departmental faculty operate in various ways, from who brings up curricular topics, how faculty interact with each other, and the importance of professional advising staff. It is important to note in this study that these departments had all succeeded in creating or changing curricula, so even if the professors expressed dissimilarity on how their faculty group may operate, they were able to accomplish curricular change.

Opinions on Leadership in the Area of Curricula

The professors were asked if they found their leadership, either the dean or chair, to be effective in the area of curricula. Thirteen of the eighteen professors, including professors NS1A, NS2B, NS3B, SS2A, SS2B, SS3B, H1A, H2A, A1A, A1B, A2A, A3A and A3B, responded very positively about the leadership, especially citing the college level deans and support staff as being exceptional. To illustrate, Professor A2A stated, "I feel like I've always had an amazing divisional deans…Kevin is similarly wonderful…", and Professor H1A thought, "The interactions I have had with the Dean's Office both as a faculty member and now as chair have been the very best." Professor NS2B further described the dean's office as a part of a larger system of leadership that is needed to support curricula:

> At the end of the day, you can't have an undergrad curriculum that works well unless you have everybody in the department involved, particularly the department chair, because if the department chair doesn't care, the faculty won't care either. It will never come up in a discussion or anything. Leadership is important.
>
> Yes, we have right now, particularly with (staff) in arts and sciences, we have a really good leadership for developing and maintaining an undergrad curriculum. It takes work. We don't have any obstacles to what we want to do as long as it's reasonable when we present our case and we back it up with reality.

> The one thing you don't hear…is that the deans are trying to do something to us. I know the science area is better than anything else. Basically, all the departments are really pretty well respected in the College of Arts and Sciences…I think that kind of relationship makes running your department so much easier because you don't have to worry about what your image is at the college or actually the university level.

There were no professors that expressed ineffective or poor leadership; rather, four professors (NS2A, NS1B, NS3A and SS1A) expressed a lack of interaction on curriculum. Professor NS3A portrayed the leadership as:

> They pretty much leave us alone, and we don't go to them for anything either just because they have no idea of what goes on here, and even … there's a person I deal with mostly is the associate dean for natural sciences, and even he does … they don't interfere with us and we don't rely upon them for advice. In general, they're fairly supportive and they're happy to help if we ever ask for help, but …

One respondent, Professor SS3A, expressed the most about this topic, as well as had some concerns about the leadership, resources and agendas that may affect curricula:

> Within the department, I feel like we have been paying attention. It's been sort of a top-down effort within the department connected to the development of ABB and the growth of the major and all the stuff. It's not like it's bubbling up from the faculty in that way.
>
> So far as all of us in the department, we do teach. It's just sort of who's seeing it from the point of view of being responsible for organizing the thing is a smaller group. I'm not sure I know that much about what is coming directly from the deans or higher levels except that there are things I see happening that I don't really like. For example, I know in humanities they've been working on new modules that there's …My understanding of it, because we're not in humanities; we're in social sciences, so I'm hearing this somewhat second-hand but the idea is that instead of thinking only in terms of departments and disciplines, they want to think in terms of sort of cross-cutting connections, modules that connect different disciplines around a theme or a topic.
>
> Now, I don't know about romanticism and literature but I think the emphasis to create cross-cutting things should be a good idea if you

> like in interdisciplinary stuff, but it can have this downside which is it can be sort of an effort to undermine disciplines and departments and replace people on the cheap, basically, by getting someone who will serve multiple disciplines but maybe doesn't know any of them in the same degree. I don't really see that happening yet in the social sciences. I think it's probably coming and I don't like it. One thing I have seen them doing, this comes out of Kevin Mihata's office is I forget what it's called…They had a call for courses that are like serving multiple disciplines. It's the same idea. I think it's the same idea, and so I feel like what I see is that the budgeting system that's in place has these sort of de-siloing effects. There are other initiatives that are coming down that are meant to counteract that but the way they do it feels like sort of undermining departments rather than supporting them to reach out.
>
> They're replacing people with temporary … they're replacing tenure track people with temporary people more and more, not on a one-to-one basis but just the effect of it when you don't replace people when they retire and you're hiring more and more temporary people to teach courses. That's just the effect of it. Then when there are this idea of sort of courses that are going to cross-cut disciplines, I feel like they're just further undermining us. I don't know. I do have a lot of suspicions about that because it feels to me like it comes from a place of cutting us rather than an intellectual commitment to interdisciplinary.

Generally, besides the one professor's concerns, the professors were very positive about the leadership both within and outside of their departments.

The University Structure and Curricula

The professors were asked if the department, college and university structure impeded or promoted curricular progress, and to share any ideas they had about structural changes (see Appendix Four). The variance in response was quite large, and there were many opinions, including those with little relation to curricula itself. A few examples of these outliers were concern for the undergraduate experience, the process of resource allocation, the administration of the extracurricular arts, and thoughts about too many administrators at the university.

Not as directly related to curricula, but could influence it, was the idea shared

by both professors in department A1 that they could be a different college like many similar A1 departments at other universities. However, Professor A1B noted it would be a poor idea, "We would be just one small little group and they'd slash and burn and we'll be gone within a minute." Similarly, Professor H2A, who is in a very small department, thought, "I don't know how long this departmental structure will survive", but that it could have a positive outcome because they could be "…united by a common purpose and a common interest and sharing resources rather than competing for them…" Also at the departmental level, Professor NS2A was not sure if it was the best structure in his department, but he 'inherited' it, and wasn't sure how he would restructure it.

Seven professors, including professors NS1B, NS2B, SS2B, H1A, H2A, A2A and A3B, thought the structure of their departments and college was good the way it was. In contrast, five professors suggested needed changes to the current structure, with Professors A3A, NS3A and SS2B suggesting changes at the college level. Professor A3A asserted:

> …part of the problem is that when the Board of Deans meets, there's one person at that table who represents something like 25,000 people, 23,000 students and then faculty and staff, as opposed to the I-School Dean who was looking after, what, 60 or 40, I mean the Evans School Dean has fewer faculty than the School of Art, and there's something wrong with that, I think…I used to think it would be good to have a College of the Arts for that very reason, that there was greater representation, or if there was a College of the Arts….

Professor SS2B thought the current college structure was too "Balkanized" which hurt the "bigger picture" of undergraduate education. Similarly, professor NS3A indicated:

> I don't like the idea of having separate deans for every one of these units, all with equal power. I mean, in a sense there's a lot of common ground across colleges… I'm not sure what the right answer

> is, but it's …I wouldn't say top-heavy, but it seems everyone operates a little bit too independently. That there is too little cooperation across colleges… I mean, even the college, when they plan…the deans … their primary focus is the health of the college, and so if they want to shrink [NS3] because under ABB they don't think it's making enough money, it might not be in the best interests of the university to shrink [NS3]…Do you really want to decide a faculty size on the number of majors and not on role within the university… how does the research mission fit in there? The college doesn't take that view because they're so worried about the college… maintaining the college at the level that it is, and that's … so that's what I would change. I don't know how to do it.

Three professors thought the Undergraduate Education unit was an ineffective structure, with Professor SS2B sharing that it also contributed to the "Balkanization" problem, and Professor SS1A sharing that it had too many layers overall:

> Even the structure of what Dean of the Undergraduate Education is supposed to do as compared to the Dean of Arts and Science and as a faculty member who I report to and do I even have a dotted line responsibility to the undergrad education or what are the parameters of the undergraduate education clearly are…

Relatedly, Professor NS2A thought:

> …undergraduate education should belong to the individual colleges. There shouldn't be any over arching funded structure so you get some TAs from the college and some from the undergraduate program. I just think that's crazy. I would like to see that unit decompose, disbanded and the resources allocated to the appropriate college. I just don't see any benefit to it and I'm under ABB [Activity-Based Budgeting].

Also involving university structure, seven professors (including professors NS1A, NS3B, SS3A, SS3B, SS2B, A1A and A2A) expressed that the curriculum approval process was too slow and bureaucratic in nature. Professor NS1A said, "I don't know why it takes so long. "I think it took years", Professor SS3A indicated, "...the whole kind of months long, many layers of curriculum approval, it just seems excessive to me", and Professor

SS2B pointed out that it "…should be more flexible and faster, more nimble."

Professor A1A explained her experience very explicitly:

> One thing I would definitely say—because we recently changed [the A1 degree offered]…Going through that process was just gruesome. First they said, "You'll just write this memo," then they said, "No, you have to write something for the HEC board." Then I had to take everything I'd done and stick in yet another form, and then we sent that on. There was a comment period and there were some questions that came back and I had to respond. It was incredibly tedious. There was a lot of bureaucracy around doing something that was actually not that big of a deal. It was also not transparent how it was supposed to work. They showed me some incredible flowchart that … had like 200 boxes on it.
>
> The process was terrible. No one was in charge, and the people who were supposed to help me didn't really know the process either. It took us a huge amount of time, getting it done was not a "good work" category.
> Yes, the arguments we made about doing the change were the same from paper to paper, and yet I had to put them in different configurations. So it was truly gruesome. That should definitely be changed. If you want to make a change, I understand that they want to check it, but why is it like that? The graduate side went through relatively simply, but on the undergraduate side, it's just a nightmare. It took them two years. I could understand if we were replicating another program or something like that. I felt that was really crazy.

Professor SS3A questioned the purpose of the curriculum committee structure:

> I think it's interesting that the curriculum committee, the whole idea of a curriculum committee apparently comes from the McCarthy era when they were worried about whether people were teaching marks and they wanted to sort of supervise and police that. That's why there exists such a bureaucratic thing. I think if there were a little bit more trust in departments and faculty to be able to organize curricula without a million layers of policing and oversight that would be a good thing. Honestly, I'm not sure I see exactly what the curriculum committee does at the level of like the university as a whole, what does it actually accomplish.

Also related to the college and university structure was the idea of coordinating between departments on offerings. Professor SS3A pointed out, "…systematically we have any formal way of sort of learning from what goes

on in other departments." Professor NS3B agreed and thought that the curriculum committees should perform that role:

> One thing that I think is missing, is any kind of coordination among departments… That's something I don't see the university curriculum committee or the college curriculum committee doing…it would be useful to look at what are the departments that offer courses with overlap.

In summary, the professors had a great diversity of thoughts about the university and departmental structure, with some suggesting changes and several expressing frustration over the slow bureaucratic approval curriculum approval process.

Satisfaction with Departmental Curricular Offerings

When faculty were queried about their satisfaction with their unit's curricular offerings, almost all said they were satisfied, but often commented that more could or should be done. This result could be largely due to the selected units, because they had all accomplished curricular change during the study protocol period (2005-2011).

In the Natural Science division, Professor NS2A was satisfied, but Professor NS2B stated a desire for some changes, focused on faculty coordination of offerings:

> The only thing I would like to see done with the undergrad curriculum, which I'm going to work on this year, is to try to get people in particular areas to look over what they're teaching and develop some awareness of what other faculty are teaching. Not to dictate what they're going to teach, but so they know what the students are introduced to in the other courses, this is mostly 400 level…So when they teach those 400 level courses their expectations aren't off the chart somewhere.

In NS1, on the other hand, both faculty A and B agreed that they would like to offer more courses, but would need more faculty to increase their offerings. For example, Professor NS1A described:

> Well, like I said, I think there's some things we'd like to do. I mean we'd like to offer an honors course…we haven't been able to do that and I wish we could do that. We'd need more faculty…but I think that's a hard case for us to make because we don't have heavy teaching loads, but our expectations for our research productivity are also much higher. So something has to give, right? So we could all teach more, but then we'd have to have lower expectations on our research productivity.

In the NS3 department, both faculty thought they could also offer more, but instead of a lack of faculty, they felt a lack of student enrollment in the upper-division courses, but they also felt their program and the students they produced were very successful, and they met most student's needs. Professor NS3A indicated:

> We were studied for our students getting jobs in industry after one year of graduation, that's, for some reason something we've been quite successful with, perhaps #1. We still have problems, for example, our 400 level courses are undersubscribed…There are some courses that we should offer that we don't at this 400 level. Especially with the graduate bound students and for them doing well on the GREs to get into the best schools and things. I don't think we're yet where we want to be, we still have ways to improve, but for the courses that we do offer, I believe we do a good job.

Professor NS3B elaborated further:

> We'd love to be able to offer more but we don't necessarily have the student body to justify it. We're able to offer what we believe is a core curriculum that gets somebody ready for what they want to do. We make it very easy to double major…We also make it possible that our upper division electives can be a…pre req in another department…and have that count. What that means, is our own 400 level classes don't get as populated as they might be. That's what the students need for their education. It'd be great to offer more.

In the social science division, there were similar findings, but more respondents mentioned teaching and related issues. In the SS1 department, Professor SS1A mentioned a way to do more teaching without more faculty:

> Again, every unit wants probably more faculty. We've done some recent teaching and recent partnership with things (outside the department)...

In the SS3 department, the faculty were in the midst of doing some slight changes to their curricula, but were generally satisfied. Professor SS3A was especially thoughtful about the faculty and teaching:

> If I was looking at it and just looking at it in the abstract and saying, "Does this look like a great thing? Is it perfectly coherent? Does it represent the field?" It's a little random, and I think there are human beings involved. I don't think we can achieve a higher level degree, I don't think we can achieve a whole lot more coherence without losing something else that's really important like faculty caring about their classes as connected to their own interests and being able to feed their research into teaching and stuff. That's a sort of a centrifugal force. It leads the curriculum off in new directions always but it's not a bad thing ultimately because it allows for a certain degree of enthusiasm and engagement that will be hard to replicate if we were just teaching a pre-approved series of courses that had been decided in advance. I think we've got an okay balance right now and it's a work in progress.

Professor SS3B agreed that the offerings were good, but did not mention teaching. She mentioned that the curricula was currently being revised:

> I think we have got very good curricular offerings. We have another option…and we haven't worked on developing it and advertising it because we were so busy containing the other one and so the next thing we're going to do is look at that.

In the SS2 department, both faculty highlighted the quality of their teaching when asked about the curricular offerings. Professor SS2A stated satisfaction in an interesting way:

> Yeah I guess I'm satisfied because if I were unsatisfied I would put in more energy to change it. I said, I think we do pretty well given what we have and we have some very good teachers. Overall I think it works pretty well but it's certainly not ideal.

Similarly, Professor SS2B highlighted teaching as well as curricular offerings:

> Generally…to the extent that our students feel satisfied and they report pretty high levels of satisfaction in the exit surveys that we do. To the extent that we feel good about the kinds of opportunities we can make available given the constraints, I feel satisfied. Are there things that I'd want to change? Is there more I want to do? Certainly there always is. But I think in general this is a strong department.

> One of the things that's really strong in this department is the quality of teaching. We've had a number of people over the years that have won distinguished teaching awards, not only just the one last year, but six or seven people…So it's something we take seriously and something we do talk about, and we have a number of faculty that are very dedicated to undergraduate education in that way.

In the Art division, the A3 department had made some recent curricular changes, and both faculty were satisfied with their offerings. Professor A3A was looking forward to implementing the changes, stating satisfaction only after the changes were done:

> I will be, when we've made our changes. Yes, we're moving, and most a lot of it will be in place in the fall.

On the other hand, Professor A3B was very satisfied with the way the program was designed, and did not state anything about the pending changes:

> I think we have the right balance. I think we have the right balance of specialization…At the same time, we have a really strong breadth of education that makes sure we're putting people out with a good liberal arts degree. In my opinion, it's one of the strongest BAs in the country in that way. I'm biased though.

In the A1 department, Professor A1A was concerned about the department's graduate curricula but satisfied with the undergraduate offerings:

> I wish we could figure out what to do with the graduate students. That's my main concern now. The grad students want to have their own separate classes, but we don't really have the resources to cover that…Part of it too is I think graduate education in design has not been well developed overall. It's been a struggle to figure out what our role would be in the larger picture.
>
> I think we have the undergraduate curriculum relatively under control. I think right now there's some shuffling, trying to decide what will … Again, responding to technology. I think that's normal and I don't see that as a flaw.

In the same A1 department, Professor A1B did not seem as satisfied overall, and expressed thoughts and concerns about faculty demographics in the unit:

> At the university and most universities, all the faculty are aging. No one's retiring. If you don't have people going, you don't have new people coming in. The new people have ideas. They have the energy. They have the passion. They have the drive. They have the connection with the students. That's why it's really important in this transition from the difficult times that we've had economically to move forward to try to hire at least a few new faculty because what's going to happen is all the senior faculty they're going to go at the same time. There'll be no overlap and no history and no connection whatsoever. That has a lot to do with the curriculum too.
>
> In the past, the faculty would retire on a regular basis. Now, they're just sticking around and some faculty are pretty tired. They're mixed. Some senior faculty are great instructors but there're a few that aren't…they're not doing their own research and they're not teaching. What are you going to do with them? You don't want them in the classroom. How do you penalize them? You have them teach some more? No. It's a Catch-22. If there's a meeting to attend, they don't show up because they say, "Hey, look. I'm out the door. What am I going to contribute to this?" That's why the great need to have some newer faculty.

In the A2 department, again the issue of numbers of faculty arose:

> I wish that we were in a place where they could do more courses that we offer instead of choosing. The flexibility is necessary because most are double majors and because our faculty is too small to offer all courses annually. I wish they could do more of what we offer because I think that it's a pretty good curriculum. We're looking at adding a research symposium course next year.

In the humanities, Professor H1A was quite satisfied, stating, "I think we do a good job", and Professor H2A response was more like some of the other departments, stating:

> Oh, we will always love to offer more. There are all those holes, which we would love to fill and teach more…but we don't have the people power to do that. We just requested a new position, but the hiring has been so problematic to put it mildly and that I'm not sure of it.

Chapter 5: Conclusions and Implications for Future Research

The nine themes presented herein explore the professors' perspectives on curriculum, and sought to answer the key research question about what faculty know about curricular change and development. The convergence of what the eighteen professors, from eleven very different departments and fields, said about their own experience and knowledge about curricula, influences on curricula, barriers to curricular change, and leadership as it relates to curricula was somewhat surprising. The research identified a similarity in the faculty chair experience at this large research university, regardless of field or research background.

Some of the theme areas that emerged in the research do provide answers to the key research question about what faculty know about curricular change and development, especially relating to their experience and their thoughts on their own knowledge as it relates to curricula. The other themes also describe many related questions to the key question, including: influences on curricula; barriers to curricular change; resources used for curricular development; faculty group interactions around curricula; leadership as it relates to curricula; university and departmental structure and satisfaction with offerings. There are limitations to the significance of this research, since it is an exploratory case study using qualitative methods at one university, and only selected the faculty leadership of departmental chair, director or associate director. Even with the limited generalizability beyond the scope of the research, this research does add to the dialogue, advances the related literature, and clearly demonstrates the need for further research on faculty and curricula, most especially from the faculty perspective.

The first theme was faculty experience and roles played with curricular development. The professors responded that they gained curricular experience on the job, especially when faced with the task of curricula. None of the literature reviewed examined where faculty gained curricular experience, but Diamond (1998) argues, "…non-tenured faculty often avoid such activities." (1998, p.6) Given this, it was not surprising that all of the faculty interviewed were tenured professors, all with many years of experience at the university. The faculty roles played in curricula were found to be very similar across departments; almost all played a role of leadership, which was positional as either director or chair of a department.

The next theme was about knowledge about curricular change and development, and the professors were directly asked 'what they knew' and 'where they gained their knowledge'. The findings were that they gained knowledge about curricula from their experience and role, and had no specific training or mentorship. Several also mentioned a lack of knowledge before they were faced with the task, which supports Barnett and Coate's (2005) argument that higher education curriculum has not been considered as a practice, and Diamond's (2002) assertion that faculty may not know much about curriculum design (2002, p.140). To help with their curricular development task, the Professors indicated they used examples from other successful programs to see what worked in their curricula. This was in contrast to several of the guides for curricular change presented by Dressel (1971), Berquist Gould and Greenberg (1981) and Genetemann, Fletcher and Potter (1994), who all suggest approaches that are systematic and use different types of research, including institutional data and educational assessment methods. While the professors in this study did not directly mention these approaches, faculty in the

department who participated in the change process could have used them.

The next theme of curricular influences inquired about what influenced curricula internally and externally, and if the Professors thought these influences benefitted or harmed their curricula. The most commonly indicated influence was financial resources and the budgeting system, which was supported somewhat by the literature, yet in a different way. Slaughter's (2002) argument that many market forces influence curricula, most especially in certain science and technology fields, was focused on outside the university, whereas the Professors in this research all cited internal university budgeting issues as being the source of the financial strain. Chait (2002) makes similar arguments about the political economy at play in curricula, but his focus on the internal forces of the university coincide more with the research findings, especially his assertions about faculty governance and shifts toward a more corporate model. This concept was reinforced by the introduction of activity-based budgeting at the university, which rewards productivity in certain areas of the university by measuring course enrollment, for example. The concept of productivity arguably would not have been present at the university without the influence of political economic influence. Similarly, the professors mentioned the influence of students, which was supported by Hook (1970), McMillan (1994) and Altbach (1994), with student demographics, student demands and student interests cited in their research. It could also be argued that this is a market force as described by Slaughter (2002), since students can be seen as the market for curricula. The professors also mentioned the size of the department and the number of faculty, which is a logical influence on what can be offered as well as how a unit is managed, but it was not mentioned in the literature

except for briefly by Diamond (2002) as a consideration when developing curricular proposals. Lastly, related professional organizations were mentioned as somewhat influential, which is confirmed by Slaughter (2002), where she states that these groups are one of the many strong forces guiding curricula.

When the professors spoke of the barriers to curricular change, they again mentioned resources, as well as the inertia of the faculty and the amount of time it takes to perform curricular tasks. These findings were reinforced by Diamond (1998), who described one of the barriers as a lack of reward system for faculty taking on the task of curricula in addition to their regular duties, which is also similar to Litzinger, Koubek and Wormley's (2009)'s description of faculty work on curriculum reform requiring "substantial effort and time." (2009, p. 45) The idea of faculty inertia could be due to the work required with little reward, or as Diamond (2002) argues that ownership of the process by faculty is key to successful curriculum design. Diamond (1998) also mentioned the university structure as a barrier to curricular change, which is again confirmed by the research, with professors citing the lengthy bureaucratic process involved in any change of curricula. Other literature, like Bogue and Aper (2000), focus on challenges to the curricula, but did not address curricular change itself or the faculty perspective on curricula.

When it came to the task of curricula, the professors cited using various resources, but mostly advising staff as well as resources from other related departments. These resources were not mentioned in the literature as significant, even by Diamond (1998) in his 'practical guide', which offered advice and 'how to' for faculty. Many professors mentioned the advising staff as a key resource to their

successful curricular reform, which may be an area for further research. When asked a follow up question about if they thought resources were adequate, the professors had split responses, which is somewhat in agreement with Diamond (1998) and Litzinger, Koubek and Wormley (2009) with their assertions of curricular work just being extra work for the faculty. Resource adequacy could also be an area for further research since the professors queried in this research had accomplished curricular reform, and those that have not may not have adequate resources for the task or other ideas about resources.

Most thought their departments were collegial and operated well overall, often coming to consensus about curricular issues. This result concurs with Roy, Borin, Justra's (2007) description of what makes department level curricular change successful, and identified consensus as a key factor to success, which was also similar to Devine, Daly, Lero and MacMartin (2007). The idea of collegiality was reinforced by Hughes, who stated, "Faculty must become adept at working in teams…" (2007, p. 108). When the professors were asked about whether they had enough discussion about curricula, it was a split response. This result could be related to the idea of faculty inertia, which was mentioned as a barrier to curricular change.

There was agreement among the professors that the university leadership was good and effective in the area of curricula, which is again supported by the literature, especially Winston (1996) who posits that a good leadership relationship is key to curricular reform. Another large study by Montez, Wolverton and Gmelch (2002) points out that good functional leadership is important to successful curricula. Again, since the professors in this study succeeded in curricular reform,

another area of further research may ask faculty who have not successfully revised their programs about the effectiveness of university leadership.

When queried about university and departmental structure, the professors varied significantly in their responses about departmental and university structure in relation to curricula. Several did mention the bureaucratic structure as problematic for curricular reform, which paralleled Diamond's (1998) argument that university structure is a barrier to curricular change.

The final theme in the research was about satisfaction with curricular offerings. Almost all of the professors indicated that they were satisfied with their offerings, which was not a surprising result since they all had changed their curricula within the last few years. Satisfaction with curricular offerings is again an area that could be researched further by asking faculty who had not accomplished curricular change about their curricular satisfaction.

An overarching topic that arose from all of the professors in this research was resources, specifically in the area of budgets. The interviews were conducted during a time of recession and budget cuts, so it was likely departmental leaders were concerned about the fiscal health of their units. There were also varied responses to the budgeting system in general, which was more positive in perspective from the larger units that would benefit from more enrollment versus the smaller units that are likely have more budget cuts. This topic relates back to the literature about the political economy from Slaughter (2002) and Chait (2002); but the influence of outside corporations or organizations was not as critical as the diminishing state support, which is the main source of funding for undergraduate education at the public university.

Another perspective that could be significant to research on curricula from a faculty perspective is that from junior faculty. When they join a department, they inherit a curricular program that is already in place. With the tenure system, most junior faculty focus on establishing their own research and teaching programs first, and do not get involved in curricular development until later in their careers, which was indicated by a few respondents. By the time tenure is given, they have been teaching in a unit usually for at least three if not five years, and often have become accustomed to the way in which a unit delivers its curricula. This 'norming' process could greatly influence the way in which they interact with the curricula during their tenure in the unit. It could be studied by querying newly hired non-tenured faculty on a regular basis, then again after a period of time to see if their perspectives have shifted.

In conducting this study, it was significant to note that all the faculty interviewed were very interested in the topic, some going well over their allotted interview time because they felt strongly about curricula. They clearly expressed frustrations with parts of the process, but also a great depth of scholarly curiosity about the system in general, and thoughtfulness about the topic. Even conducting the study may have an impact, because as Professor SS2A noted about curricula, "I thought about it more today than I usually do."

In conclusion, the perspective and role of the faculty was well summarized by the concluding thoughts of Professor H1A:

> I think that we are right on target when they're saying that the faculty is in charge of curriculum. That's our responsibility. The administration can claim some other things; I'm not going to dispute every one of them. As long as they keep their hands off the curriculum, I'm OK with that. That is our job. That is a great mystery. That is one of the great

> mysteries of existence. How much do they know? And how can anybody know what they know? I guess that's where you come in.
>
> We are bumbling around. Yeah. You see the thing about it is that the university attracts a certain type of person. One of the great blessings of the university is that you haven't got all these professors running loose in the streets because there is a place for us to go. The thing is that the kind of person that is attracted to this is possibly a person who is less likely to grossly fail than some would be.
>
> You don't become a faculty member because you are trying to get rich. You don't become a faculty member because you're not going to be made fun of in the newspapers. Why do you become a faculty member? It's usually because of some sort of intellectual or educational commitment or both. Curiosity, or a restlessness about learning things. I think the kind of people who find it attractive to become faculty members may also be the kind of people who bumble better than the average.

Implications for Future Research

This research is just the start of the exploration into the faculty perspective about curriculum; there is much more that can be studied, both in depth and in scope. One missing perspective is from faculty who were not involved in curricular change or development, even though all teaching faculty have a vote on curricular decisions. A larger study, perhaps in a survey format, would be a logical next step for further research in this area. Another approach would be to replicate this study at similar and different institutions to compare the faculty perspective outside of the boundaries of this particular university and its structure. There are also different structural approaches to the research that could be taken, for example, only interviewing faculty from a particular discipline across several institutions to research the perspective of those disciplinary professors. Professional schools or colleges, like engineering, should also be explored, since regulation of curriculum by professional accrediting bodies likely influences the faculty perspective on

curricula. Overall, the research gives voice to the faculty, and the faculty have much more to contribute to the conversation.

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Appendix One

UNIVERSITY of WASHINGTON
HUMAN SUBJECTS DIVISION

Date: February 24, 2012

PI: Ms. Michelle Trudeau
Graduate Student
Education

CC: Dr. Steven Olswang

RE: HSD study #42455
"The Role of Faculty in Undergraduate Curricula: An Exploration of Influences and Ways of Knowing"

Dear Ms. Trudeau:

The University of Washington Human Subjects Division (HSD) has determined that your research qualifies for exempt status in accordance with the federal regulations under 45 CFR 46.101/ 21 CFR 56.104. Details of this determination are as follows:

Exempt category determination: **2**

Determination period: **2/24/2012 - 2/23/2017.**

Although research that qualifies for exempt status is not governed by federal requirements for research involving human subjects, investigators still have a responsibility to protect the rights and welfare of their subjects, and are expected to conduct their research in accordance with the ethical principles of *Justice, Beneficence* and *Respect for Persons, as* described in the Belmont Report, as well as with state and local institutional policy.

Determination Period: An exempt determination is valid for five years from the date of the determination, as long as the nature of the research activity remains the same. If there is any substantive change to the activity that has determined to be exempt, one that alters the overall design, procedures, or risk/benefit ratio to subjects, the exempt determination will no longer be valid. Exempt determinations expire automatically at the end of the five-year period. If you complete your project before the end of the determination period, it is not necessary to make a formal request that your study be closed. Should you need to continue your research activity beyond the five-year determination period, you will need to submit a new *Exempt Status Request* form for review and determination *prior to implementation*.

Revisions: Only modifications that are deemed "minor" are allowable, in other words, modifications that do not change the nature of the research and therefore do not affect the validity of the exempt determination. **Please refer to the Guidance document for more information about what are considered minor changes.** If changes that are considered to be "substantive" occur to the research, that is, changes that alter the nature of the research and therefore affect the validity of the exempt determination, a new *Exempt Status Request* must be submitted to HSD for review and determination *prior to implementation*.

Problems: If issues should arise during the conduct of the research, such as unanticipated problems, adverse events or any problem that may increase the risk to the human subjects and change the category of review, notify HSD promptly. Any complaints from subjects pertaining to the risk and benefits of the research must be reported to HSD.

Please use the HSD study number listed above on any forms submitted which relate to this research, or on any correspondence with the HSD office.

Good luck in your research. If we can be of further assistance, please contact us at (206) 543-0098 or via email at hsdinfo@uw.edu. Thank you for your cooperation.

Sincerely,

Laurie E. Berger
Human Subjects Review Administrator
(206) 543-3033
lberger@u.washington.edu

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Appendix Two

Chart of Subject Units*

Department Division and Code	Faculty Count	Number Interviewed	Students in Major Count
Humanities 1	7	1	49
Humanities 2	6	1	39
Social Science 1	6	1	20
Social Science 2	26	2	679
Social Science 3	27	2	431
Natural Science 1	23	2	718
Natural Science 2	46	2	1342
Natural Science 3	41	1	306
Arts 1	38	2	474
Arts 2	5	1	25
Arts 3	13	2	61

*Data Source: UW Website, www.washington.edu

Appendix Three

UNIVERSITY OF WASHINGTON
CONSENT FORM

HSD study #42455
"The Role of Faculty in Undergraduate Curricula:
An Exploration of Influences and Ways of Knowing"

Researcher: Michelle Trudeau, Ed.D. Candidate in the College of Education, and Director, Student and Academic Services, School of Environmental and Forest Sciences, 206-616-1533;
Faculty Adviser: Professor Steven Olswang, Education, 206-685-7693

Researchers' statement

We are asking you to be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called "informed consent." We will give you a copy of this form for your records.

PURPOSE OF THE STUDY

This dissertation research will ask key informants in departments that have created or changed their curricula significantly since 2005 until 2011 at the University of Washington about their roles, their knowledge and the process they went through in their own experience and in their own words. For this research, key informants from each department are the departmental chair or director and the chair or director of the departmental curriculum committee.

STUDY PROCEDURES

You will be asked to participate in an interview of about an hour in length with the researcher. The researcher will have questions to ask you, but also ask you to elaborate where you desire to give more information. The researcher will ask you what happened when you were working on your major curricula, whom else was involved and in what ways, and what may have influenced the outcomes. The researcher may also ask you how you personally developed curricular knowledge, and if you feel your knowledge is adequate. You may refuse to answer any question during the interview. The researcher will use a recording device during the interview, as well as handwriting interview notes.

RISKS, STRESS, OR DISCOMFORT

During the interview, the researcher will be asking you about your professional knowledge and interactions with others at your position at UW. This may cause stress, discomfort, invasion of privacy and concern for your reputation or that of

your department. If you are concerned about any side effects, please inform the researcher. The researcher can try to change the direction of the questioning, and end the interview if problems persist. You should contact the researcher in the event of study-related injury, illness, or distress. The recordings of the interview will be transcribed within 60 days of the interview and then deleted/destroyed from the device. You will be given an opportunity to review the recordings or transcripts and delete any portions. The researcher will keep the transcriptions in a locked cabinet until after publication of the dissertation research, and destroyed according to human subjects protocol.

ALTERNATIVES TO TAKING PART IN THIS STUDY

If you choose not to be interviewed, you can answer questions via email from the researcher, but the time involved to answer the questions may take longer than the interview process. You can also choose to not participate.

BENEFITS OF THE STUDY

The role of faculty in undergraduate curricular change and development is not well researched from what the literature has shown. The proposed research may demonstrate specific faculty needs in the area of curricula, which may include curricular guides, training or targeted staff assistance. You may, if interested, wish to read the conclusions of the research, which may help you in future curricular assignments.

CONFIDENTIALITY OF RESEARCH INFORMATION

All of the information you provide will be confidential, but not anonymous since you can possibly be identified by your position in the department and role in the curricular change described. However, if we learn that you intend to harm yourself or others, we must report that to the authorities. Government or university staff sometimes review studies such as this one to make sure they are being done safely and legally. If a review of this study takes place, your records may be examined. The reviewers will protect your privacy. The study records will not be used to put you at legal risk of harm. A copy of the consent form will be kept with the transcript of the interview.

OTHER INFORMATION

You may refuse to participate and you are free to withdraw from this study at any time without penalty or loss of benefits to which you are otherwise entitled.

COMPENSATION FOR INJURY

No money has been set aside to pay for things like lost wages, lost time, or pain. However, you do not waive any rights by signing this consent form.

Printed name of study staff obtaining consent Signature Date

Subject's statement

This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, I

can ask one of the researchers listed above. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098. I will receive a copy of this consent form.

Printed name of subject Signature of subject Date

Copies to: Researcher
Subject

Appendix Four

Human Subjects #42455 "The Role of Faculty in Undergraduate Curricula: An Exploration of Influences and Ways of Knowing" PI: Michelle Trudeau, Graduate Student

Interview Structure

After introduction to the purpose of the study, the subjects will be asked:

1. I noticed you had a curricular change in (YEAR). Can you describe your experience with curricular development and change?
2. Can you further describe your specific role, both formal and informal, in your unit's undergraduate curricula?
3. What do you know about developing entire undergraduate curricular programs?
4. How did you obtain the knowledge you currently have?
5. What do you think influences your curricula the most? Please include both internal and external sources.
6. Do you see these influences as beneficial or harmful to your curricula? If so, in what ways?
7. Do you see barriers to curricular change? If so, what are they?
8. When you did change or create your curricula (as was approved in YEAR), what resources (people included) on campus did you use, if any, to help you with your curricula and the process?
9. What resources off campus did you use, if any?
10. Do you feel there are adequate resources available for developing curricula? Why or why not, and what might be helpful?
11. If you had ideas about curricula, do you think your voice would be heard

among your peers? Why or why not?

12. Who brings up topics about curricula? Do you feel the topic gets enough discussion? Why or why not?
13. Do you find your leadership (dean OR chair/director) to be effective, especially in the area of curricula?
14. Do you think the current structure (faculty or administration) impedes or promotes progress in regards to curricula?
15. What changes would you make to the current structure in your department and why?
16. What changes would you make to the current structure at the university and why?
17. Overall, do you feel satisfied with your unit's curricular offerings? Why or why not?
18. Is there anything else related to curricula, especially relating to the faculty role, that you would like to discuss?

Appendix Five

UW Form 1503: Creating and Changing Undergraduate Academic Programs

(see next page)

UNIVERSITY OF WASHINGTON
CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

OFFICE USE ONLY
Control #

After college/school/campus review, send a signed original and 1 copy to the Curriculum Office/FCAS, Box 355850.

For information about when and how to use this form: http://depts.washington.edu/uwcr/1503instructions.pdf

College/Campus	**Department/Unit**	**Date**

New Programs

- ☐ Leading to a Bachelor of _____ in _____ degree.
- ☐ Leading to a Bachelor of _____degree with a major in _____.
- ☐ Leading to a _____ Option within the existing major in _____.
- ☐ Leading to a minor in _____

Changes to Existing Programs

- ☐ New Admission Requirements for the Major in _____ within the Bachelor of _____.
- ☐ Revised Admission Requirements for the Major in _____ within the Bachelor of _____.
- ☐ Revised Program Requirements for the Major in _____ within the Bachelor of _____.
- ☐ Revised Requirements for the Option in _____within the major in _____.
- ☐ Revised Requirements for the Minor in _____.

Other Changes

- ☐ Change name of program from _____ to _____.
- ☐ Change delivery method or location of program.
- ☐ New or Revised Continuation Policy for _____.
- ☐ New Honors Requirements for _____.
- ☐ Eliminate program in _____.

Proposed Effective Date: **Quarter:** ☐ Autumn ☐ Winter ☐ Spring ☐ Summer **Year: 20 __**

Contact Person:	Phone:	Email:	Box:

EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE

For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (*Use additional pages if necessary*).

OTHER DEPARTMENTS AFFECTED

List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions.

Department/Unit:	Chair/Program Director:	Date:
Department/Unit:	Chair/Program Director	Date:

CATALOG COPY
Catalog Copy as currently written. Include only sections/paragraphs that would be changed if your request is approved. Please cross out or otherwise highlight any deletions.

PROPOSED CATALOG COPY
Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications). **Please note:** all copy will be edited to reflect uniform style in the General Catalog.

APPROVALS	
Chair/Program Director:	Date:
College/School/Campus Curriculum Committee:	Date:
Dean/Vice Chancellor:	Date:
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date:
POST TRI-CAMPUS APPROVAL (when needed)	
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date: