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"Getting a Lot of Education:"

College Students' Out-of-Classroom Interactions with Faculty and the Implications of Summer Session

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• • Introduction and Overview • •

By providing a forum for Summer Session administrators and researchers to discuss their practice, the inaugural issue of *Summer Academe* simultaneously offered a view of the common experiences among even the most disparate institutions. One common thread among the viewpoints expressed was that Summer Session administrators are called upon not only to have expertise in curriculum planning, but also to possess savvy in marketing.

Interestingly, many of the constituents to whom the Summer Session administrators must market their programs are found within their own institutions. Martin (1996-1997) discussed the perennial issue facing Summer Session administrators: challenging the notion that the Summer Session is "on the periphery of the university's mission," (p. 8). Kobayashi (1996-1997) discussed the persistence of Summer Session's nature as a "slack period," evidenced by the fact that the Summer Session student enrollment is, on average, approximately one-third of the fall term (Summary of Reports of the Association of University Summer

Sessions, cited in Kobayashi, 1996-1997). As a result, the Summer Session must be creatively marketed to students, to convince them to spend their summers studying.

In contrast to the challenges presented by Summer Session, a second common thread in *Summer Academe* addressed the educational strengths of the unique nature of the Summer Session. Confirming Scott's (1993) review of the literature which found that intensive Summer Session courses yielded closer student-teacher relationships, Grobsmith's (1996-1997) research found that nearly one-half of students surveyed thought the Summer Session courses were better than academic year courses, owing to better relationships with their professors: "professors were more relaxed, had more time for them and were more available" (p. 30). Similarly, Peca's (1996-1997) reflections on her experiences teaching in the Summer Session confirmed that faculty also perceive closer connection with students: "I know these students better than most of the other students with whom I've taught because we spent time together around class, not just during class" (p. 61). These findings suggest that, compared to the rest of the academic year, there was an increase in nonclassroom interaction between students and faculty during the Summer Session.

The fact that the Summer Session may be more conducive to student-faculty interaction outside of class than the "regular" school year has significant implications for student learning: consistently and unanimously, the literature on how college affects students has traced nonclassroom interaction with faculty to the epicenter of student learning (Astin, 1993; Pascarella, 1980; Pascarella & Terenzini, 1991). This example of how the Summer Session has the potential to offer advantages over the rest of the school year may have significant implications for marketing considerations as well: it offers compelling evidence that Summer Session is not peripheral to the mission of universities, but rather is central to the mission of educating students.

The research presented in this article offers a fuller understanding of the factors that encourage or discourage student-faculty interaction outside of class and how these interactions affect students. The research serves the dual purpose of (1) informing Summer Session administrators of the significance of the unique quality of the Summer Session in promoting student-faculty interaction, and (2) offering Summer Session administrators insight into how they might increase the frequency and quality of these interactions.

• • Review of the Literature
on Student-Faculty Interaction Outside of Class • •

As studies of the undergraduate experience have discovered, much of students' college experience falls outside the boundaries of the classroom. It has been estimated that only one-third of students' waking hours are spent in class or studying, leaving students with at least 70 hours discretionary time each week (Kuh, Schuh, Whitt, Andreas, Lyons, Strange, Krehbiel, & MacKay, 1991; Boyer, 1987; Wilson, Gaff, Dienst, Wood, & Bavary, 1975). The research on college student outcomes suggests that when students spend some of their time outside of class with faculty, for example, in an advising session, as a continuation of class discussion or during office hours, that the effects of those interactions can span a lifetime: students' commitment to completing college, their intellectual and personal development during the college experience, and their aspirations for beyond college can be significantly affected by these relationships (Pascarella & Terenzini, 1991; Pascarella, 1980; Astin, 1977; Astin, 1993). Therefore, some researchers have asserted that the most important teaching takes place outside of class (Wilson, et al, 1975).

Research has indicated that students are the primary initiators of student-faculty interactions outside of class, so the student perspective, previously unexplored, is essential to understanding how these interactions develop (Kuh, et al, 1991). Correlational data exists on the qualities of faculty and students most likely to interact out-of-class, but no research has explained the interplay of these qualities that draw students into out-of-class interaction (Wilson, et al, 1975). Also, faculty and students have indicated that these potentially influential interactions occur infrequently, a fact with which students report dissatisfaction (Wilson, et al, 1975; Kuh, et al, 1991; Astin, 1993; Follett, Andberg, & Hendle, 1982). As Pascarella, Terenzini, and Blemling (1996) concluded after their extensive review of the literature on out-of-class experiences,

> Student-faculty contact and student learning are positively related and it would seem that finding ways to promote such contact is in the best educational interests of both students and institutions. (p. 155)

• • Qualitative Inquiry in Higher Education • •

Qualitative methods are well suited to explore unanswered questions about students' nonclassroom interactions with faculty. Quantita-

tive studies assessing the impact of student-faculty interaction on students have focused on the outcomes of the college experience, or how students have changed since they were "input" into the college system and what environments are associated with that change.

In contrast, the goal of some qualitative research is to describe the middle step, the "environment," with a particular focus on students' experiences of that middle step. So, the topic for inquiry shifts from the end product of college experiences to students' assessments and interpretations of their actual experiences. As Whitt (1991) emphasised in her discussion of qualitative research as "artful science,"

> Interest in qualitative research is increasing as higher education practitioners and researchers seek to understand the complex qualities and processes of institutions of higher education, such as learning, growth, culture, and effectiveness and find that conventional science assumptions and quantitative methods are not sufficient to the task. (p. 406)

• • The "Essential Encounters" Study • •

The unanswered questions about out-of-classroom interactions between students and faculty have formed the focus of "Essential Encounters: A Study of College Students' Out-of-Classroom Interactions with Faculty." The first phase of the qualitative research focused on students with high levels of interaction with faculty and was reported in *Summer Academe* (DiGregorio, 1996-1997). The findings indicated that understanding the reasons students *do not* initiate interactions with faculty may be primary to understanding why they *do*. Students recalled a number of ways that their efforts to interact with faculty were frustrated by barriers that they had not anticipated, such as faculty members' roles as authorities and students' sense that faculty members' time is precious.

Students were also able to identify individual and environmental strategies that helped dissolve some of the barriers between themselves and their faculty, such as nurturing faculty and small classes. These students had above average levels of interaction with their faculty and they did report developing satisfying relationships and even friendships with faculty. Substantial benefits accrued to students through these relationships, the most important of which may have been that students felt more comfortable initiating future contact with their faculty members. This is an important finding because it suggests that, once students are able to break through the initial barriers to out-of-classroom interaction, then those interactions are self-reinforcing.

The second phase of the research, which represented a substantial expansion of the first phase, is reported in this article. In the second phase, data collection was expanded and extended. A unique, larger, and more diverse sample was used; the sample included students with both high and low levels of interaction with faculty, and there was a series of interviews with each respondent. Faculty and administrator respondents were incorporated into data collection, as was document analysis. In the second phase, the research questions were expanded to include a new question related to the interactions students find most meaningful. Details of the research questions, research methods and findings for the second phase of the research follow.

• • Research Questions • •

While there is substantial evidence that student-faculty interactions are associated with positive student outcomes, less is known about how these interactions develop and their meaning for students. Since students' perspectives on these interactions remains largely unexplored, the research focuses on students' experiences of their interactions with faculty. First, there is a need to know more from students about why they do or do not choose to spend some of their out-of-classroom hours in contact with their faculty. So, the first research question is: *Why do students engage or not engage in out-of-classroom interaction with faculty?*

Second, there are a number of reasons that students might initiate contact with their faculty members—which interactions are most likely to yield positive outcomes for students? The second research question is: *How do students describe meaningful experiences of out-of-classroom interaction with faculty?*

Third, to learn more about these potentially important interactions between students and faculty, there is a need to learn more about students' own interpretations of these interactions and whether they affect their college experience. So, the third research question is: *Do students report outcomes of their out-of-class interactions with faculty?*

• • Research Methods • •

The setting was a medium-sized research university, selected because of its participation in a national, longitudinal study of student learning outcomes. The quantitative national study data made it possible to select two groups of undergraduate students in their fourth and final year of study, a "high" group and a "low" group, based on students'

reported amount of out-of-classroom interaction with faculty relative to their peers. Two groups were selected because the goal was to identify reasons that students do not initiate interactions as well as the reasons that they do. In accordance with *maximum variation sampling*, students were selected to represent both sexes and a variety of cultural backgrounds and undergraduate schools (Lincoln & Guba, 1985).

Data collection consisted primarily of intensive, semi-structured interviews with eighteen students, interviewed three to four times each during the fall term of their senior year. The interview protocol had been developed and tested through the first phase of the research project with a separate sample of students. In the present study, students were asked to reflect on their out-of-classroom interactions with faculty, describing specific events and reflecting on the immediate and cumulative impact of those events. For the purposes of the study, out-of-class interactions were defined as any conversation of at least fifteen minutes in length that occurred outside of class meeting time, during office hours, as a continuation of class discussion, in an advising session, at a departmental event, in the residence hall, etc. The time limit was imposed so that brief exchanges of information such as "Here's my paper" were excluded; conversations may have begun as brief exchanges but to be included in the study they must have extended beyond that.

Interviews with faculty and administrator informants and document analysis of internal materials triangulated the interview data and facilitated understanding of the institutional setting. In accordance with Lincoln and Guba's (1985) guidelines for qualitative research, measures were taken to insure the *trustworthiness*, or soundness, of the study which includes consideration of four different components:

> credibility (the researcher's interpretations are credible to the respondents), transferability (the study may be useful in another context), dependability (changes over time are taken into account) and confirmability (the data can be confirmed by someone other than the researcher). (Whitt, 1991, p. 413)

So, to assure the trustworthiness of the study, a number of strategies were employed, which included implementing *member checks* with student respondents to confirm and correct emerging themes, providing an *audit trail* of all notes and materials from data collection and analysis, assuring *prolonged engagement* in the setting in order to learn the culture and establish the trust of the respondents, and by providing *thick description* of the data in the form of students' verbatim comments so that readers can understand and interpret the findings.

Characteristic of qualitative research, data analysis was inductive

and involved reading and rereading the verbatim interview transcripts for recurring comments. Analysis was systematic and consisted of *unitizing* and *coding* with the assistance of FolioVIEWS textbased manager (Lincoln & Guba, 1985; Miles & Huberman, 1984; Weitzman & Miles, 1995). Unitizing involved identifying each of the smallest pieces of information in the interviews, whether the unit was a phrase, sentence, or paragraph. Coding involved naming or labeling the units based on the phenomena they represented and employing *constant comparison*: a unit was tested for fit with existing codes and in the absence of a fit, a new code was established. Initially, codes were defined narrowly and then reviewed and similar or related codes that clustered around common ideas were grouped into overarching *themes*. These themes were combined through analysis to yield the four final research themes: points of contact, student characteristics, faculty characteristics, and student outcomes.

• • Findings • •

The findings of the study provide answers to the three research questions:

> *Why do students engage or not engage in out-of-classroom interaction with faculty?*
> *How do students describe meaningful experiences of out-of-classroom interaction with faculty?*
> *Do students report outcomes of their out-of-class interactions with faculty?*

The findings are summarized and illustrated with students' verbatim comments. It is important to note that, while a limited number of student comments are incorporated in this article, the quotations included are representative of the interview data from which the themes emerged.

• • Factors that Encourage or Discourage Interactions • •

Three of the research themes—points of contact, student characteristics, and faculty characteristics—address the complex processes of how out-of-classroom interactions between students and faculty are facilitated or discouraged, answering the first research question: *Why do students engage or not engage in out-of-class interactions with faculty?*

• • *Points of Contact* • •

Points of contact are settings or environments in which students encountered faculty and which influenced the occurrence of out-of-class interactions. Points of contact that were key in affecting whether students would interact with faculty outside of class included classroom environments and electronic mail.

The size of students' classes was central in determining if they would interact with faculty outside of class. Invariably, large classes evoked a sense of being lost in the crowd and deterred students from initiating interactions with faculty, especially in their first year of university. Students recalled,

> You're just a face—you know, it's the whole numbers thing.... There's a sense of being lost. It's so huge.

> I think that relationships with professors outside of the classroom can be difficult in large settings. Large lecture halls it's going to be so difficult to remember the students' names, much less the professor's first name sometimes. You may not feel for any reason, "Why would I want to get to know this person outside of class?"

> You go to A01 Chemistry class and it's like 300 people, each person vying for the professor's attention. It seems like you're one in a million.

In contrast to large classes, small classes built a two-way connection between students and faculty: students felt they knew the faculty member better and that the faculty member knew them better. The connections established in small classes made the respondents feel more comfortable initiating contact with faculty outside of class.

> [My classes have] smaller numbers and have more direct contact with the professor when you're in class so you can't ignore them when you're not in class. You have a more mutual idea of each other that automatically lends itself more [to out-of-class interaction with faculty].

> In a smaller class, the professor gets to know you faster and you get to know the other students, which makes you discuss all kinds of things. It feeds on itself and makes me more likely to see the professor afterwards.

Students reported that their first two years of college were characterized by large lecture classes—it was not until their junior or senior year that they had regular opportunities to enrol in small classes.

Electronic mail, a relatively new point of contact not addressed in previous research on out-of-classroom interactions, encouraged student-

faculty interaction by offering students a more convenient and less intimidating mode to initiate interaction with faculty. E-mail was uniquely able to respond to students' schedules:

> It's easier for me to sit in my room and type out my questions than to go to campus and to go to their office hours and schedule it around all the other things I have scheduled.

> When I have an idea that comes to me at three o' clock in the morning, I e-mail the prof and then I go and see them later on.

Using e-mail offered students a chance to test the waters with faculty: they could compose their thoughts, and they didn't have to interrupt the faculty since faculty could respond when it was convenient for them. Students explained the advantages of e-mail:

> One advantage is you can figure out what you want to say before you send it. And you can edit if you want to.

> I just asked it as, "If you have room, could I come talk to you sometime?" This way I didn't bother them in their office hours and they can respond at their leisure.

> Once you've e-mailed a professor a few times, it's more likely that you'll talk to them later, just because you've kind of broken the ice.

Because e-mail allowed students to "break the ice" with faculty in ways that were less intimidating, e-mail served as a bridge that led to face-to-face interaction between students and faculty. Perhaps most importantly, for students who reported being too intimidated to initiate interaction in person, e-mail afforded an alternative form of communication through which they were able to have frequent out-of-classroom contact with their faculty.

• • *Student Characteristics* • •

The two central student characteristics that determined if students initiated interaction with faculty included whether students were new to college and whether they believed they had a need for interaction (e.g., a problem or question). In addition, individual differences emerged in how students initiated interactions with faculty.

Respondents pointed to the importance of providing opportunities for first-year students to interact with faculty since this is when respondents reported feeling most intimidated by faculty—faculty seemed impersonal and inaccessible compared to high school teachers.

> When I got to college, it was like a whole different ball game. That was

my first impression and my first expectation of faculty was that they really can't do too much and I'm going to have to struggle and use my other resources, like tutors and stuff, but I really can't get to know the faculty.

By their fourth and final year, many of the students were less intimidated by faculty, which they attributed to their own maturation as well as to having had positive encounters with their faculty:

I've learned a lot of other things [from my interactions with faculty] and it's largely because I was able to interact with some faculty informally and that gave me the confidence to interact with others.

It was important for respondents to have positive interactions with faculty to increase the likelihood that they would approach faculty again in the future. As students reflected on the differences between their approach to faculty when they were new to university and when they were in their final year, many of them regretted that they did not overcome their intimidation sooner:

That's one thing I wish I had done earlier [is interact with my professors]...I wish someone sat me down and told me, "Get a grip, go to your professors." There are plenty of times that I needed to go to my professors that I didn't go because of my own lack of self-confidence, not quite understanding the university system and not being strong enough.

Respondents' experiences also emphasised the importance of faculty encouraging students to utilise office hours to discuss course material. This is because students explained that, to be able to approach a faculty member, especially the first time, they felt that they had to have a justifiable reason, such as a question or a problem. Students commented:

I'd always felt that if I didn't have a specific question I wasn't going to go in and talk to them and I still really don't because I don't want to waste their time.

I didn't have much non-class interaction with [my professor] at all. I didn't need to because she taught it so well we didn't need to bother her outside of class. I really appreciated it and I definitely respected her a lot. I always wanted to go up to her and say I loved her class.

As these comments illustrate, without having a demonstrated need, such as a question or a problem, students were reluctant to impinge on faculty time outside of class.

One of the purposes of the study was to determine whether the differences between students with high and low frequencies of interaction with faculty could be explained by varying levels of student interest. It could not since, for many students, their interest did not always

translate into out-of-classroom interactions with faculty. In fact, among the students with low interactions was a group of students who reported that they did not initiate out-of-classroom interactions with faculty because they were not interested, their time was more likely to be filled with other activities. And the students with the highest frequency of interactions reported a high level of interest, they readily initiated interactions with faculty, and their willingness to initiate interactions was undeterred by negative interactions with faculty.

However, in the middle of the continuum were students who were interested in interacting with faculty outside of class but they depended on some initiative from faculty or they reluctantly initiated interaction but were strongly influenced by faculty members' responses to them. *Most* of the students were in the middle of the continuum, including many among the "low" interactors who were interested in interacting with faculty but were highly dependent on the environment and on faculty for encouragement to do so. Students in the middle of the continuum explained that negative experiences short-circuited their efforts to initiate out-of-classroom interaction.

> I had a bad experience winter quarter with one of the faculty…. I think that hurt me for a long time because I couldn't go to my professors.

> I think sometimes I'm waiting for [faculty to initiate contact with me]. One professor disappoints me or is not conducive to talking to them, then it's easier just to let it be.

For these students, a negative outcome from their efforts to initiate out-of-classroom interaction could mean that they experienced a setback in their willingness to initiate out-of-classroom interactions in the future.

•• *Faculty Characteristics* ••

There were several ways that faculty characteristics (qualities of faculty members, as they were perceived by the student respondents) affected the occurrence of out-of-classroom interactions. First, respondents' comments indicated that, in general, they perceived a gap between themselves and faculty, a gap that made the faculty at first seem inaccessible and not quite real:

> Professors are living in a bubble that doesn't extend beyond their office or their teaching classrooms…. I think that at a university like [this] the bubble is there no matter what for all the professors. It's the question of whether or not they extend out of the bubble.

> [The faculty] are movie stars in their field. If a movie star walks in here, it's expected that we are amazed…the same with professors. They are

geniuses. They are on the cutting edge of their work. They are the movie stars in [my field].

The gap between students and their professors was not necessarily permanent or fixed. There were many factors that determined whether faculty reinforced or dissolved some of the barriers that the gap erected to out-of-class interaction between students and faculty.

First, students reported that the classroom was often the forum where faculty initially set the tone for out-of-classroom interaction and that how faculty defined their *roles as teachers* determined whether students would initiate out-of-classroom interaction. Students noted that when faculty were committed to and enthusiastic about their teaching, when they placed a priority on students' understanding of the material, and when they helped soften the student-faculty hierarchy by valuing students' opinions, students felt that they were more approachable outside of class, as their comments indicate:

> He was literally enlivened by [the subject]. He would walk in and he'd just take off his sweater. And he always took it off over his head and his hair would go ruffled and he'd smooth it down and he'd go, "OK." And he would pull down a blackboard and just start.... But he'd just go for fifty minutes.... Maybe it was because he was very charismatic in class. So there wasn't any fear of going into his office hours.

> They care about your level of understanding of the material. It shows that they care more about you, the students, that you're learning, that they're not here just to teach, they want to make sure you understand.

> [My professor] came up to me and specifically said, "Well, what do you think about [the speaker] and what she had to say?"... [That said to me] "I have enough respect for you that I want to hear what you have to say about this"... And that's where you start to cross the line into being a contemporary.

Second, how faculty made their *time* available, evidenced by how they discussed and structured their office hours, affected the occurrence of interactions. Students gauged whether to initiate interaction based on how faculty talked about the time they set aside for office hours.

> You can just tell by the way they teach. If they say, "Please come into office hours" ten times a week. Or if they just say, "Yeah, my office hours are here." Or they don't even say it at all, it's just on the syllabus and you have to go find it. You can tell—you kind of get a sense in that way. The kind of vibes you get.

And students sensed faculty members' actual availability based on how they reacted to students efforts to initiate interactions, as the two

contrasting examples below illustrate:

> He makes you feel like you're not bothering him.... I just feel like, whenever I talk to him, I don't feel like I'm really wasting his time.

> I wanted to borrow a book that I needed to have, so as I went in he was putting on his coat while I'm asking him to borrow a book, so he said, "Yeah, I'll bring the book in tomorrow. And here's a couple other names you can look up that would be helpful." But I would've liked to have had a little bit more conversation with him and asking him somewhat about the book.... It wasn't like I wanted to chat about his family.... I don't think I'll go back to see [him].

Third, whether staff bridged "the gap" between students and staff to *relate to students as "real" people* affected whether students were willing to initiate out-of-classroom interactions with them. There were a number of ways that staff could relate to students as real people. First, when staff communicated a genuine interest in students as individuals, for example, by inquiring into students' career plans and their academic progress, then those staff seemed more approachable to students than staff whose interests did not extend beyond the subject matter. And one of the most powerful ways that staff communicated a genuine interest in students was to know their names; when staff didn't know students' names, students were discouraged from initiating interaction with them.

> He really is into talking, to helping students. He doesn't just want to help them, he wants to know who they are.

> I ran into one of my old instructors and I hadn't seen him in like two years.... Just in the two minutes that we talked, he remembered my name, remembered what year I was, asked, "What are you going to do next year?"

> One quarter I went to office hours a couple of times and my professor didn't know who I was and that was very frustrating for me. I kind of got an attitude and then I didn't go to office hours the next quarter.

In addition to demonstrating to students that they were interested in them as individuals, staff who presented *themselves* as real people seemed more approachable and students were more likely to initiate out-of-class interaction with them. By allowing the class conversation to extend beyond class material to include the staff members' personal experiences, by demonstrating a sense of humour, by relating to the student perspective, and by inviting students to call them by their first names, staff could seem more like real people. Examples of each of these qualities follow:

> [This professor] often uses his own life examples and telling what he was like in college and he went to [this university]. So, his stories are even more amusing because they are similar to ours. He seems more accessible because of that.

> If that person has a sense of humor, it makes things a lot easier [to initiate out-of-classroom interaction], because you know that person is a personable type person. If you don't have a sense of humor, you don't not necessarily get along with other people, but you have to have a bit of a sense of humor to get along with people. Life is humorous.

> The things she would talk about—Seinfeld—she would talk about when she was in college. You know, she would tell stories, and she would react the way we would react.... Everyone felt like they could open up to her more, maybe. They weren't as embarrassed to say things.

> My professor asked me to call her by her first name.... So that helps. Then the intimidation factor leaves.

Keeping in mind students' initial impressions that staff seemed not quite real, living in a "bubble," it follows that ways in which staff did prove themselves to be real and to be genuine encouraged students to take the risk to initiate out-of-classroom interactions.

• • *Meaningful Interactions* • •

The second research question was: *How do students describe meaningful experiences of out-of-classroom interaction with faculty?* Meaningful interactions are defined as positive interactions that encouraged students to initiate contact with faculty again, interactions that related to positive outcomes of interactions, and those that students identified as meaningful in personal and/or academic ways. Qualities of interactions that made them meaningful echo those characteristics of faculty that first encouraged students to initiate interactions.

So, meaningful interactions were affected by how faculty members defined their roles as teachers, specifically, when faculty actively encouraged students to engage in out-of-class interaction or worked closely with students in ways that students believed helped them achieve some previously-unknown potential. For example, one student recalled

> So I went to his office hours after I got the paper back, because his comments said he thought I could do better.... [I said] "this is my level of writing. I'm happy with it."... And he said, "Well, yes, you are capable of it." And every time I came back, he said I could do it...because of that, it motivated me.

Related to how faculty made their time available to students,

meaningful interactions included those interactions when faculty made time to make students a priority outside of class and when they made significant investments of their time in students.

> [Meaningful interactions are] the ones where the professor shows that he or she is going above and beyond the call of duty. The ones that go beyond relating specifically to the paper that I'm working on, where they ask, "How are things going?" or they spend a lot of time dealing with the paper as opposed to, "Yeah, that sounds good."

Finally, when faculty related as "real" people with students by demonstrating an interest in students or by being willing to talk about themselves, it not only encouraged students to initiate interactions, but could also lead to interactions that were meaningful for students.

> It created more of a while person of who he was, like he was telling me about he and his wife going [abroad]. And the travels that they had done. It was an experience outside of [the university] and how it affected him and the happiness that he had from that experience. It was really a good connection with him because that was something I want also.

Meaningful interactions shared in common the fact that they extended beyond an exchange of information which could have occurred in the classroom. Out-of-classroom interactions that were most meaningful were the ones that somehow managed to leave the classroom behind. One student explained the sentiments of many of the respondents:

> The other stuff that you're not going to get from books is where the non-classroom interaction becomes meaningful.... I think with most non-classroom interaction, you do end up having some sort of agenda related to class. That's almost unavoidable. But if you can expand beyond that, if you can try to make the weak ties, your strong ties would be the classroom and the weak ties may be that this professor worked in the field in which you are interested...things that would be tangentially or weakly related [to class] would be the most meaningful.

• • *Outcomes* • •

The final research theme relates to outcomes and answers the research question: *Do students report outcomes of their out-of-class interactions with faculty?* When students reflected on whether their interactions with faculty had affected them, they reported getting "a lot of education" from these interactions, directly connecting the interactions to enhanced learning:

> The most important thing, I think, [about out-of-classroom interaction with faculty] is that you can get a lot of education out of it. And then it

> will be more than just listening to the lectures. It's more than just reading the book, because you're actually processing and by going in you can process ideas and solve some questions.

> [Out-of-classroom interaction with faculty] helps the student learn more. I mean, I've learned a lot more from my papers and things by talking with the professors about it.

> I usually learn the most during those times [when I go to office hours] as opposed to being in class and having a problem and looking it up in the book.

Companion to the enhanced learning that resulted from students' interactions with faculty was improved academic performance by the students: they performed better on their assignments which they believed was reflected in higher grades.

An additional outcome students reported was that the interactions with faculty softened the initial barrier students felt between themselves and their faculty. Students were able to see the faculty as more "real" or "human" which made them less intimidating and therefore made it more likely students would initiate interactions again.

Out-of-class interactions with faculty also enhanced students' self-image by facilitating a greater sense of confidence in their abilities and by emphasising that the students were valued members of the university community:

> The two professors that I established pretty close relationships with did wonders for my self-confidence. I mean, they sort of convinced me that I did have half a clue of what I was talking about.

> I think [out-of-classroom interaction with faculty has] had kind of a stimulating effect on me as far as my experiences at [university], being comfortable in classes as a student...being able, being willing to express myself and my ideas. I think it comes partially from having interactions with faculty and knowing that they find them valid, that they are looking for that and want that.

> I think [out-of-classroom interaction] can kind of elevate a student to a higher plane, just like the interest.... If a person has an interest in a student, he or she can really encourage that student because someone cares about them. And the student will feel that she is valuable.

> If they try to recognise you, let you know that [they know] you're alive, then...you feel important, they have a vested interest in your understanding of the material. If you dropped off the face of the earth, you would be missed.

Some of the outcomes identified by students echo findings of previous

research. But because this is the first research to offer an understanding of students' experiences of out-of-classroom interactions, this research illuminates and explains the connection between interactions and student outcomes. For example, other research has identified academic achievement and intellectual development as outcomes of interaction (eg., Pascarella & Terenzini, 1991; Astin, 1993). Respondents in this study explained that not only did out-of-class interactions augment their learning about the material, but that the interactions enhanced students' commitment to their academic work because they then felt a personal responsibility to the professors.

> I've noticed when I have one-on-one interaction with a faculty member I feel more personally accountable for the work that I do and more motivated to get really interested.

> This class could potentially be one of the worst classes in my career…. But I kinda—I want to do well cause now he knows me so I want to do well on my reports and I want to know what's going on in lab.

•• Discussion ••

The findings of the study have a number of implications for practice within Summer Session administration, both in ways the Summer Session offers potential educational advantages over the rest of the academic year and ways administrators might enhance that potential.

•• Points of Contact ••

First, related to points of contact, students reported that classroom environments exerted a powerful influence on the occurrence of out-of-classroom interactions with their faculty. The size of classes was central in determining if students interacted with faculty outside of class, and, because of the connection that previous research has established between student-faculty interactions and academic outcomes, this suggests that class size has the potential to affect college student outcomes such as learning and intellectual development (Astin, 1993; Pascarella & Terenzini, 1991).

One potential advantage of the nature of Summer Session as "slack period" (Kobayashi, 1996-1997) is that summer is likely to be characterized by lower enrollment compared to the regular school year and, therefore, smaller class sizes. This study found that smaller classes build bridges to out-of-class interaction, making students more willing to initiate interactions with faculty. Maintaining and even increasing the number of small classes may be crucial to preserving the Summer

Session's unique ability to foster out-of-class interaction between students and faculty.

The fact that access to e-mail encouraged students who were otherwise reluctant to initiate interaction suggests that institutions that offer e-mail will not only facilitate student-faculty interaction already occurring, but may increase the proportion of students benefiting from out-of-class interactions with their faculty. While not all students reported using e-mail, e-mail and electronic discussion groups have the potential to extend the boundaries of the classroom, to allow discussions from class to continue beyond scheduled meeting times and to provide an alternative channel of communication outside of class. And, as students indicated, e-mail may be more convenient not only for students, but for faculty as well, for example, by allowing faculty to respond at their convenience or by being able to post "Frequently Asked Questions" to an electronic discussion group. This offers an incentive for institutions to provide their faculty and students, including those who are visiting the institution, access to e-mail in the Summer Session.

• • Student Characteristics • •

Second, from an understanding of the student characteristics affecting the occurrence of out-of-classroom interaction between students and faculty, it was evident that students were particularly intimidated by faculty in their first year when their initial impressions of faculty suggested that out-of-classroom interaction would be impossible. Summer Session may be an ideal setting to counteract the effects of a first year experience which often includes large introductory classes, classes that consistently discouraged students in this study from initiating interaction with their faculty. Many of the students reported that it wasn't until their third or fourth year that they had regular interactions with faculty. In the Summer Session, when nonclassroom interactions between students and faculty may be more likely to occur, first year students may have an opportunity to develop their confidence to initiate interaction with faculty earlier in their academic career than they might otherwise.

Students reported that, many times, they did not initiate interaction with faculty because they did not have a problem or a question. By creating out-of-classroom opportunities for students to interact with faculty (cultural events, paper conferences, field trips, etc.) educators can help enhance the number of reasons and opportunities students have for initiating contact with their faculty. Summer Session, when students and faculty may have more relaxed schedules (Grobsmith, 1996-1997),

may be an ideal time to promote some of these informal yet somewhat structured opportunities for out-of-classroom interaction.

One of the purposes of the study was to determine whether the differences in students with a high frequency of interaction and students with a low frequency of interaction could be explained by varying levels of student interest. While some "low" interacting students reported little interest in out-of-class interactions with faculty, most of the students reported a desire to interact with their faculty outside of class. Many of the students with low interactions had attempted to initiate interaction but had been discouraged from further interactions by environments or by faculty members' responses to their efforts to initiate interaction. It would be beneficial for Summer Session administrators to consider environments, faculty attitudes and programs that currently exist that might represent barriers to students who would otherwise initiate interaction outside of class.

• • *Faculty Characteristics* • •

Third, there were several ways that faculty characteristics affected out-of-classroom interaction, including how faculty approached their roles as teachers, how they made their time available, and whether they related to students as real people. Each of these demonstrates that a faculty member's approach in the classroom sends important signals about their "approachability" outside of class. This suggests that Summer Sessions can increase the out-of-classroom interaction and associated benefits for students by considering teacher evaluations in making staffing decisions and by encouraging faculty to value their teaching through initiatives such as faculty development programs and teaching excellence awards.

When faculty made their time available to students, it encouraged students to initiate interaction with their faculty. Previous research reported that faculty are more available to students in the Summer Session (Grobsmith, 1996-1997), and this study offers confirmation of how crucial that availability is to the occurrence of out-of-class interactions. It is important for Summer Session faculty to offer regular office hours, as is often required during the rest of the year, which may mean allocating special office space for visiting faculty.

Summer Session may also be an ideal opportunity to provide seed money for field trips or cultural outings, student-faculty lunches or informal social events to facilitate opportunities for students and faculty to relate to each other as "real" people. Students' comments on their most meaningful interactions made it clear that opportunities such as these

to extend beyond the formal business of class lead to an increase in quantity and *quality* of interactions between students and faculty.

• • *Student Outcomes* • •

Fourth, one of the most important findings of the study is that students confirmed that student-faculty interactions are at the epicenter of a number of positive student outcomes. Students reported that their out-of-classroom interactions with faculty had positively affected their learning and academic performance, their self-image, and their views of faculty since faculty seemed more "real" or "human" which encouraged students to initiate further interactions. Students' comments about the effect of student-faculty interaction on their learning offers support for previous research which emphasized that the most important teaching takes place outside of class (Wilson, et al, 1975). And the fact that positive interactions encouraged students to initiate further interactions with their faculty stresses the importance and benefits of facilitating positive interactions between students and faculty: the frequency and quality of students' interactions with faculty can flourish if students have a positive interaction.

Each of these outcomes underlines the strength of the Summer Session as a learning environment: if Summer is indeed more likely to foster out-of-class interactions than the rest of the school year, then Summer Session is uniquely positioned to enhance student outcomes such as learning and academic achievement, self-esteem, and future interactions with faculty.

• • Conclusion • •

This study offers the first in-depth exploration of students' views of how students and faculty navigate the initial distance between them to interact out-of-class, what qualities of the interactions make them meaningful for students, and what outcomes students identify from those interactions. The research indicates that, by providing a forum that fosters student-faculty interaction outside of class, Summer Session is offering an opportunity for a number of positive student outcomes including increased student learning. This is important information for Summer Session administrators facing the perennial challenge of marketing the Summer Session to students and to other educators who may question its relationship to the educational mission of the institution. There may be no better marketing strategy than one that identifies the role of the Summer Session in promoting students' out-of-classroom

interactions with faculty and the enhanced student learning that follows those interactions.

•• References ••

Astin, A.W. (1977). *Four Critical Years: Effects of College on Beliefs, Attitudes, and Knowledge.* San Francisco, CA: Jossey-Bass.

Astin, A.W. (1993). *What Matters in College: Four Critical Years Revisited.* San Francisco, CA: Jossey-Bass.

Follett, C.V., Andberg, W.L., & Hendle, D.D. (1982). "Perceptions of the College Environment by Women and Men Students." *Journal of College Student Personnel, 23* (6), 525-530.

DiGregorio, K. (1996-1997). "Essential Encounters: Non-Classroom Interactions Between Students and Faculty." *Summer Academe, 1*, 13-26.

Grobsmith, E. (1996-1997). "Report on 1995 Summer Sessions Student Satisfaction Survey." *Summer Academe, 1*, 27-34.

Kobayashi, V. (1996-1997). "Summer Session as Slack Period: Implications for University Policy Makers." *Summer Academe, 1*, 35-50.

Kuh, G., Schuh, J., Whitt, E., Andreas, R., Lyons, J., Strange, C., Krehbiel, L., & MacKay, K. (1991). *Involving Colleges: Successful Approaches to Fostering Student Learning and Development Outside The Classroom.* San Francisco, CA: Jossey-Bass.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic Inquiry.* Beverly Hills, CA: Sage.

Martin, H. (1996-1997). "Summer Sessions: The Centrality of Their Purpose to the Academy's Mission." *Summer Academe, 1*, 7-12.

Miles, M.B., & Huberman, A.M. (1984). "*Qualitative Data Analysis: A Sourcebook of New Methods.*" Beverly Hills, CA: Sage.

Pascarella, E. (1980). "Student-Faculty Informal Contact And College Outcomes." *Review of Educational Research, 50,* 545-595.

Pascarella, E., Terenzini, P., & Blemling, G. (1996). "Students' Out-Of-Class Experiences and Their Influence on Learning and Cognitive Development: A Literature Review." *Journal of College Student Development, 37* (2), 149-162.

Pascarella, E. & Terenzini, P. (1991). *How College Affects Students: Findings and Insights From Twenty Years of Research.* San Francisco, CA: Jossey-Bass.

Scott, P. (1993, November). "A Comparison of Student Learning Experiences in Intensive and Semester-length Classes." Paper presented at the annual meeting of NCCSS. Proceedings: 30th Annual Conference of the North American Association of Summer Sessions, Portland, OR.

Tampke, D. (1993). "A Summary of Faculty Interaction Programs at ACUHO-I Institutions." *Journal of College and University Student Housing, 23,* 24-30.

Wilson, R.C. (1975). *College Professors and Their Impact on Students.* New York: John Wiley & Sons.

Weitzman, E.B., & Miles, M.B. (1995). *Computer Programs for Qualitative Data Analysis: A Software Sourcebook.* Thousand Oaks, CA: Sage

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