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# Using Focus Groups to Obtain Students' Perceptions of General Education

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This article describes a study that used focus group methodology to examine the perceptions students have of their experiences in the interdisciplinary portion of their general education requirements. In addition to identifying the content and the kind of teaching that they found most appealing in the general education curriculum, students also reported that general education courses affected their thinking, their behavior, and their attitudes toward working in small groups. The authors discuss the findings in terms of their implications for faculty, administrators, and instructional/faculty developers.

Among its recommendations, Boyer's College: The Undergraduate Experience in America (1987) called for re-focusing on general education in order to give students a more coherent, more meaningful education. In response to Boyer's work and to the concerns voiced by the public and various business leaders regarding the coherence of the undergraduate experience, many colleges and universities across the country have changed their general education requirements (Kanter, London, & Gamson, 1991) so that general education is playing a larger role in the undergraduate curriculum than it has in the past (Gaff, 1991).

Despite the enthusiasm for general education in undergraduate curriculum, recent research suggests that students are less affected by general education reform than they might be (Gaff, 1991). Furthermore, Baxter Magolda (1987) and Twombly (1990) note that not enough attention has been focused on the meaning students make of the curriculum or on the ways such curriculum can foster change. The research described in this article, then, was undertaken with the intent of addressing some of these concerns about the movement toward general education requirements. Specifically, the article describes a study that used focus group methodology to enhance understanding of students' perceptions of the interdisciplinary portion of their general education requirements.

## **Description of the Interdisciplinary Program**

The interdisciplinary program is part of a general education curriculum designed to provide shared learning experiences for students at a comprehensive university in New England. Implemented in 1987, the All-University Curriculum (AUC) is committed to educating students broadly by challenging them to go beyond their choeen specializations. The faculty who developed the AUC selected classical and traditional knowledge in the humanities that has value for today; they also identified knowledge in science, the social sciences, business, engineering, and technology necessary to prepare graduates for the contemporary world. All of these areas are integrated in interdisciplinary courses in which students examine problems, ideas, and issues in depth through multiple perspectives (All-University Curriculum document, 1987). Teams of faculty from two or three disciplines develop the courses, which can be taught either by teams or individuals. The design of the courses in the AUC encourages active learning; and by using creative and interactive teaching styles, the faculty encourage students to take responsibility for their own learning.

All students in baccalaureate programs are required to take at least one course in four out of five breadth categories. The breadth categories include: Living in a Cultural Context-Western Heritage; Living in a Cultural Context-Other Cultures; Living Responsively to the Arts; Living in a Social Context; and Living in a Scientific and Technological World (For a list of the courses, see the first section of Appendix A). Students are exempt from the category closest to their major. For example, music and art students do not take a course in the arts category; similarly, engineering students are exempt from the science and technology category.

In May, 1991, the first class to have completed requirements in the All-University Curriculum graduated from the University. Therefore, it

seemed important to examine student perceptions of this interdisciplinary general education program. Although courses are independently evaluated by students at the end of each semester, there has never been an overall review of students' perceptions since the program's implementation in 1987. The goal of the study reported here was to assess students' reactions to the integrative general education requirements of the All-University Curriculum.

#### **Method**

Gaff (1991) has suggested that we need to develop a larger view of students and a more complete understanding of their experience in the curriculum. To obtain this view, we cannot easily quantify student attitudes or behaviors as learning outcomes for specific courses. Instead, we propose that student perceptions demand a perspective and a methodology that is itself process-oriented.

Therefore, for our study we chose a focus group methodology to examine these perceptions. We anticipated that this methodology would optimize the amount of information obtained regarding student perceptions of their interdisciplinary curriculum. The hallmark of focus groups is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found within a group (Morgan, 1988). This method produces a fairly high level of participant involvement, leading to relatively spontaneous responses from students. Because participants interact with one another and not only with the interviewer, the interaction has the potential for providing greater accessibility to participants' points of view.

#### Procedure

During the latter part of the 1991 spring semester, we sent letters inviting students to participate in the focus groups to a stratified sample of fifty-five graduating senior-level students from each of seven colleges within the University. As a result, a total of forty-eight students took part in eight focus groups. The size of the groups ranged from four to eight. Although we had originally planned to arrange the groups by college of enrollment, this arrangement was impossible because of class schedules and club and athletic activities. Thus, the groups were slightly more heterogeneous than originally intended.

At the start of each session, participants were asked to complete a twelve-item survey intended to focus them on the topic of the interdisciplinary general education program (see Appendix A). The survey requested basic demographic information, course and curricular information, as well as information about student opinions and attitudes regarding the program. To assist them in recalling the courses they had taken during their four years at the University, the survey also required students to indicate which of the AUC Interdisciplinary courses they had taken from a list of the offerings and then to respond to questions about these courses. The short survey, which took no longer than ten minutes to complete, provided us with an overview of students' perceptions of courses and the program; the focus groups allowed us to explore those perceptions in depth.

We chose focus group interviews to explore in depth the students' perceptions/ attitudes and behavior. The topics for the focus groups had been carefully predetermined and sequenced from general to specific questions (see Appendix B). For example, the first question of the focus session requested participants to "look back on the list of the AUC courses you have taken..." Among the questions, students were asked whether any All-University Curriculum courses had made a difference in the way they thought or challenged them to think in new ways. They were also asked whether any AUC course made them change their behavior in any way. Follow-up questions included probes for specific elements or examples students could discuss from the courses they had taken.

Each focus group session lasted approximately one-and-one-half hours and was moderated by one of the two project directors. Two recorders attended each focus group session and took notes. The University's Center for Social Research assisted in the transcription and analysis of data.

#### Data Analysis

Although analysis for the questionnaire data was primarily a matter of counting the frequency of responses in various categories, the volume and complexity of the data from focus groups required additional methods of qualitative analysis. The process involved identifying trends and patterns within each focus group and then across the various focus groups (Krueger, 1988). Our task was to identify those opinions, ideas or feelings that were repeated even though they were expressed in different styles and words. Opinions that were expressed only once, and were not supported by others, were enlightening, but did not form the crux of the report (Krueger, 1988). The results from the focus groups supplemented responses from the survey questionnaire and reinforced the need for methodological triangulation in the quest to understand students' perceptions of the general education requirements.

#### Results

Findings from the short questionnaire revealed that over thirty percent of our sample had taken an extra AUC course as an elective. We had suspected that students occasionally chose AUC courses as electives, but we did not anticipate that such a large number were doing so. We also learned that twenty-five percent of the students who had not taken "Epidemics and AIDS" wished they had, but simply could not fit an additional course into their schedules or programs of study. In addition, the survey data indicated that the majority of graduating students had gone to art museums, musical performances, or scientific and technological sites as part of their AUC requirements and that a significant number had volunteered at soup kitchens, AIDS hospices, or food share programs as optional requirements.

A strong relationship emerged among "course with greatest impact," "books that made a lasting impression," and "faculty member students would recommend to a peer." For example, when asked which course they would recommend to a peer, twenty-five percent of the students chose "A Western Heritage: The Humanities"; two of the five faculty members students would recommend to a peer teach in the "Western Heritage" course; and books from the "A Western Heritage: The Humanities" course dominated the list of "books that made a lasting impression," with Zen and the Art of Motorcycle Maintenance by Robert Pirsig and The Painted Bird by Jerzy Kosinki mentioned by almost every student in the groups who had taken the course.

The survey data that we collected at the start of the focus groups gave us quantitative data about student majors, which courses students took, which courses they felt had an impact on their thinking or behavior, but provided little information about why or how students made meaning of their courses. Thus, the focus groups were valuable in providing us with additional data on the impact of curricular offerings in the program.

#### Reactions to Content

Initial questions about the value of the interdisciplinary courses and the impressions that courses made (see Appendix B) produced information about the students' reactions to the content of courses in the arts and the sciences and provided valuable insights into the way students perceived the relationship between a course and its instructor.

The arts. Of the five categories of courses only one category engendered more discussion of content than it did of particular faculty. Focus group discussions about Living Responsively to the Arts remained focused on the category and the courses and not on individual faculty members. Consistent

with the findings on the short-answer questionnaire, students, in general, indicated that when they took the courses in the arts category, they did not think the courses were meaningful or worthwhile. Although there were several students who took additional art history courses after taking a course in the arts category, they were the exception. Because most students knew little about the arts and felt there was no need to know ("What good does it do me to take this kind of course?"), they apparently came to the courses with the perception that studying the arts would be neither meaningful nor interesting. In discussions on this topic, almost all the students agreed that they had not wanted to take a course in this category. They indicated that they had assumed not only that courses in the arts would be boring, but also that the courses would be very difficult. Although all the courses in the arts category are team-taught, students did not differentiate one faculty member from another in the sessions.

Focus groups revealed, however, that some students recognized or appreciated the value of courses in the arts category several semesters after they they had taken those courses. Often in their discussions, students would comment that now they could look at art differently; they could analyze art and even notice more architectural details:

- "I simply had never listened to classical music before and had no idea how to analyze art."
- "I didn't like it at the time, but now that I know how to look at it I think it's pretty interesting."
- "You know now I'm even aware in advertising or commercials of the use of opera or when classical or romantic images are being used to make a point."

The sciences. It is clear that some interdisciplinary courses in the sciences appealed to many students. For the most part, students found the team-taught lab courses, "Epidemics and AIDS" and "Living in the Environment," to be both rigorous and exciting. Students would have discussed these two courses for the entire session if the groups had not been structured. Obviously, the issues were current and meaningful for students, but the depth of interest these non-science majors revealed was illuminating. Biology lectures and labs were at the heart of both these courses; but because they were in a contextual framework, students overcame their science apprehension and became deeply involved in both courses. Focus groups revealed that students personalized the learning in these two courses:

- "It's strange, but I really liked the field trips in 'Living in the Environment' and the follow-up labs."
- "Me too. It's so weird, but now I look at garbage in different ways. I'm

so much more aware now than I was before taking it. My roommates and I try to recycle, and even when we don't always do it, we're much more careful than we were before."

- "I like the fact that you can talk about the environment in so many ways and that there are so many questions. The labs were interesting because you care about the topic."
- "I liked listening to the economics professor and the politics professor debate certain issues; I never knew it was so complex."

Comments on "Epidemics and AIDS" included:

- "The stigma regarding AIDS was totally broken down by the labs."
- "I actually learned how the body works in this course."
- "I think students have changed their behavior after taking this class."
- "Well, people sure talk about AIDS differently now."

#### Instructor-Content Interaction

Perhaps an important conclusion that can be drawn from these interviews is that the professors' enthusiasm for content had a strong impact on students' perceptions or attitudes about specific courses and about the curriculum in general. The content-instructor interaction was particularly evident when students spoke favorably about specific courses. Consistent with the research, students equated a professor's enthusiasm for teaching or obvious love of the material with a "good, meaningful" course (McKeachie, 1986; Sherman, Armistead, Fowler, Barksdale, & Reif, 1987; Lowman, 1984). We knew from the survey that four courses emerged consistently in response to the statements, "I would recommend this course to a peer," and "This course had a significant impact on me." As we followed up on the initial responses in the questionnaires, few students in the groups talked about content of a specific course without referring to the faculty member:

- "I liked Western Heritage because I liked the way it was taught. We got to look at ideas from many different angles."
- "Dr. X had such a unique perspective on everything. It was so cool."
- "Some of the ideas were so new to me. She really made me think."
- "It was so great to watch Prof. A get into his materials. It's like he'd be so totally into it that I'd look up and the class would be over."
- "I liked Hunger. Dr. Y went way beyond the textbook and into his own experiences." "It was so intense the way Prof. D talked about values and changing things."
- "He really made me think in a different way about the homeless people I see."

 "I can't believe how the statistics came to life in that course. It changed me."

Conversely, student comments or observations that a professor was disinterested or "not into" the subject matter were often equated with a class that lacked meaning, coherence, or ways to generate interest.

## Impact of Courses

In addition to the information we obtained about the content of the courses in the AUC, we also obtained insights about the ways the courses affected the students. Prompted by the questions about the impact of the various courses, students in the focus groups identified ways in which the courses influenced their thinking, their behavior, and their desire to work in small groups.

Impact on thinking. Students felt that certain courses "opened their minds" to thinking about the values and ideas of western culture as well as other cultures. Focus group sessions revealed that new perspectives, new points of view were important to students and that, in some sense, such broadening of their ideas is what they had hoped for in college. In addition, students talked quite excitedly about learning the value of questioning and examining ideas and thoughts as part of the learning process. Students were accustomed to ambiguity and uncertainty in the humanities, but were surprised to learn that questioning assumptions is critical to learning in the professional schools and the sciences. Several discussions indicated that students came to these courses with the fixed notion that business and engineering were hard, "cold" and factual and were genuinely surprised to discover otherwise. The interdisciplinary nature of the courses provided the catalyst for these insights. Never before, for example, had students understood that fields of sociology, government and philosophy could be related to business problems:

- "Studying Transnational Corporations made me realize how important it is to know people's cultures and backgrounds."
- "I never realized that intuition played any role in engineering or design.
   I guess I just assumed that discovery came from facts."
- "What I liked was not that we received new information but that we [are] learning new ways of thinking and understanding."
- "Sources of Power' made me realize how no one discipline has the answer to any of society's problems. You need sociologists as well as economists and government."

Impact on behavior. The focus group discussions indicated that students thought that, as a result of taking some of the courses, their behavior and the behavior of other students had changed in several ways. The most significant change occurred in sexual behavior. Students claimed that sexual behavior changed as a result of taking "Epidemics and AIDS." Several said they were much more cautious about practicing "safe sex" and that their friends had also changed their behavior.

Students also indicated that they tried to recycle, eliminate waste and change their living habits as a result of taking "Living in the Environment." However, several reported that their changes were short-lived or not as consistent as they should have been because it is "so difficult to change living in college housing." However, they felt that even little changes were worth noting.

Students suggested that participating in projects and volunteer work fostered a change in their behavior. They felt that once their attitudes were changed by these experiences, their behaviors changed also. Several commented that they treated the homeless differently now, showing more compassion toward them.

Impact on perceptions of working in groups. Students in this study were divided on the value of group work, with many students expressing strong negative attitudes towards this practice both in the interdisciplinary classes and in their other courses. They found it particularly difficult to work in groups if they were highly motivated when other students were not. They also talked about knowing what they could do alone, and not liking the uncertainty associated with group projects. Several students commented that they knew "group work was supposed to be good for you to prepare you for the working world," but they did not find that to be a compelling reason to work in groups on academic projects:

- "Group work really isn't good because you have to depend on people who aren't always dependable."
- "I agree. I've never been in one that wasn't a disaster. It seems I always get stuck doing the work for someone who isn't taking it seriously."
- "Some people just aren't mature enough to work in groups. They see groups as an opportunity to blow off the course."
- "The concept is good, and once in a while it works, but often it's a
  disaster. It always sounds like a good idea until it's time to get the actual
  work done. Conflicting schedules always get in the way."

The comments that were not negative about group work were primarily related to the lab component of courses in the science category. Some

students, for instance, indicated that their attitudes were reflective of their experiences in the sciences: "Well, I'm a biology major, and I think people in the sciences just get accustomed to working with another person." Because of the "hands on" nature of science labs, other students felt that partner or group work was beneficial.

# **Implications**

Overall, although the results from the questionnaires and the focus groups do not present the faculty and administrators of the All-University Curriculum with conclusive evidence, they do provide some important insights concerning students' perceptions of the program. Furthermore, the results are relevant not only for faculty and administrators in an all-university curriculum but also for any faculty or instructional/faculty developers who are interested in the quality of the undergraduate experience. Specifically, this study contains implications for teaching, for future research, and for the use of focus groups as a research methodology.

## **Teaching**

Our study suggests that interdisciplinary courses can be successfully implemented so that students will enroll in the courses and will perceive that they have learned from them. In addition the results provide insights about teaching, particularly for those interested in developing students' critical thinking, getting students more engaged in the content of a course, or using small groups in instruction.

It is clear from the data that, for many students, perceptions, attitudes, and ways of thinking can be influenced by their experiences in the all-university curriculum. Students reported numerous instances in which their attitudes or perceptions toward topics or groups of people were altered as a result of their experiences in a course. It is especially interesting to note that students perceived that through such courses they could become more open-minded and begin to recognize the connectedness of the disciplines and the complexity of issues surrounding topics from various disciplines. The fact that students liked being encouraged to expand their perspectives and broaden their interest has important curricular and pedagogical implications for anyone who wants to enhance critical thinking skills and students' ability to see interrelationships among their college experiences. Given that most institutions of higher education are presently attempting to address the need for greater emphasis on multicultural and global education, the interdisciplinary classroom may be the ideal place to stimulate students' abilities to

appreciate diverse ways of thinking and being, to make the necessary connections, and, generally, to think rather than sit passively and take in information.

There was some indication that behavioral changes followed attitudinal changes. The survey data revealed that the interdisciplinary general education courses encouraged off-campus learning and willingness to volunteer for a variety of activities related to the courses. Students in the focus groups suggested that they enjoyed going to off-campus exhibits, performances, and scientific sites. This information strongly supports the notion that the interdisciplinary general education program is providing an array of activities to support and involve students in their own learning. More important, though, many students indicated that they had changed their behaviors as a result of these activities. These instances reinforce the potential impact of off-campus assignments on learning and the importance of finding ways to increase student involvement in a subject as a way to motivate learning.

The study also revealed valuable information about how we might make humanities and social sciences and, particularly, the sciences more accessible to non-majors. Interdisciplinary proponents argue that learning in the sciences would be enhanced if the curriculum were built on natural areas of student interest, with scientific principles and procedures introduced in context (Steen, 1991). The success of the "Epidemics and AIDS" and the "Living in the Environment" courses seem to reflect that stance. Although all the interdisciplinary courses in the scientific and technological category of the AUC have rigorous lab components, students liked the labs because they were interested in the course content. Again, the findings have implications for enhancing student motivation and interest by finding ways to make course content relevant to students.

In addition, the study has reinforced the importance of instructor enthusiasm in the teaching of a course. For example, for almost all of the students in our focus groups, the content of a well-taught course was inextricably entwined with the professor. Even though the moderators consistently directed the students away from specific discussion of faculty members to a discussion of perceptions of the courses in the interdisciplinary program, student satisfaction with a course was consistently equated with faculty enthusiasm and interest in the subject. This finding is not inconsistent with studies that show instructor enthusiasm as an historically strong predictor of teaching excellence (Feldman, 1976; Sherman et al., 1987). Lowman's study (1984) indicates that teaching effectiveness (i.e., student learning) results from a professor's skill in creating intellectual excitement and rapport. These findings do suggest the need to keep and reward the most highly motivated

and enthusiastic faculty in required general education programs if we are to take general education seriously. In addition, faculty and instructional/faculty developers need to be aware of the importance of instructor enthusiasm for course content and think about how to help instructors design and translate content in ways that reflect their enthusiasm both for the material and for student learning.

Another important finding of this study is the dissatisfaction expressed by some students with the use of small groups in instruction. The literature suggests that collaborative learning energizes students and allows them to analyze and create new perspectives (Bruffee, 1984). Cooperative learning has been shown to develop higher-level thinking skills, promote positive interdependence, and increase student retention (Cooper, et al., 1990). However, the students' reactions towards group work in classes indicate the need for further reflection in this area. In our case, one of the obstacles to promoting successful group work appears to be directly related to the number of students taking the courses on a pass/no pass basis. Some of the dissatisfaction also seems to be the result of students' perceptions of 'fairness' of group grading. Bouton and Garth (1983) suggest, however, that because students are unaccustomed to working in groups, such instructional methods are often ineffective. Unless the use of groups is carefully planned and unless students are carefully prepared for their roles, many students get discouraged before they have sufficient opportunity to recognize the value of learning in groups. This issue might suggest that before encouraging faculty to use small groups and collaborative projects in class, faculty or instructional/faculty developers with specific expertise in these areas can assist by providing consultations or workshops on the effective use of small groups in instruction.

The issue that students sometimes do not appreciate the value of course content until some time after the course also requires additional consideration. This insight provides a reminder that looking for changes in attitudes, behaviors or values —especially abstract ideas or aesthetic values—immediately following a class or even immediately preceding graduation might give us only partial truths. The finding has implications not only for the way faculty or designers work with student expectations during a course but also for the way the effects of courses are evaluated. It may be necessary to think more fully about assessment measures that will allow us to obtain longitudinal insights when we are evaluating courses.

#### Further Research

In addition to providing insights about teaching, the study was useful for

identifying areas that could be advanced by further research. For example, the survey data indicated that many students went beyond the required number of interdisciplinary courses to fulfill elective requirements. Because we had not anticipated that such a large number of students in the sample would have taken an extra course, we did not ask their reasons for doing so. Although the present study has identified some of the reasons why certain courses were popular, we need additional follow-up to understand even more fully the curricular and pedagogical reasons for the choices and decisions students make about their general education requirements.

The strong relationship that emerged among course, professor, and book that students would recommend to a peer is also an important finding that raises issues for further investigation. We need to explore the relationships to better understand how one affects the other. For instance, because the interdisciplinary course in Western Heritage uses all primary sources while many introductory, traditional western civilization courses do not, program and course developers might want to further examine the impact of the use of primary sources rather than textbooks on students' perceptions of course effectiveness.

Also, although the present study was useful for providing some initial data on all-university curriculum, future research might seek insights from additional sources. Based on our findings, for example, we recommend the collection of additional quantitative and qualitative data from a larger, randomly selected sample of students. In addition, conducting focus groups with faculty to assess their perceptions of the meaning or purpose of general education and its effects would provide valuable information regarding the relationship between faculty and student perceptions. Because the students had so much to say about the content of various courses, it would be particularly useful to have the perceptions of the content experts to balance against the perceptions of the students.

#### Use of Focus Groups

Finally, it is important to reinforce the value of focus groups as a method for tapping students' perceptions. Weimer (1991) makes a distinction between the sort of descriptive feedback needed to improve college teaching and the common policies and practices used by practitioners in higher education attempting to evaluate teaching. She suggests that despite a large body of literature and many highly reliable survey instruments, the data often do not yield information helpful to those interested in program improvements or changes. We found that focus groups were one way to respond to her concerns. They provided rich data that we could not have gotten from

traditional survey instruments. For example, the interaction among students that led to the discussion of "after the class was over" effect is not something we did or could have gotten from a traditional pen and paper questionnaire. In addition, our ability to begin to see the interactions between the content and the professor was only obtained after we were able to hear the students talking and probe their responses. Besides providing information about student attitudes toward the program, then, the focus groups gave us the opportunity to obtain rich data to help explain why and how these courses had an impact on students.

#### **Conclusion**

This paper reflects some of our initial efforts in response to Gaff's (1991) call for further understanding of students' experiences in courses required as part of a university's general education requirements. What began as an attempt to identify how students perceive integrative general education requirements at the university expanded into participant-focused study of the program with implications not only for the All-University Curriculum but also for teaching, research, and the use of focus groups as a methodology for understanding how students experience their undergraduate education.

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# Appendix A

NameSchool		Soc. Sec. # Major
1.	Please circle the AUC courses you have taken or are curred Living in a Cultural Context: Western Heritage AUCW 180 A Western Heritage - The Humanities AUCW 210 Discovering America 1 AUCW 211 Discovering America 11 AUCW 212 Discovering America 111 Living in a Cultural Context: Other Cultures	Living Responsively to the Arts AUCA 110 Romanticism in the Arts AUCA 120 Classical Greece AUCA 130 The Italian Renaissance AUCA 140 Creativity: Dynamics of Artistic Expression
	AUCC 110 Hunger - Problems of Scarcity and Choice  AUCC 120 Literature and Films of Other Cultures  AUCC 140 Native American Cultures  AUCC 210 Cultures and Transnational Corporations  Living in a Social Context  AUCS 110 Sources of Power  AUCS 120 The Adult Journey  AUCS 130 Dynamics of Business  AUCS 210 Discovering the News  AUCS 340 Ethics and the Professions	AUCA 150 Urban Roots and Ethnic Arts  Living in a Scientific and Technological World  AUCT 110 Reasoning in Science  AUCT 120 Living in the Environment  AUCT 140 Epidemics and AIDS  AUCT 150 Technology as a Human Affair  AUCT 160 Seeing through Symmetry
2.	Are there any AUC courses you would have liked to tal  1. Yes Which course?	xe but could not fit into your schedule? 2. No

3.	Are there any AUC courses you would have liked to take but would not have received credit within your major?		
	1. Yes Why? 2. No		
4.	Which AUC courses had the greatest impact on you? Why?		
5.	Which AUC courses would you recommend to a friend?		
6.	Which AUC courses would you not recommend to a friend?		
	Why?		
7.	Which AUC professors would you recommend to a friend?		
	Why?		
8.	Which book, play or reading from an AUC course would you recommend to a friend or peer?		
9.	Which book, play, or reading from an AUC course made a lasting impression on you?		
10.	Have you attended one of the following for an AUC course? Circle answers.  1. Art museum off campus 2. Concert at music school 3. Art exhibit on campus 4. Theatrical performance 5. Scientific/technological exhibit		
11.	Have you participated in an event off campus or volunteered as part of an AUC course?		
	1. Yes Activity 2. No		
12.	Have you ever taken an AUC course pass/no pass?  1. No 2. Yes. If so, how many? 1 2 3 4 Why?		

# **Appendix B**

 Looking back on the list of AUC courses you have taken during the last four years, can you give me your overall impressions of the AUC Program?

Why do you feel that way?

2. Do you see any value in taking interdisciplinary courses outside of your major?

What is your perception of interdisciplinary learning?

3. Does interdisciplinary learning take place more easily in team-taught courses or individually taught courses?

Which do you prefer?

Can you tell me about the advantages of each?

4. Was there any one AUC course that made an especially strong impression on you?

How did it make an impression?

- 5. Did any course change the way you thought about something? How did this happen?
- 6. Did any course change anything you do, or any action or behavior? How did this happen?
- 7. Was there any one AUC course that had absolutely no impact on you? What do you think was lacking in the course?
- 8. Was there a book or reading associated with an AUC course that made a lasting impression on you?

What was it? How did it affect you?