

**Student Engagement and Liberal Arts Education:  
Faculty and Student Perceptions**

Rebecca Maddox and Chris Roberts

Assessment Program  
Truman State University  
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## **Student Engagement and Liberal Arts Education: Faculty and Student Perceptions**

Assessment is an important and necessary part of any academic institution. Assessment at Truman State University exists on many levels and concerns many different areas of study, both from outside and within the university. A great part of assessment at Truman is concentrated around the university mission and gaining an understanding of whether the university is accomplishing this mission to the best of its abilities. In its mission statement, the university asserts the goal to provide an education that stems “naturally out of the philosophy, values, content, and desired outcomes of a liberal arts education.” However, in order for the university to accomplish this goal, a universal understanding of liberal arts education is necessary, both among faculty and students and across disciplines. During the Spring 2006 semester we conducted a project as a part of the assessment internship program in which we analyzed student and faculty perceptions of both student engagement and liberal arts education.

The 2006 assessment internship project built on a study conducted by the 2003-2004 interview project at Truman. This project consisted of 361 interviews of undergraduate students at the university concerning their views on student engagement and a liberal arts education. Once this study was completed, faculty members were given a questionnaire compiled from the student responses to the survey. From data, the project determined that students and faculty had different values concerning the issues of student engagement and liberal arts education at Truman. However, because students and faculty were questioned using different methods, their responses could not be directly compared and contrasted. The 2006 internship project was conducted in order to gain a more complete and accurate understanding of these differences between students and faculty.

## **Faculty Interviews**

The 2006 project began with interviews of ten faculty members (five male, five female) across disciplines. We interviewed at least one faculty member from each of the following departments: social science, language and literature, science, business and accountancy, human potential and performance, fine arts, and math and computer science. We conducted the interviews on Tuesdays and Thursdays during the month of February and ranged from twenty minutes to an hour. As much as possible, we asked the same questions of faculty as of students in the 2003-2004 project. These questions concerned the faculty members' opinions about what it means to be a liberally educated person and how student engagement both in and out of the classroom contributes to students' liberal arts education.

For each survey, we provided the definitions of "class experiences" and "out-of-class experiences" that were used in the previous study. Class experiences were defined as "those experiences that contribute to students' education in formal, structured and straightforward ways and include the courses students take in the LSP and major and minor curricula; assignments, field trips, and experiential activities completed as part of the class requirements; internships for academic credit; and study abroad courses." The definition of out-of-class experiences included "those experiences that involve any other activity in which students are involved as a part of their Truman experience, such as participation in or attendance at athletic events, dramatic or musical performances, art shows and displays; participation or leadership in honor societies, professional fraternities, social fraternities and sororities, and other student organizations; volunteerism; campus work experiences; involvement in student government; attendance at speeches, cultural events, conferences and workshops; participation in intramurals and fitness activities;

involvement with counseling, mentoring, and advising relationships; collaboration in research, projects, or programs with students, faculty, and/or staff at Truman; etc.”

## **Interview Results**

The first question we posed to faculty members was, “In your mind, what are the characteristics of a liberally educated person?” The qualities most cited were having a broad understanding of issues and being well-rounded, while five out of the ten participants also named characteristics of citizenship in their descriptions. Other high-ranking qualities included critical thinking skills, appreciation for difference, and the ability to engage in a variety of settings.

Question two asked participants to “describe the class experiences that most contribute to your teaching of the liberal arts.” The experiences most mentioned by professors included applied assignments and discussion (five faculty members) and reflective writing and demonstration of problem-solving skills (three faculty members). Individual research, presentations, use of technology, and group projects were all also mentioned in response to this question.

In the third question of the interviews, faculty members described “those out-of-class experiences that would most significantly supplement or contribute to students’ education in the liberal arts.” Cultural events were by far the most mentioned experiences, with six out of the ten faculty members. Study abroad and service learning were both named by three faculty members, and two faculty members mentioned experiences in social fraternities, research, athletics, and music.

Question four asked faculty members to “describe those out-of-class experiences that would most significantly enhance students’ college experiences and growth as individuals.” Four

faculty members responded to this prompt with participation in student organizations and study abroad experiences, and three faculty members mentioned cultural events and the formation of friendships.

The fifth question asked professors, “How have your interactions with students, both in and out of the classroom, modeled what in your opinion constitutes a liberal arts education?” This question elicited a wide range of responses, with the most common being the formation of relationships (five faculty members). The sharing of ideas, encouragement, being seen in different areas, and learning with students were all named three times.

In the sixth question of the interview, we asked professors, “How do your courses serve as a venue for interdisciplinary connections?” A large number of the faculty members stated that their subject was inherently interdisciplinary. However, faculty members also explicitly mentioned their courses providing a broad perspective, making use of problem solving skills, applying oral and written communication skills, and using examples drawn from other subjects.

The seventh question asked, “What types of interdisciplinary connections have you observed students making in your classes?” These responses were obviously dependent on the departments from which they came. They were mentioned as follows:

<b>Division</b>	<b>Interdisciplinary Connection(s)</b>
Sociology	Political science, psychology, and business
Business	Data analysis, psychology, and critical thinking
Philosophy	History, political science, physics, and theatre
English	Religion, psychology
Math	Philosophy, religion
Music	Math, physics, and language
Nursing	Biology, sociology, psychology, music, and art
Biology	Math, environmental studies
History	Psychology

In question eight, we asked faculty members, “What steps might, or should, Truman take to strengthen students’ liberal arts education?” Five faculty members named having a smaller core or reducing the number of requirements. Four professors mentioned having a better understanding of the liberal arts campus-wide, and three mentions were made of re-evaluating or revising the Liberal Studies Program.

Question nine asked, “Aside from grades, what distinguishes a good student in your mind?” A student who is curious, inquisitive, or challenging was mentioned as a good student by six professors, and four faculty members named the importance of responsibility for the students’ own work, a good work ethic or sense of commitment, and learning for learning’s sake. Being excited, engaged, focused, and able to make connections were also mentioned in response to this question.

Similarly, question ten asked, “What distinguishes a successful educator?” Five professors mentioned the importance of personal relations with students, and four named caring about students and learning and striving to improve. Being able to engage or interest students was mentioned by three faculty members, as well as designing their classes with the students in mind, being open, and having the desire to learn. Other qualities mentioned included having a good attitude, loving the subject matter, being available, being responsible, and presenting materials clearly.

Finally, question eleven asked faculty members, “What distinguishes a good educational experience from just teaching a class?” Four professors cited student engagement and a phenomenon most often referred to as “seeing it click.” This concept applied to situations where students who had previously struggled with a particular idea suddenly reached the point where they understood. A feeling of community, a desire to continue learning about the subject matter,

and a clear difference that arrived from learning over the course of the semester were all named by three professors, and a sense of accomplishment and an awareness of the relevance of the topic were mentioned twice.

Once we coded the faculty interview responses, we compiled them with the results from the student interviews in 2003-2004 project. We then used the combined responses to create a web-based questionnaire was administered to both faculty and students via TruView. Students and faculty members had two weeks to complete the questionnaire, which we closed on March 31 and began analyzing the results.

### **Questionnaire Results**

Ten major questions were devised regarding student engagement and liberal education. Each of these major questions had a number of individual characteristics (a total of 137 for all ten questions). These questions comprised the quantitative portion of our online questionnaire that survey respondents were asked to evaluate. There were six total values, ranging from “not at all important” to “extremely important”. They were then converted to quantitative whole number values of 1 through 6, with 1 being “not at all important” and 6 corresponding to “extremely important”. For each characteristic or “sub question” of the major questions, mean values from particular groups of the respondents were compared. These groups included Faculty, Students, Female Faculty, Male Faculty, Female Students, and Male Students.

Imperfections in the data set from the questionnaire resulted in a handful of problems relating to the number of respondents. The data that was received on Excel had 121 faculty and 604 students for a total of 725 respondents. There were 55 female faculty and 66 male faculty respondents. As for the students, there were 426 females and 178 males. However, when categorizing respondents by their designation as faculty or students, the statistical software

program SPSS revealed 122 faculty members and 603 students. While this is a clear inconsistency, the derived means for each group were still relatively equivalent with differences of less than .01 between Excel and SPSS analyses. Additionally, the data set received contained a number of gaps, located within Questions 4 and 5. As a result, there were only 404 and 408 recognizable respondents, respectively. Question 4 had 103 faculty (46 female and 57 male) and 305 student (221 female and 84 male) responses. Question 5 had 103 faculty (46 female and 57 male) and 301 student (218 female and 83 male) responses. Though there are a significant number less respondents for these two questions, there were still enough respondents to properly evaluate and analyze the results.

As the primary purpose of the survey was to compare faculty and student perceptions of student engagement and liberal education at Truman State University, the faculty/student comparison is the most important to this report. The mean values for each of the 137 total questions were tested for statistically significant differences with an independent t-test where equal variances were not assumed. For any question where faculty and student means were determined to have less than a 5% probability of being equivalent (p-value of .05), the students and faculty had statistically significantly different values.

Below there are tables for each of the ten major questions that reveal information pertaining to faculty and student means and the t-test to determine statistically significant differences. The tables are truncated and only contain the results of sub questions that are directly discussed. The discussed results pertain specifically to statistically significant differences between faculty and student means, as well as highest and lowest valued sub questions within each particular major question. An analysis of survey results led us to determine that respondents tended to relate the valuation of their responses to major questions

only, and not value their responses over the entire survey. This means that a student mean of 3.84 in regards to “citizenship” in Question 1 is only comparable to other sub questions within Question 1, and not to something such as “writing papers” in Question 2. Thus, while the mean of all responses throughout the entire survey for all respondents was 4.46, the mean for all responses for all respondents on a particular question (such as Question 1) was significantly different from the mean for another question (such as Question 2). For this reason, the mean of all respondents for each question is given in the table. It is an easy way to assess whether or not a particular sub question is highly or lowly valued.

**1.) In your mind, how important is each of the following characteristics in describing a liberally educated person?**

Question 1 (Mean of 4.72)	F	S	M	Diff.	p
Ability to communicate/interact well with others	5.38	5.08	5.13	.30	.001
Ability to think and reason well	5.68	5.30	5.36	.38	.000
Citizenship	4.61	3.84	3.97	.77	.000
Critical thinker	5.57	4.96	5.06	.61	.000
Desire to learn	5.41	4.91	4.99	.50	.000
General academic knowledge, little expertise	3.75	3.43	3.48	.32	.004
Life-long learner	5.39	4.79	4.89	.60	.000
Open-minded	5.20	4.95	5.00	.25	.010

The results from statistical analysis show that faculty more value the ability to communicate and interact well with others and the ability to think and reason well than do students. Additionally, faculty feelings about citizenship, critical thinking, the desire to learn, being a life-long learner, and being open-minded as being important characteristics in describing a liberally educated person are stronger than students’ and the difference is statistically significant at the xxx level. On the other hand, there are no statistically significant characteristics that students value more than faculty members.

For all 725 respondents, there was an overall mean value of 4.72 for the entirety of Question 1. The lowest valued characteristic in describing a liberally educated person was “general academic knowledge, little expertise” with means of 3.75 and 3.43 for faculty and students, respectively. The average for all respondents was 3.48, 1.24 lower than the average for all of the characteristics. Additionally, the highest valued characteristic in describing a liberally educated person was “ability to think and reason well” with means of 5.68 and 5.30 for faculty and students, respectively. The average for all respondents was 5.36, .64 higher than the average for all of the characteristics. Despite the fact that there is a statistically significant difference in means between faculty and students for each of these characteristics, they were both the lowest and highest valued characteristics for each demographic group.

**2.) In your opinion, how important is each of the following class experiences in contributing to, or supplementing, a good liberal arts education.**

Question 2 (Mean of 4.33)	F	S	M	Diff.	p
Class discussions	4.84	4.55	4.60	.29	.007
Classroom diversity	4.27	4.00	4.05	.27	.020
Good professor	4.92	5.33	5.26	.41	.000
Group projects	3.77	3.19	3.29	.56	.000
Hands-on labs	4.35	3.90	3.97	.45	.000
Independent thinking	5.30	4.72	4.82	.58	.000
Interdisciplinary connections	4.73	4.33	4.40	.40	.001
Interesting subject matter	4.31	5.01	4.89	.70	.000
Professor/student interaction	5.06	4.86	4.89	.20	.050
Research	4.46	3.98	4.06	.48	.000
Smaller classes/student interaction	5.01	4.83	4.86	.18	.112
Speeches and presentations	4.07	3.48	3.58	.59	.000
Wide range of classes	4.56	4.81	4.76	.25	.032
Writing papers	4.75	3.78	3.94	.97	.000

In seeking to understand how faculty and students valued in-class experiences as they contributed to a liberal arts education, we determined through the results of our survey that

faculty and students were highly divided. Of the 18 class experiences in Question 2, 12 had p-values less than .05 when comparing faculty and student means. We found that faculty more significantly value classroom discussions and diversity, group projects and hands-on labs, independent thinking, interdisciplinary connections, research, speeches and presentations, and papers. With regards to writing papers, the faculty feels considerably stronger towards this in-class experience. The difference between faculty and student means was .97, nearly 20% of the entire converted Likert scale range of 1 – 6. On the other hand, students feel significantly stronger about interesting subject matter, a wide range of classes, and good professors than faculty. The lowest valued class experience in contributing to a good liberal arts education for both faculty and students was group projects with an overall mean of 3.29. This mean was 1.04 less than the mean for all of the responses to Question 2. The highest valued class experiences were good professors, independent thinking, interesting subject matter, professor/student interaction, and smaller classes. While students and faculty felt statistically significantly different about a number of these experiences, they were nevertheless the highest valued ones for both groups.

**3.) In your opinion, how important is each of the following out-of-class experiences in contributing to, or supplementing, a good liberal arts education?**

Question 3 (Mean of 3.81)	F	S	M	Diff.	P
Cultural events	4.56	4.39	4.42	.17	.126
Faculty interaction	4.74	4.29	4.37	.45	.000
Greek life	2.35	2.45	2.44	.10	.434
Religious organizations	3.19	3.64	3.56	.45	.002
Research	4.48	3.81	3.93	.67	.000
Study abroad	4.62	4.48	4.51	.14	.223

Question 3 asked respondents to value out-of-class experiences that contributed to a liberal arts education. Whereas Question 2 had a large number of significantly different responses, Question 3 only had three experiences that faculty and students felt significantly different about. It appears that faculty more value faculty interaction and research, while students more value religious organizations. The highest valued out-of-class experiences that contribute to a good liberal arts education amongst both faculty and students seem to be cultural events and study abroad. The lowest valued experience is Greek life with a mean of 2.44 for all respondents—1.37 less than the mean of 3.81 for all responses in Question 3.

**4.) In your opinion, how important is each of the following types of out-of-class experiences in significantly enhancing the college experience and growth of students as individuals?**

Question 4 (Mean of 4.67)	F	S	M	Diff.	p
Greek life	2.73	2.95	2.93	.22	.166
Living away from home	4.56	4.97	4.92	.41	.002
Meeting new people	5.11	5.19	5.22	.08	.444
Religious organizations	3.57	3.96	3.90	.39	.018
Research	4.45	3.68	3.91	.77	.000
Residential life	3.59	3.97	3.91	.38	.013
Study abroad	4.84	4.65	4.74	.19	.136
Truman (Freshman) Week	3.06	3.60	3.50	.54	.002

Question 4 was similar to Question 3, only it dealt with out-of-class experiences that enhance the college experience and growth of students as individuals instead of a liberal arts education. Question 4 had five experiences in which faculty and student means were statistically significantly different. As with Questions 2 and 3, faculty placed significantly more value on research than students. However, students responded stronger to living away from home, religious organizations, residential life, and Truman (Freshman) Week as being important out-of-class experiences that enhanced the college experience and individual growth. Though students

felt significantly stronger about Truman (Freshman) Week, it was still one of the lowest valued experiences for both faculty and students. It had an overall mean of 3.50, which is 1.17 less than the mean of Question 4 as a whole. However, it was not the lowest valued experience. Greek life, with an overall mean of 2.93, was the lowest valued experience for both faculty and students. Thus, both faculty and students feel that Greek life is a relatively insignificant out-of-class experience not only in contributing to a good liberal arts education, but also in contributing to individual growth and enhancing the college experience. On the other hand, the highest valued experiences according to faculty and students were living away from home, meeting new people, and study abroad.

**5.) In your opinion, how important is each of the following types of student/faculty interaction in contributing to a student’s liberal arts education?**

Question 5 (Mean of 4.46)	F	S	M	Diff.	p
Attendance at conferences	3.77	3.30	3.39	.47	.000
Class discussions	4.99	4.72	4.74	.27	.015
Interest in student; willingness to help	5.12	5.07	5.03	.05	.645
Professor enthusiasm for his/her discipline	5.41	5.37	5.33	.04	.692
Relationship (higher level of comfort and friendship)	3.91	4.62	4.40	.71	.002
Research	4.33	3.72	3.84	.61	.000

In regards to Question 5, we found that faculty significantly more value attending conferences, class discussions, and research as important types of student/faculty interactions that contribute to a liberal arts education. Students, however, feel significantly stronger about maintaining a positive faculty/student relationship that included a high level of comfort and friendship. Both faculty and students feel that a faculty interest in students and willingness to help, as well as a professor’s enthusiasm for their discipline, are the most important student/faculty interactions that contribute to a liberal arts education. On the other hand,

attending conferences was the lowest valued interaction. As with many other cases, faculty and student means for this particular interaction are statistically significantly different, but they both are aligned in believing that it is the least important of the student/faculty interactions.

**6.) In your mind, how important is each of the following options in strengthening students' liberal arts education?**

Question 6 (Mean of 3.67)	F	S	M	Diff.	p
Additional requirements	1.93	2.38	2.30	.45	.000
Fewer requirements	3.39	2.95	3.02	.44	.010
Same requirements	2.63	3.31	3.19	.68	.000
Advertise events – more PR – more info	3.35	3.82	3.74	.47	.001
Better understanding of liberal arts campus-wide	4.30	3.86	3.93	.46	.001
Encourage faculty student interaction	4.20	4.39	4.36	.19	.121
Greater consistency/higher standards across professors	3.74	4.29	4.19	.55	.000
Make more connections – LSP to major	3.90	4.25	4.19	.35	.017
More choices	3.75	4.73	4.57	.98	.000
More interdisciplinary courses	3.48	4.12	4.01	.64	.000
More study groups	3.18	3.44	3.40	.26	.070
No foreign language	1.66	2.20	2.11	.54	.000
Real-life applications	4.13	4.46	4.40	.33	.025

Question 6 was a very unique one in that a great majority of the sub questions had statistically significantly different means between faculty and students. Of the 15 sub questions, only four of them had relatively similar means amongst both groups. Faculty results indicate that they feel more strongly about having fewer requirements and maintaining a better understanding of liberal arts campus-wide as viable options to strengthen the liberal arts education at Truman State. Students, on the other hand, feel more strongly about the following options: adding requirements, having the same requirements, advertising events better/more, having a greater consistency and higher standards across professors, making more connections from the LSP to the major programs, having more choices, having more interdisciplinary courses, and including real-life applications.

While students seem to feel stronger about having both more requirements and the same requirements, it should be noted that the “additional requirements” sub question received a student mean of only 2.38, which is 1.29 below the overall mean for Question 6. Additionally, the student mean for “no foreign language” is significantly higher than the faculty mean, but both are of the lowest responses for all of Question 6. An interesting result is that faculty, more than students, feel that there should be less requirements at Truman State. However, students by a wide margin feel that there should be more choices available to them. Their mean for this sub question was 4.73, nearly 1 value point higher than the faculty mean. As far as highs and lows are concerned, faculty and students both feel that eliminating the foreign language requirement and adding requirements would not be beneficial, whereas encouraging faculty/student interaction and having more real-life applications would be beneficial.

**7.) In your mind, how important is each of the following characteristics in distinguishing a successful student?**

Question 7 (Mean of 4.71)	F	S	M	Diff.	p
Good grades	3.69	3.79	3.77	.10	.356
Curious/inquisitive/challenging	5.34	4.87	4.95	.47	.000
Interested in course material, enthused about learning	5.20	4.87	4.92	.33	.000
Participates	4.97	4.43	4.52	.54	.000
Sociable and involved	4.01	4.25	4.21	.24	.046
Takes responsibility for own work	5.43	5.11	5.16	.32	.000

For characteristics that distinguish a successful student, survey responses revealed that faculty feel stronger about curiosity, inquisitiveness, interest in course material, participation, and responsibility. Students, however, more value sociability. While there were five characteristics that faculty and students felt significantly different about, all characteristics (with the exception of good grades) had average means greater than 4.00 for both faculty and students.

Thus, good grades are seen by both faculty and students as an ineffective means to which one would distinguish a successful student. In general, the most highly valued characteristic is responsibility, specifically when a student takes responsibility for his/her own work. This revelation in the data coincides with the results of our faculty interviews in that responsibility was frequently cited as being a strong characteristic in successful students.

**8.) In your opinion, how important is each of the following descriptions in characterizing a successful educator?**

Question 8 (Mean of 4.98)	F	S	M	Diff.	p
Clear presentation of material	5.14	5.39	5.35	.25	.005
Forms personal relationships with students	3.66	4.32	4.21	.66	.000
Sociable, friendly	3.96	4.69	4.56	.73	.000
Variety of teaching abilities	4.31	4.61	4.56	.30	.009
Willing to help – interested in, cares about students – flexible	5.02	5.33	5.28	.31	.002

For Question 8, all of the sub questions that had statistically significant means amongst faculty and students had higher student means. The characteristics that students feel stronger about than faculty in describing a successful educator include the following: clear presentation of material, forms personal relationships with students, sociable and friendly, variety of teaching abilities, willingness to help students, and general interest and care for students. The results from Question 8 coincide with a general trend throughout the survey where students value significantly more than faculty friendly qualities in professors. With a mean of 4.98, Question 8 had the highest valued results. Student means for the sub questions were all above 4.00, and faculty means were only below 4.00 in two cases: “forms personal relationships with students” and “sociable, friendly”. Thus, while forming personal relationships with students was the least valued characteristic for both faculty and students, there were a number of characteristics that had averages above 5.00.

**9.) From your perspective, how important is each of the following aspects in distinguishing a good educational experience from just taking a class?**

Question 9 (Mean of 4.65)	F	S	M	Diff.	p
Active student engagement	4.89	4.46	4.54	.43	.000
Enjoying the class	4.14	4.90	4.78	.76	.000
Enthusiastic/good professor	4.64	5.18	5.09	.54	.000
Good student/professor relationship	4.20	4.52	4.46	.32	.006
Meeting/learning about others	3.99	4.03	4.03	.04	.745
Sense of accomplishment	4.95	5.02	5.01	.07	.488

In distinguishing a good educational experience from just taking a class, survey results indicate that faculty members feel significantly stronger about active student engagement in the classroom than students. On the other hand, students feel stronger about enjoying the class, having an enthusiastic professor, and having a good student/professor relationship when it comes to distinguishing a good educational experience. Though there were four sub questions that had statistically significant differences, faculty and student means for Question 9 were all above 4.00, with the exception of faculty sentiments towards “meeting/learning about others” (3.99). This quality was the lowest valued amongst both faculty and students. The highest valued aspect in distinguishing a good educational experience from just taking a class was having a sense of accomplishment.

**10.) How important is each of the following in student/faculty interactions, both inside and outside of the classroom?**

Question 10 (Mean of 4.59)	F	S	M	Diff.	p
Faculty availability outside of class	4.46	4.76	4.71	.30	.011
Faculty prestige/academic background	3.11	3.54	3.47	.43	.001
Faculty willingness to hear students’ opinions	4.82	5.03	5.00	.21	.043
Mutual respect	5.19	5.20	5.19	.01	.942
Mutual trust	5.06	5.07	5.07	.01	.878

Regarding the importance of student/faculty interactions in and out of the classroom, we found that students value faculty availability outside of class, faculty prestige and academic background, faculty willingness to hear students' opinions, and having an outgoing attitude significantly more than faculty members. There were no qualities in which faculty were determined to have statistically significantly stronger means. The lowest valued characteristics in regards to student/faculty interactions was faculty prestige/academic background. For both students and faculty, the most important characteristics in student faculty/interactions are mutual trust and respect. Thus, Question 10 elucidates a general trend throughout the survey results, which points towards faculty and students at Truman State valuing camaraderie and the growth/facilitation of friendship and positive relationships between professors and students.

Aside from micro-patterns in each of the ten major questions, there are clearly recognizable trends throughout the entire survey. Another major trend is regarding research; faculty, by a considerable margin, value research more than students. The importance of research arose in four of the ten major questions regarding its importance as: an in-class experience that contributes to a liberal arts education, an out-of-class experience that contributes to a liberal arts education, an out-of-class experience that enhances the college experience and individual growth, and a student/faculty interaction that contributes to a liberal arts education. The margin of difference for each of these categories was .48, .67, .77, .61, respectively, with faculty valuing research more than students on each occasion. Additionally, as in-class and out-of-class experiences that contribute to a liberal arts education, faculty valued research above the mean value for each of those major questions. It is clear that Truman faculty believe research to be an integral part not only of a liberal arts education, but also of college life in general, whereas students do not hold research in such high esteem.

There are also interesting results to be seen in a gender analysis. Throughout the questionnaire, both faculty females and student females tended to have higher means than their male counterparts. Additionally, student females, significantly more than males, value religious organizations, residential life, student employment, volunteer and service opportunities, and study abroad. An intriguing result of gender t-tests is that faculty members are significantly more consistent in their responses as far as gender is concerned. Amongst faculty and students there were a total of 70 of 137 questions that had statistically significantly different means. Between male and female students, there were 79. However, between male and female faculty members, there were only 11 of 137 questions that had statistically significantly different means. While our analysis did not take into account a number of other qualities, such as department or political affiliation, this gender analysis does reveal that it is more than likely that faculty members are more consistent in their understanding and valuing of student engagement and liberal arts education at Truman State University than are the students.

We concluded our survey by asking the open-ended question, “Where do your most valued faculty/student interactions take place?” In the classroom and in the professor’s office were by far the most popular responses for both faculty members and students. Labs, moments before and after class, and research scenarios were all recognized as being important interactions, as well. Students and faculty both felt that times when they were able to interact one-on-one were valuable. Overall, faculty members felt that small classes or working with small groups aided in their valued interactions with students, while students emphasized the importance of discussion in class. Many students also mentioned the importance of a faculty member recognizing them and knowing them by name.

The final question on the questionnaire asked whether the participants had any additional comments they would like to share. Many students and faculty members responded to this question, although in varying ways. Some used this question as a forum to voice their complaints about the university. Others made suggestions about how we could improve the questionnaire. Either way, their responses demonstrated an interest in this aspect of Truman State University's environment, as well as a desire to see this institution progress as an effective liberal arts and sciences university.

## **Conclusion**

As indicated by the 2003-2004 Interview Project, faculty and students at Truman have varying opinions about both student engagement and liberal arts education. Over half of the questions asked in our questionnaire yielded significantly different levels of value between students and faculty in regard to these areas. Most importantly, the responses to this questionnaire helped us realize that individuals have very strong opinions about Truman's future, and discussing liberal arts at the university is both a necessary and positive step toward gaining a better understanding of that future.

## Appendix A – Tables of Questionnaire Responses

Italicized entries indicate statistically significantly different means between faculty and students.

### 1.) In your mind, how important is each of the following characteristics in describing a liberally educated person?

<b>Question 1</b> (Mean of 4.72)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
<i>Ability to communicate/interact well with others</i>	5.38	5.08	5.13	.30	.001
<i>Ability to think and reason well</i>	5.68	5.30	5.36	.38	.000
Appreciation for difference	5.02	4.84	4.87	.18	.077
<i>Citizenship</i>	4.61	3.84	3.97	.77	.000
<i>Critical thinker</i>	5.57	4.96	5.06	.61	.000
<i>Desire to learn</i>	5.41	4.91	4.99	.50	.000
<i>General academic knowledge, little expertise</i>	3.75	3.43	3.48	.32	.004
<i>Life-long learner</i>	5.39	4.79	4.89	.60	.000
<i>Open-minded</i>	5.20	4.95	5.00	.25	.010
Possesses practical skills/knowledge, understands the world	4.93	4.87	4.88	.06	.547
Renaissance person (well-versed on a variety of topics)	4.38	4.28	4.30	.10	.415
Well-rounded (have a lot of interests/experiences)	4.61	4.66	4.65	.05	.669

### 2.) In your opinion, how important is each of the following class experiences in contributing to, or supplementing, a good liberal arts education?

<b>Question 2</b> (Mean of 4.33)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
<i>Class discussions</i>	4.84	4.55	4.60	.29	.007
<i>Classroom diversity</i>	4.27	4.00	4.05	.27	.020
Different teaching/learning methods	4.53	4.34	4.37	.19	.065
<i>Good professor</i>	4.92	5.33	5.26	.41	.000
<i>Group projects</i>	3.77	3.19	3.29	.56	.000
<i>Hands-on labs</i>	4.35	3.90	3.97	.45	.000
<i>Independent thinking</i>	5.30	4.72	4.82	.58	.000
<i>Interdisciplinary connections</i>	4.73	4.33	4.40	.40	.001
<i>Interesting subject matter</i>	4.31	5.01	4.89	.70	.000
Lectures	3.69	3.89	3.85	.20	.079
Practical/applied assignments	4.42	4.39	4.39	.03	.807
Professor/student interaction	5.06	4.86	4.89	.20	.050
<i>Research</i>	4.46	3.98	4.06	.48	.000
Smaller classes/student interaction	5.01	4.83	4.86	.18	.112
<i>Speeches and presentations</i>	4.07	3.48	3.58	.59	.000
Use of technology	3.76	3.96	3.93	.20	.135
<i>Wide range of classes</i>	4.56	4.81	4.76	.25	.032
<i>Writing papers</i>	4.75	3.78	3.94	.97	.000

**3.) In your opinion, how important is each of the following out-of-class experiences in contributing to, or supplementing, a good liberal arts education?**

<b>Question 3 (Mean of 3.81)</b>	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
Athletics (participant, spectator, intramurals, rec. center)	3.24	3.15	3.17	.09	.527
Cultural events	4.56	4.39	4.42	.17	.126
<i>Faculty interaction</i>	4.74	4.29	4.37	.45	.000
Greek life	2.35	2.45	2.44	.10	.434
Other university events (Presentations, SAB, etc.)	3.99	3.92	3.93	.07	.534
Other university organizations/clubs (social, political, etc.)	4.10	4.19	4.17	.09	.417
Professional organizations	4.10	4.04	4.05	.06	.650
<i>Religious organizations</i>	3.19	3.64	3.56	.45	.002
<i>Research</i>	4.48	3.81	3.93	.67	.000
Residential life	3.61	3.71	3.70	.10	.438
Service learning	3.83	3.85	3.85	.02	.863
Student employment/work	3.44	3.52	3.51	.08	.538
Study abroad	4.62	4.48	4.51	.14	.223
Truman (Freshman) Week	3.29	3.48	3.44	.19	.219
Volunteer and service organizations	4.07	4.16	4.14	.09	.508

**4.) In your opinion, how important is each of the following types of out-of-class experiences in significantly enhancing the college experience and growth of students as individuals?**

<b>Question 4 (Mean of 4.67)</b>	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
Athletics (participation/spectator, intramurals, rec. center)	3.60	3.52	3.57	.08	.600
Cultural events	4.44	4.43	4.47	.01	.930
Faculty interaction	4.55	4.34	4.44	.19	.087
Greek life	2.73	2.95	2.93	.22	.166
<i>Living away from home</i>	4.56	4.97	4.92	.41	.002
Meeting new people	5.11	5.19	5.22	.08	.444
Other university events (Presentations, SAB, etc.)	4.12	4.13	4.17	.01	.922
Other university organizations/clubs (social, political, etc.)	4.18	4.34	4.35	.16	.190
Professional organizations	4.10	4.11	4.15	.01	.893
<i>Religious organizations</i>	3.57	3.96	3.90	.39	.018
<i>Research</i>	4.45	3.68	3.91	.77	.000
<i>Residential life</i>	3.59	3.97	3.91	.38	.013
Service learning	3.86	3.88	3.91	.02	.936
Student employment/work	3.50	3.76	3.73	.26	.092
Study abroad	4.84	4.65	4.74	.19	.136
<i>Truman (Freshman) Week</i>	3.06	3.60	3.50	.54	.002
Volunteer and service organizations	4.14	4.28	4.28	.14	.340

**5.) In your opinion, how important is each of the following types of student/faculty interaction in contributing to a student's liberal arts education?**

<b>Question 5</b> (Mean of 4.46)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
Advising	4.15	4.28	4.20	.13	.351
<i>Attendance at conferences</i>	3.77	3.30	3.39	.47	.000
<i>Class discussions</i>	4.99	4.72	4.74	.27	.015
Interest in student; willingness to help	5.12	5.07	5.03	.05	.645
Out-of-class interaction (independent of course work)	4.23	4.21	4.17	.02	.864
Professor availability (in or out of office hours)	4.75	4.91	4.82	.16	.188
Professor enthusiasm for his/her discipline	5.41	5.37	4.33	.04	.692
<i>Relationship (higher level of comfort and friendship)</i>	3.91	4.62	4.40	.71	.002
<i>Research</i>	4.33	3.72	3.84	.61	.000
Small class size	4.88	4.69	4.69	.19	.121
Varied teaching styles	4.50	4.45	4.42	.05	.732

**6.) In your mind, how important is each of the following options in strengthening students' liberal arts education?**

<b>Question 6</b> (Mean of 3.67)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
<i>Additional requirements</i>	1.93	2.38	2.30	.45	.000
<i>Fewer requirements</i>	3.39	2.95	3.02	.44	.010
<i>Same requirements</i>	2.63	3.31	3.19	.68	.000
<i>Advertise events – more PR – more info</i>	3.35	3.82	3.74	.47	.001
<i>Better understanding of liberal arts campus-wide</i>	4.30	3.86	3.93	.46	.001
Encourage faculty student interaction	4.20	4.39	4.36	.19	.121
<i>Greater consistency/higher standards across professors</i>	3.74	4.29	4.19	.55	.000
<i>Make more connections – LSP to major</i>	3.90	4.25	4.19	.35	.017
<i>More choices</i>	3.75	4.73	4.57	.98	.000
<i>More interdisciplinary courses</i>	3.48	4.12	4.01	.64	.000
More study groups	3.18	3.44	3.40	.26	.070
<i>No foreign language</i>	1.66	2.20	2.11	.54	.000
<i>Real-life applications</i>	4.13	4.46	4.40	.33	.025
Re-examine JINS program	3.48	3.78	3.73	.30	.071
Re-examine LSP	3.95	3.97	3.96	.02	.924

**7.) In your mind, how important is each of the following characteristics in distinguishing a successful student?**

<b>Question 7</b> (Mean of 4.71)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
Ability to apply	5.01	4.88	4.90	.13	.201
Good grades	3.69	3.79	3.77	.10	.356
<i>Curious/inquisitive/challenging</i>	5.34	4.87	4.95	.47	.000
<i>Interested in course material, enthused about learning</i>	5.20	4.87	4.92	.33	.000
<i>Participates</i>	4.97	4.43	4.52	.54	.000
Persistent, determined, hard worker	5.10	4.92	4.95	.18	.053
Sets and achieves goals	4.85	4.71	4.73	.14	.141
<i>Sociable and involved</i>	4.01	4.25	4.21	.24	.046
Someone who really learned	4.97	4.89	4.91	.08	.490
<i>Takes responsibility for own work</i>	5.43	5.11	5.16	.32	.000
Well-rounded	4.66	4.81	4.78	.15	.137

**8.) In your opinion, how important is each of the following descriptions in characterizing a successful educator?**

<b>Question 8</b> (Mean of 4.98)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
Ability to relate to students	4.96	5.05	5.04	.09	.340
<i>Clear presentation of material</i>	5.14	5.39	5.35	.25	.005
Desire to see students learn and achieve	5.41	5.28	5.30	.13	.135
<i>Forms personal relationships with students</i>	3.66	4.32	4.21	.66	.000
Generates student interest	4.99	5.12	5.09	.13	.051
Good communication skills	5.31	5.31	5.31	.00	.987
Knowledgeable about discipline	5.47	5.36	5.38	.11	.219
Open-minded	5.12	5.03	5.05	.09	.323
Passionate about subject	5.33	5.25	5.27	.08	.393
Produces successful students	4.69	4.75	4.74	.06	.589
<i>Sociable, friendly</i>	3.96	4.69	4.56	.73	.000
<i>Variety of teaching abilities</i>	4.31	4.61	4.56	.30	.009
Well-rounded	4.51	4.66	4.63	.14	.181
<i>Willing to help – interested in, cares about students – flexible</i>	5.02	5.33	5.28	.31	.002

**9.) From your perspective, how important is each of the following aspects in distinguishing a good educational experience from just taking a class?**

<b>Question 9</b> (Mean of 4.65)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
Ability to apply – seeing application	4.70	4.70	4.70	.00	.978
<i>Active student engagement</i>	4.89	4.46	4.54	.43	.000
Concern for learning over grades	4.80	4.65	4.67	.15	.188
Continued interest in the material	4.63	4.73	4.72	.10	.307
<i>Enjoying the class</i>	4.14	4.90	4.78	.76	.000
<i>Enthusiastic/good professor</i>	4.64	5.18	5.09	.54	.000
Gaining a new perspective	4.77	4.57	4.60	.20	.202
<i>Good student/professor relationship</i>	4.20	4.52	4.46	.32	.006
Knowledge of the subject	4.65	4.70	4.70	.05	.578
Meeting/learning about others	3.99	4.03	4.03	.04	.745
Moments of epiphany (when a difficult concept makes sense)	4.57	4.56	4.56	.01	.988
Sense of accomplishment	4.95	5.02	5.01	.07	.488

**10.) How important is each of the following in student/faculty interactions, both inside and outside of the classroom?**

<b>Question 10</b> (Mean of 4.59)	<b>F</b>	<b>S</b>	<b>M</b>	<b>Diff.</b>	<b>p</b>
Classroom presentation skills	4.48	4.44	4.45	.04	.670
<i>Faculty availability outside of class</i>	4.46	4.76	4.71	.30	.011
Faculty cares for students' educational development	4.78	4.86	4.85	.08	.447
Faculty interpersonal communication skills	4.64	4.72	4.71	.08	.392
Faculty knowing students by name	4.42	4.66	4.62	.24	.059
<i>Faculty prestige/academic background</i>	3.11	3.54	3.47	.43	.001
Faculty support for students' educational and career goals	4.48	4.69	4.65	.21	.068
<i>Faculty willingness to hear students' options</i>	4.82	5.03	5.00	.21	.043
Making interdisciplinary connections	4.26	4.13	4.15	.13	.272
Mutual respect	5.19	5.20	5.19	.01	.942
Mutual trust	5.06	5.07	5.07	.01	.878
<i>Outgoing attitude</i>	3.64	4.34	4.22	.70	.000