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## The Presence of Jesuit Values in a Selection of University of San Francisco Courses: The Students' Perspective

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### The Presence of Jesuit Values in a Selection of University of San Francisco Courses: The Students' Perspective

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#### Abstract

Even with the Ignatian Pedagogical Paradigm (IPP) well-integrated into university coursework, the IPP works optimally in the presence of Jesuit values. But do students perceive the presence of these values in their courses? An effort was undertaken at the University of San Francisco (USF) to determine if student perception of USF's core values in their courses could be measured, and if so, to what extent they were present. A total of 511 USF core values surveys were collected from both undergraduates and graduates in the School of Management from Spring 2014 to Intersession 2016. This paper reviews the development of the Original and Revised Surveys, and the findings that were made. This includes one low-scoring core values statement, and statistically significant differentials among international graduate students on a gender basis. The most significant finding was that all students perceived every USF core value on a substantive level in every course. Final recommendations include: (1) a detailed review of USF's core values for clarity, and (2) a revision of the core values survey to better recognize values perception in international students of both genders.

#### Introduction

Many organizations, universities included, have codified missions, goals, values, and objectives. Modern management approaches, as well as academic accreditation organizations, strongly suggest that progress towards accomplishing these ends requires measurement. At the university level, this has become integral to measures of learning outcome.<sup>1</sup> What is reported here is an effort to measure the perceived presence of the university's core values in a complement of courses at the University of San Francisco (USF), the motivation for creating these measurements, and the results of this testing.

# Jesuit Values and the Ignatian Pedagogical Paradigm (IPP)

The centrality of the Ignatian Pedagogical Paradigm (IPP) in the design and content of courses taught at Jesuit universities is a key conversation repeated often throughout Jesuit education; it is the practicum by which Jesuit values are activated in a person's life. In fact, the authors' earlier work in this area focused heavily on incorporating the IPP into newly created Business of Biotechnology courses, the effort for which is described in detail in Gunn et al. (2015), "The Ignatian Pedagogical Paradigm and the Global Imperative of Biotechnology."<sup>2</sup>

Yet, in "Jesuit Values, Ignatian Pedagogy, and Service Learning: Catalysts for Transcendence and Transformation via Action Research" (2015), Dr. Heidi Streetman describes the relationship of the IPP and Jesuit values in the context of coursework, and emphasizes that both the IPP and Jesuit values are essential.<sup>3</sup> This led the authors to question *which specific values* students actually carry with them as a result of their Jesuit coursework at every level of the university. Should an individual's values framework be limited or lacking, the application of IPP practices themselves may be minimized or compromised. And as Gunn, et al., assert "[t]he potential of the Ignatian Pedagogical Paradigm (IPP) is [only] realized in the reflective actions of students after they leave the Jesuit educational setting and go out into the world."<sup>4</sup> Thus, in light of Dr. Streetman's emphasis, the authors posited that delivering on Jesuit values was as essential as implementing the IPP. An effort was undertaken to measure the perceived presence of Jesuit values in a complement of courses at the university.

#### Which Jesuit Values to Test?

Seeking a common set of Jesuit values to test, the websites of the twenty-eight U.S. Jesuit colleges and universities were examined for published Jesuit core values. This review revealed significant incongruity. Some universities published extensive core values statements, while others published no explicit values statements online. Still other universities merged their core values with their mission statements. For those U.S. Jesuit universities with separate, online core values statements, a range of from four to nine values were typical, while no two universities had identical core values statements. With no common Jesuit values statements available, it was decided to utilize USF's own core values as an initial benchmark. The research presented here reflects solely those core values.

#### **USF's Core Values**

The core values of the university are listed in USF's Vision, Mission and Values Statement,<sup>5</sup> which was approved by the USF Board of Trustees on September 11, 2001. They appear in Figure 1.

The University's core values include a belief in and a commitment to advancing:

- the Jesuit Catholic tradition that views faith and reason as complementary resources in the search for truth and authentic human development, and that welcomes persons of all faiths or no religious beliefs as fully contributing partners to the University;
- the freedom and the responsibility to pursue truth and follow evidence to its conclusion;
- learning as a humanizing, social activity rather than a competitive exercise;
- a common good that transcends the interests of particular individuals or groups; and reasoned discourse rather than coercion as the norm for decision making;
- diversity of perspectives, experiences and traditions as essential components of a quality education in our global context;
- excellence as the standard for teaching, scholarship, creative expression and service to the University community;
- social responsibility in fulfilling the University's mission to create, communicate and apply knowledge to a world shared by all people and held in trust for future generations;
- the moral dimension of every significant human choice: taking seriously how and who we choose to be in the world;
- the full, integral development of each person and all persons, with the belief that no individual or group may rightfully prosper at the expense of others;
- a culture of service that respects and promotes the dignity of every person.

Source: www.usfca.edu/about/values/

Figure 1: University of San Francisco Core Values Statement

#### Survey Development

The first core values survey was developed in the 2010 timeframe as a part of the ongoing survey work of GLAS, the Gunn-Lorton Attitudinal Survey Project in the School of Management at the University of San Francisco. The GLAS project has explored, and continues to explore, a variety of attitudinal measures in a large spectrum of categories, including attitudes regarding science, technology, and mathematics, and confidence levels in business, government, law, information systems, and the business of biotechnology. At this writing, the GLAS project has collected nearly 1,000 student records reflecting over 75,000 data points.

The effort described in this paper began with a series of "Initial Pilot Surveys," designed to be administered to upper division undergraduate business students. The surveys presented each USF core value verbatim, while various constructs and ratings structures were experimented with. This ranged from inquiries regarding the direct "mention" of a value in a course, to the perceived presence of that value in their overall USF education.

It was posited that not every core value would be an essential component in every course, and since there was no earlier work to refer to, a 9-point Likert scale was used. While it has been shown statistically that a 5-point Likert scale is sufficient to measure differences in a subject population,<sup>6</sup> this requires pre-knowledge of the likely range of answers, and that the descriptors for that range are themselves appropriate. Since the Initial Pilot Surveys were under experimentation and the range of answers unknown, a 9-point Likert scale strategy was employed to give an expanded response range to the survey takers.

The experience of the Initial Pilot Surveys was then used to create the "Original Survey" in the Spring 2013 timeframe. All Original Survey data cited in this paper was recorded by this consolidated instrument starting in Spring 2014. Since undergraduate courses are taught on a traditional semester schedule over a fifteen-week period, the final version of this initial survey effort asks about student perception of the presence of each USF core value in the final days of their current course, and on a range which starts from "Not mentioned at all," to "Mentioned some (e.g. once a month), played some role," to "Mentioned regularly, or played a significant role in the course."

The efforts to extend USF core values measurement to USF graduate students began in Fall 2013. The Original Survey and resultant undergraduate responses were reviewed as a part of that effort, and four issues emerged: First, several of the core values were compound-value statements, for which the students were asked to provide a single rating. This could create confusion in survey respondents. It was possible that this compound-value nature contributed to the comparatively low mean response to the first core value in the Original Survey. Its mean response (6.6) was lower than the mean response to all other core values. It was proposed that splitting the first core value into two value statements might resolve this issue. Examination of all USF core values for potential splitting was then undertaken.

Second, the grammatical structure of each core value when presented in isolation and verbatim was not a complete sentence. This was also potentially confusing for respondents. Third, it was agreed that the perceived presence of a value did not require that its explicit verbiage be used. Asking if a value was "mentioned" might be inadequate, as the presence of a value could be implicit in assignments, readings, projects, and so forth, and in that way perceived by the student. The primary question was how and to what extent, if at all, each USF core value was perceived in any particular course. A change in the descriptor range for each core value was needed. Finally, graduate courses are logistically shorter than undergraduate courses, typically three-to-four hour sessions over a seven-to-eight week period. Some graduate courses had unusual schedules, such as a four-hour lecture/session, followed by a

one-week intensive, and ending with a second four-hour lecture/session. Others might be a series of weekend intensives. Regardless of schedule, any USF course that meets academic accreditation standards for credit was considered suitable for testing. Further, any reference framing the schedule of course must not be apparent in the survey. Testing was to be done near the end of every course surveyed, and appropriate to class schedule.

With these considerations in mind, a revised version of the USF core values survey was developed. Each core value was re-written as a complete sentence, a total of three compoundvalue statements were split into separate core value statements, and the rating scale removed the term "mention" and introduced instead a descriptor range from "not perceived to be present" to "moderately present" to "strongly present." A fourth apparent compound-value statement was determined to be interconnected, and thus was left intact. This rewritten survey is referred to as the "Revised Survey," and it began to be administered to both graduate and undergraduate students starting in Summer 2014.

Table 1 is a comparison of the core value statements as they differ in the Original Survey vs. the Revised Survey. A short Core Value Descriptor for each value has been added for easy reference. By way of splitting compound-value statements, USF core value #1 in the Original Survey was broken down into core values #1a and #1b in the Revised Survey. Similarly, CV#4 (CV=Core Value) became CV#4a and CV#4b, and CV#7 became CV#7a and CV#7b. While core value #9, "the full, integral development of each person and all persons, with the belief that no individual or group may rightfully prosper at the expense of others" is an apparent compound-value statement, it was deemed to be intrinsically interdependent, and was not split. The value expressed in CV#9 is complex in that the full expression of one portion of the value statement can adversely affect the other portion. It is a mature value, and it was decided that the two apparently separate values must be considered together.

CV#	Core Value Descriptor	Original Survey Statement	CV#	Core Value Descriptor	Revised Survey Statement
1	Faith+Reason/ All Faiths	the Jesuit Catholic tradition that views faith and reason as complementary resources in the search for truth and authentic human development, and that welcomes persons of all faiths or no religious beliefs as fully contributing partners to the University	1a	Faith+Reason	Spiritual faith and reason are complementary resources in the search for truth and authentic human development
			1b	All Faiths	Persons of all faiths or no religious beliefs are welcomed as fully contributing partners
2	Truth	the freedom and the responsibility to pursue truth and follow evidence to its conclusion	2	Truth	Individuals have the freedom and the responsibility to pursue truth and follow evidence to its conclusion
3	Non-competition	learning as a humanizing, social activity rather than a competitive exercise	3	Non-competition	Learning is a humanizing, social activity, rather than a competitive exercise
4	Common Good/ Reasoned Discourse	a common good that transcends the interests of particular individuals or groups; and reasoned discourse rather than coercion as the norm for decision making	4a	Common Good	A common good transcends the interests of particular individuals or groups
			4b	Reasoned Discourse	Reasoned discourse should be the norm for decision making, rather than coercion
5	Diversity	diversity of perspectives, experiences and traditions as essential components of a quality education in our global context	5	Diversity	A quality education in our global context requires a diversity of perspectives, experiences and traditions

Table 1: Core Value Survey Statement Comparisons in the Original and Revised Surveys

6	Excellence	excellence as the standard for teaching, scholarship, creative expression and service to the University community	6	Excellence	Excellence is aspired to as the standard for teaching, scholarship, creative expression and service to the University community
7	Social Responsibility/ Future Trust	social responsibility in fulfilling the University's mission to create, communicate and apply knowledge to a world shared by all people and held in trust for future generations	7a	Future Trust	The world is shared by all people and held in trust for future generations
			7Ъ	Social Responsibility	There is a social responsibility in fulfilling the University's mission to create, communicate and apply knowledge to the world
8	Moral Dimension	the moral dimension of every significant human choice: taking seriously how and who we choose to be in the world	8	Moral Dimension	Every significant human choice has a moral dimension: taking seriously how and who we choose to be in the world
9	Person(s)/Group	the full, integral development of each person and all persons, with the belief that no individual or group may rightfully prosper at the expense of others	9	Person(s)/Group	No individual or group may rightfully prosper at the expense of others, while ensuring the full, integral development of each person and all persons
10	Culture of Service	a culture of service that respects and promotes the dignity of every person	10	Culture of Service	There is a culture of service that respects and promotes the dignity of every person

 $Table \ 1 \ (\text{cont.})$ 

All surveys described herein are similar in style. For brevity's sake, only the Revised Survey is printed in its entirety. It can be found in Appendix A. The Revised Survey continued to be constructed on a 9-point Likert scale for the same reasons listed previously, as well as to enable any direct comparisons, if possible. In the Revised Survey, two descriptors are placed at each extreme, and one is placed at the mid-point. The descriptors are "not perceived to be present" at the far left, "moderately present" in the middle, and "strongly present" to the far right. Since three of USF's core values (CV#1, CV#4 and CV#7) were broken into two parts, the Revised Survey contains thirteen individual core value statements for student evaluation.

An introductory header is presented prior to the beginning of both Original and Revised Surveys, and an exemplar header is included as a part of Appendix A. As the USF core values surveys are a part of the GLAS project, USF core values surveys are sometimes incorporated as part of other survey instruments. Even so, all USF core values questions are preceded by this header. Variations on the header may additionally identify the course, section, and/or semester in which the survey was administered.

#### **Data Collection**

Over a nearly two-year period, five faculty members in the School of Management incorporated the USF core values surveys into their course assessments. The result was a total of 511 USF core values surveys collected in twentyone class sections of fifteen different courses in USF's School of Management, breaking down into 375 undergraduates surveyed, and 136 graduate students surveyed. In total, 319 Original Surveys and 192 Revised Surveys were collected. The surveys were administered during academic periods starting in the Fall 2014 semester and extending through Intersession 2016. A complete list of courses in which data was collected can be found in Appendix B: Data Collection Sources.

All undergraduate students were enrolled in the bachelors program in Business Administration, and included specific majors in Accounting, Entrepreneurship and Innovation, Finance, International Business, Management, Organizational Behavior and Leadership, and Marketing. Graduate students were enrolled in a complement of masters' degree programs in the School of Management and the College of Arts and Sciences. In the School of Management, degrees included MBA, JD/MBA, MS in Information Systems, and MS in Organizational Development, while in the College of Arts and Sciences (A&S), Professional Science Masters in Biotechnology (PSM) students were surveyed. While the PSM students were officially graduate students in A&S, they were surveyed while taking Bio-Business MBA courses as a part of their degree program.

For the purposes of this paper, the data was analyzed in four ways: (1) The Primary Result, (2) The Original vs. Revised Survey Results, (3) Undergraduates vs. Graduate Students, and (4) The Graduate Students.

#### Results

The complete statistical tests for all results described in this paper may be found in Appendix C.

#### The Primary Result

The first and perhaps most significant finding is that all students—graduates and undergraduates alike, regardless of whether they responded to the Original Survey or Revised Survey, and independent of gender or domestic/international status—all students as a group perceived every USF core value at a moderate level or better for every USF core value in every course tested. Recalling the original expectation that not every core value would be an essential component in every course, this was an encouraging finding.

The average responses for each core value in both the Original Survey and the Revised Survey are presented in Figures 2 and 3, respectively, with Figure 3 reporting separately for graduate and undergraduate students.

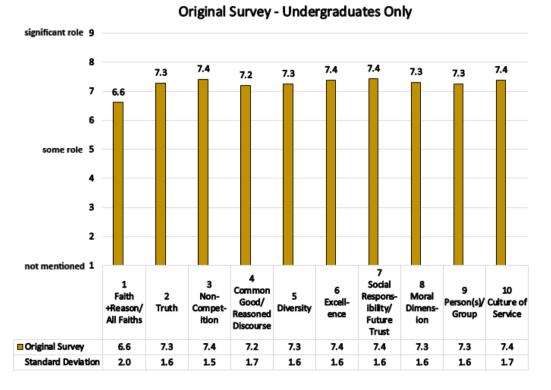
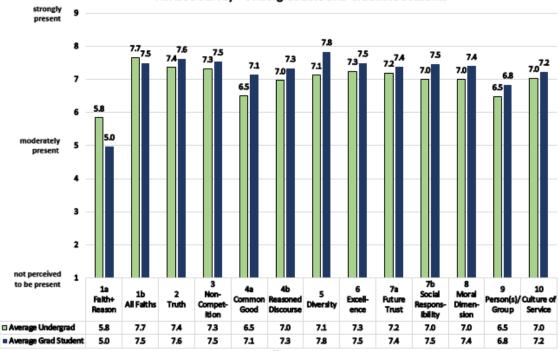


Figure 2: Average Responses to the Original Survey—Undergraduate Only



Revised Survey - Undergraduate and Graduate Students

Figure 3: Average Responses to the Revised Survey—Graduate and Undergraduate

#### The Original vs. Revised Survey Results

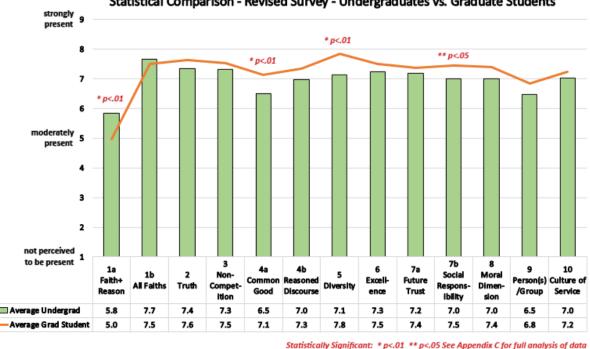
Given the substantive changes that were made between the Original and the Revised Surveys, it is not possible to compare the two sets of survey responses directly; however, several clear insights did emerge.

As described previously, the compound-value questions (CV#1, CV#4 and CV#7) in the Original Survey were split into separate questions in the Revised Survey (CV#1a/b, CV#4a/b, CV#7a/b). Of greatest interest was the result from splitting the first question, CV#1 (Faith+Reason/All Faiths), since its average response in the Original Survey (6.6) was lower than the average response for all other core values in the survey. When split in the Revised Survey, into CV#1a and CV#1b, the first part of the split question, CV#1a (Faith+Reason), recorded an even lower average response of 4.9, while the second portion of the split value, CV#1b (All Faiths), registered a mean response of 7.3, comparable to the other core value responses in the Revised Survey. Thus, the noticeably low response to the first core value statement, CV#1 (Faith+Reason/All Faiths) in the Original Survey can be traced directly to the first portion of the core value, now encapsulated in CV#1a (Faith+Reason).

The two remaining compound-value statements, which were intentionally split in the Revised Survey, (CV#4 to CV#4a/CV#4b and CV#7 to CV#7a/CV#7b), scored comparably in the Revised Survey when compared with each other.

#### Undergraduate vs. Graduate Students

The undergraduate/graduate student comparisons in the section are limited solely to responses to the Revised Survey. Figure 4 graphically depicts the difference in responses between undergraduate and graduate students, with significant differences noted.



Statistical Comparison - Revised Survey - Undergraduates vs. Graduate Students

Figure 4: Statistical Comparison: Revised Survey—Undergraduates vs. Graduate Students

Four significant differences were found when comparing the response of the undergraduate students to the graduate students in the Revised Survey. Graduate students scored significantly higher on three questions: CV#4a (Common Good) (p<.01), CV#5 (Diversity) (p<.01), and CV#7b (Social Responsibility), while the undergraduate students scored significantly higher on the low-scoring CV#1a (Faith+Reason) (p<.05). A more detailed look at these differences appears in Table 2 below.

Table 2: Statistical Significance in	Undergraduate vs.	Graduate Student Res	ponse—Revised Survey
	0		

Core Value	Statistical Significance (All in Favor of Males)	Undergraduates Scored Significantly Higher	Graduate Students Scored Significantly Higher
CV#1a (Faith+Reason)	p<.01	Spiritual faith and reason are complementary resources in the search for truth and authentic human development	
CV#4a (Common Good)	p<.01		A common good transcends the interests of particular individuals or groups
CV#5 (Diversity)	p<.01		A quality education in our global context requires a diversity of perspectives, experiences and traditions
CV#7a (Future Trust)	p<.05		The world is shared by all people and held in trust for future generations

#### The Graduate Students

The graduate student responses were analyzed in more detail to determine if there were gender differences. Comparing responses question-toquestion, no statistically significant differences were detected between the females and males; however, when all the responses to all the questions were analyzed in aggregate, a different picture emerged. Considered together, the average male response was 7.3 versus the average female response of 7.1, and while not observably different on its face, detailed statistical analysis of the actual responses revealed a significant difference of p<.05 between female and male responses. This indicated that there are clear differences relating to gender within the group. Figure 5 charts the average graduate response in the Revised Survey when broken down by gender.

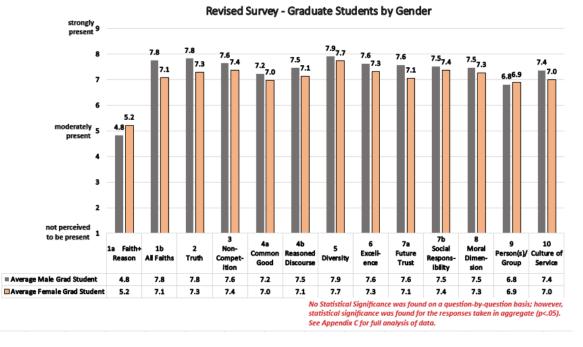


Figure 5: Average Responses: Graduate Students by Gender-Revised Survey

In search of where these differences might lie, the domestic graduate student data was separated from the international graduate student data, and both analyzed again by gender. For the domestic graduate students, there were no statistically significant differences attributable to gender for either individual questions or when considered in aggregate. Figure 6 presents the average response for domestic graduate students broken down by gender.

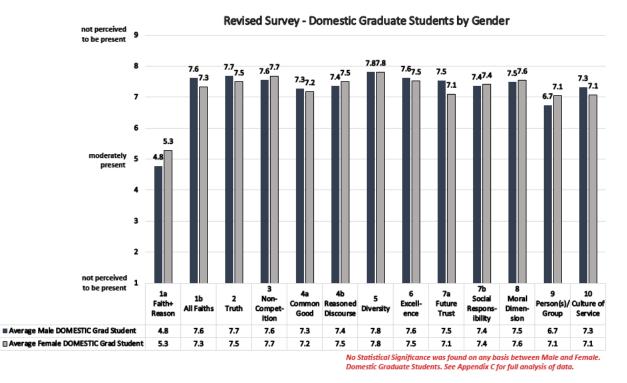


Figure 6: Average Responses: Domestic Graduate Students by Gender-Revised Survey

The findings for the domestic graduate student analysis clearly suggested that significant differences would be found within the survey responses from international graduate students. Analysis proved this out. Considering the international graduate student responses, there are significant differences between the genders, both for specific questions, as well as for the survey responses in aggregate. Figure 7 compares the male and female international graduate student responses to each question, and notates the six that demonstrate statistically significant differences. The low-scoring CV#1a (Faith+Reason) is the sole question where the female students outscored the male students, although the difference was not statistically significant. Taking the international students in aggregate, the average male response was 7.8 compared with the average female response of 6.3. This difference had a statistical significance of p<.01, more significant that the one computed when all the graduates were considered as a group (p<.05), but now directly reflective of the subgroup of data where the differences occurred. A detailed review of the significant core value differences can be found in Table 3.

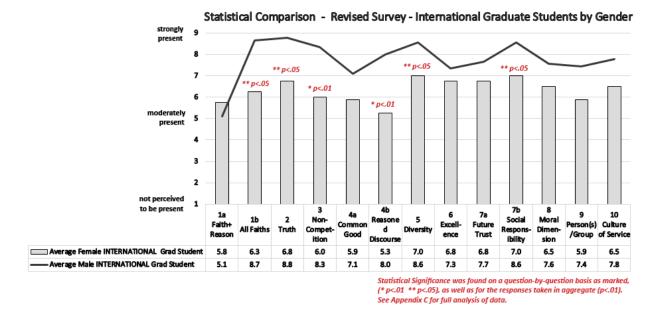


Figure 7: Statistical Comparison: International Graduate Students by Gender-Revised Survey

		Female International	Male International
	Statistical	Graduate Students	Graduate Students
Core Value	Significance	Scored Significantly	Scored Significantly
		Higher	Higher
			Persons of all faiths or no religious beliefs
CV#1b (All Faiths)	p<.05		are welcomed as fully contributing partners
			Individuals have the freedom and the
CV#2 (Truth)	p<.05		responsibility to pursue truth and follow
			evidence to its conclusion
			Learning is a humanizing, social activity,
CV#3 (Non-	p<.01		rather than a competitive exercise
Competition)			
			Reasoned discourse should be the norm for
CV#4b (Reasoned	p<.01		decision making, rather than coercion
Discourse)			
			A quality education in our global context
CV#5 (Diversity)	p<.05		requires a diversity of perspectives,
			experiences and traditions
			There is a social responsibility in fulfilling
CV#7b (Social	p<.05		the University's mission to create,
Responsibility)			communicate and apply knowledge to the
			world

Table 3: Statistical Significance in International Graduate Student Response by Gender, Revised Survey

#### Discussion

The Original Survey, developed from the Initial Pilot Surveys, established that USF's core values were being perceived in undergraduate courses, that this perception could be measured, that the first core value (CV#1) yielded low scores, and that there were a set of issues that needed to be taken into consideration to expand testing these values in subsequent populations, which were to include graduate students in addition to undergraduates.

The Revised Survey yielded student responses, which confirmed the benefit/soundness of splitting the compound-value statements, pinpointed the low-scoring portion of CV#1 as being its first portion (CV#1a), revealed several graduate/undergraduate differences, found anomalies in the graduate student response based on gender, and found value statements to which students responded with significant statistical difference.

There is much to consider from every perspective. Focusing on value perception differences between graduate students and undergraduate students, age and experience are certainly explanations, although likely simplistic. Differences in maturity levels, including moral maturity, work experience, family experience, cultural background, and personal experience of multiple cultures, all related to the individual's understanding of the university's core values. As described earlier, what is important is that Jesuit values be present as all students engage with the Ignatian Pedagogical Paradigm throughout their courses. Survey response values may in fact fluctuate over time with student perception of meaning, and these fluctuations may be a natural evolution of the student.

At the same time, the responses of the graduate students cannot be ignored. First of all, it is significant that the domestic male and female graduate student responses had no significant differences; this is itself either a measure of a unity of gender perspective in terms of USF core values perceived at the graduate level, or that gender is not a factor in terms of USF core value perception at the graduate level. For the international graduate students, however, the male and female responses were sufficiently different that they must be better understood. Elements could include English as a second language, other language challenges, cultural differences, gender role perception, gender expression characteristics, and other factors yet to be identified. Future survey design changes may seek to identify these differences, and establish a less variable, more accurate value perception. It could potentially have an impact on educational pedagogy for international students at U.S. Jesuit universities.

Finally, any adjustments to USF's core values must necessarily be a deeply-considered task. For example, the low-scoring CV#1a (Faith+Reason) and the intrinsically interdependent CV#9 (Person(s)/Groups) might suggest to some that re-writing and/or splitting are required, but any effort to review these core values benefits from an appreciation for the difference between a value that requires maturity to comprehend and a misworded statement. Hopefully, this set of insights into the perception of USF's core values by the university's own students may be helpful to future review processes.

#### Conclusion

Given the essential relationship of the Ignatian Pedagogical Paradigm and Jesuit values, the intention of this effort was to see if the perception of the university's core values could be measured in individual courses by participating students, and thus, available to work in concert with the IPP present in those courses. The evidence shows that these values were measurable and were perceived by the students to be present in the courses tested.

Recommendations arising from the study include: (1) a review of USF's core values for clarity, with special attention to the first core value, (2) the collection of additional framing data for undergraduates to include gender and domestic/international status, (3) an expansion of the student test population to include more academic areas within the university, (4) consideration of values perception and expanded data collection for international students and gender differences, and (5) increased discussion with respect to the incorporation of USF's core values into course design.

#### Notes

<sup>1</sup> National Institute for Learning Outcomes Assessment, accessed January 26, 2016, http://www.learningoutcomeassessment.org/Accreditation1., htm); AASCB (Association to Advance Collegiate Schools of Business) International, "Addressing Learning Goals," accessed January 26, 2016, http://www.aacsb.edu/accreditation/standards/2003-business/aol/learning-goals); Craig Kelley, Pingsheng Tong, and Beom-Joon Choi, "A Review of Assessment of Student Learning Programs at AACSB Schools: A Dean's Perspective," *Journal of Education for Business* 85 (2010): 299-306, DOI: 10.1080/08832320903449519.
<sup>2</sup> Moira A Gunn, John Koeplin, S.J., Paul V. Lorton, Jr., and

Morra A Gunn, John Koeplin, S.J., Paul V. Lorton, Jr., and Michael D. Whitty, "The Ignatian Pedagogical Paradigm and the Global Imperative of Biotechnology," *Jesuit Higher Education: A Journal* 4, no. 1 (2015): 72-82, http://epublications.regis.edu/jhe/vol4/iss1/3/.

<sup>3</sup> Heidi D. Streetman. "Jesuit Values, Ignatian Pedagogy, and Service Learning: Catalysts for Transcendence and Transformation Via Action Research," *Jesuit Higher Education: A Journal* 4, no. 1 (2015): 36-50, http://epublications.regis.edu/jhe/vol4/iss1/9/.

<sup>4</sup> Gunn et al., "Ignatian Pedagogical Paradigm."

<sup>5</sup> University of San Francisco Core Values Statement, accessed July 13, 2015, <u>http://www.usfac.edu/about/values/.</u>

<sup>6</sup> Geoff Norman, "Likert Scales, Levels of Measurement and the 'Laws' of Statistics," *Advances in Health Sciences Education: Theory and Practice* 15, no. 5 (December 2010): 625-32, doi: 10.1007/s10459-010-9222-y.

## Appendix A: Revised USF Core Values Survey

USF Core Values         The following items are drawn from USF's Core Values, which were adopted by the Board of Trustees on 9/11/2001.         They reflect a belief in and a commitment to advancing these values, which are intended to be reflected in the totality of the coursework you undertake during your degree program at USF.         Obviously, not all will be discernible in every single course, and some may be emphasized in particular courses over others. There are no right answers.         On a scale from "not perceived to be present" to "moderately present" to "strongly present", rate how much each core value was present in your experience of this course.         Please rate the following items on a scale from "not perceived to be present" to "moderately present" to "strongly present" WITH RESPECT TO THIS COURSE         1. Spiritual faith and reason are complementary resources in the search for truth and authentic human development         not perceived       moderately         b present       o         or spreaved       moderately         present       present         or perceived       moderately         to be present       present         or perceived       moderately         strongly       present         or perceived       moderately         strongly       present         or perceived       moderately         strongly       present         present       present	Revised US	F Core V	alues Sur	vey - Fall,	2016							
Trustees on 9/11/2001.  They reflect a belief in and a commitment to advancing these values, which are intended to be reflected in the totality of the coursework you undertake during your degree program at USF.  Obviously, not all will be discernible in every single course, and some may be emphasized in particular courses over others. There are no right answers.  On a scale from "not perceived to be present" to "moderately present" to "strongly present", rate how much each core value was present in your experience of this course.  Please rate the following items on a scale from "not perceived to be present" to "moderately present" to "strongly present" wiTH RESPECT TO THIS COURSE  1. Spiritual faith and reason are complementary resources in the search for truth and authentic human development not perceived moderately present present or present present present present or present present present present present or present present present present present present present to be present presen	USF Core Va	alues										
not perceived to be present       moderately present       strongly present         c       Persons of all faiths or no religious beliefs are welcomed as fully contributing partners         not perceived to be present       moderately present       strongly present         a       a       a       a         b       a       a       a       a         a       a       a       a       a       a         b       a       a       a       a       a       a         a	Trustees on S They reflect a reflected in th Obviously, no particular co On a scale fr how much ea Please rate th present" to "	9/11/2001. a belief in he totality ot all will k urses ove om "not p ach core v he followir strongly p	and a com of the cou oe discerni r others. Ti erceived to alue was p ng items or resent'' Wi	mitment to rsework you ble in every here are no be present resent in you n a scale fro TH RESPEC	advancing t u undertake single cour right answe t" to "moder our experien om "not perc CT TO THIS	hese value during you se, and sor rs. ately prese ce of this o eived to be COURSE	s, which and ir degree pi ne may be nt" to "stro ourse. present" t	e intended rogram at l emphasize ongly prese o "modera	to be JSF. d in ent", rate tely			
not perceived to be present       moderately present       strongly present         3. Individuals have the freedom and the responsibility to pursue truth and follow evidence to its conclusion not perceived to be present       moderately present       strongly present         4. Learning is a humanizing, social activity, rather than a competitive exercise not perceived       moderately present       strongly present	development not perceived moderately strongly											
not perceived to be present       moderately present       strongly present         3. Individuals have the freedom and the responsibility to pursue truth and follow evidence to its conclusion not perceived to be present       moderately present       strongly present         4. Learning is a humanizing, social activity, rather than a competitive exercise not perceived not perceived       moderately present       strongly present	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			
not perceived moderately present strongly present	not perceived	all faiths o	r no religiou	s beliefs are	moderately	s fully contr	ibuting partr	ners	0,1			
not perceived moderately present strongly present 4. Learning is a humanizing, social activity, rather than a competitive exercise not perceived moderately strongly strongly	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			
not perceived moderately strongly	not perceived	have the fr	eedom and	the respons	moderately	ue truth and	l follow evid	ence to its o	strongly			
not perceived moderately strongly	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			
	not perceived	a humaniz	ing, social a	activity, rathe	moderately	petitive exe	rcise		0,			
	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			

to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
6. Reasoned	discourse s	hould be th	e norm for o	decision makir	ng, rather th	nan coercior	1	
not perceived to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
7. A quality ec	Jucation in a	our global c	ontext requ	ires a diversity	of perspec	ctives, expe	riences and	traditions
not perceived to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	$\bigcirc$	$\bigcirc$	$\bigcirc$	present	$\bigcirc$	$\bigcirc$	$\bigcirc$	
not perceived to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
9. The world i	s shared by	/ all people	and held in	trust for future	e generatio	ns		
not perceived to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
10. There is a knowledge to		oonsibility in	fulfilling the		mission to a	create, comr	municate ar	
not perceived to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
11. Every sigr	nificant hum	nan choice h	nas a moral	dimension: ta	king seriou	sly how and	who we ch	
in the world not perceived to be present				present				strongly present

* 12. No indivic development	-			at the exper	nse of others	s, while ensu	uring the full	, integral
not perceived to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
* 13. There is a	a culture of	service that	respects ar	nd promotes	the dignity o	f every pers	on	
not perceived to be present				moderately present				strongly present
$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

		Academic	-	Survey	
Course ID	Course Name	Session	Surveys	Туре	Level
BUS 308	Systems in Organizations	Spring, 2014	40	Original	Undergraduate
BUS 308	Systems in Organizations	Fall, 2014	68	Original	Undergraduate
BUS 308	Systems in Organizations	Spring, 2015	39	Original	Undergraduate
BUS 374	Technological Perspectives in Business	Spring, 2014	37	Original	Undergraduate
BUS 374	Technological Perspectives in Business	Spring, 2015	37	Original	Undergraduate
BUS 471	Business System Analysis and Design	Fall, 2014	29	Original	Undergraduate
BUS 472	Database Management in Business	Spring, 2014	30	Original	Undergraduate
BUS 472	Database Management in Business	Spring, 2015	39	Original	Undergraduate
BUS 322	Cost Accounting	Spring, 2015	25	Revised	Undergraduat
BUS 322	Cost Accounting	Fall, 2015	31	Revised	Undergraduat
MBA 6401	Advanced Leadership	Spring, 2015	13	Revised	Graduate
MBA 6413	Business Teams and Small Group Dynamics	Spring, 2015	10	Revised	Graduate
MBA 6561	Local, National and Global Bio-Business	Spring, 2015	18	Revised	Graduate
MBA 6563	Legal, Ethical and Social Implications of Biotech	Fall, 2015	17	Revised	Graduate
MBA 6797	Study Tour Switzerland	Summer, 2014	11	Revised	Graduate
MBA 6797	Study Tour Wash DC	Intersession, 2015	20	Revised	Graduate
MBA 6797	Study Tour London	Summer, 2015	6	Revised	Graduate
MBA 6797	Study Tour Puerto Rico	Intersession, 2016	5	Revised	Graduate
MSIS 626	Information Systems Capstone	Fall, 2014	19	Revised	Graduate
MSIS 626	Information Systems Capstone	Fall, 2015	8	Revised	Graduate
MSIS 647	Global Information Systems	Spring, 2015	9	Revised	Graduate
	Total	511			

#### Appendix C. Tables of Key Statistical Values for Figures 3-7

Table C-1: Statistics for Figure 3 & 4: Statistical Comparison – Revised Survey – Undergraduates vs. Graduates

Figure 3 & 4 - Undergrads vs. Grads	1a Faith+Reason	1b All Faiths	2 Truth	3 Non-Competition	4a Common Good	4b Reasoned Discourse	5 Diversity	6 Excellence	7a Future Trust	7b Social Responsibility	8 Moral Dimension	9 Person(s)/Group	10 Culture of Service	All Scores
Average Undergrad Student	5.84	7.66	7.36	7.32	6.50	6.96	7.13	7.25	7.20	7.00	7.00	6.48	7.04	6.98
N=56 SD	2.04	1.56	1.81	1.82	1.68	1.51	1.90	1.52	1.74	1.80	1.51	2.01	1.74	1.79
Average Grad Student	4.97	7.50	7.63	7.54	7.14	7.34	7.84	7.50	7.38	7.46	7.40	6.84	7.23	7.21
N=136 SD	2.54	2.01	1.76	1.69	1.81	1.65	1.53	1.69	1.93	1.80	1.86	2.08	2.03	2.01
Statistical Significance (t-test groups)	0.012	0.296	0.171 <i>Statistic</i>	0.217 al significa	0.012 ince color o	0.073 coding for	0.003 t-test grou	0.181 ps: black:	0.267 no signifi	0.054 cance; red:	0.079 p<.01; b	0.139 plue: p<.0	0.267 5	0.004

Table C-2: Statistics for Figure 5: Average Responses – Graduate Students by Gender – Revised Survey

Figure 5. Males vs. Females	1a Faith+Reason	1b All Faiths	2 Truth	3 Non-Competition	4a Common Good	4b Reasoned Discourse	5 Diversity	6 Excellence	7a Future Trust	7b Social Responsibility	8 Moral Dimension	9 Person(s)/Group	10 Culture of Service	All Scores
Average Male Grad Student	4.82	7.75	7.82	7.64	7.24	7.46	7.91	7.63	7.58	7.52	7.47	6.81	7.36	7.30
N=85 SD	2.44	1.79	1.66	1.49	1.77	1.56	1.48	1.57	1.82	1.86	1.89	2.16	1.98	1.98
Average Female Grad Student	5.22	7.08	7.29	7.37	6.98	7.14	7.73	7.32	7.06	7.37	7.27	6.88	7.00	7.05
N=51 SD	2.72	2.28	1.88	1.99	1.87	1.79	1.63	1.84	2.07	1.73	1.81	1.95	2.10	2.06
Statistical Significance (t-test groups)	0.386	0.058	0.089	0.382	0.428	0.273	0.508	0.346	0.130	0.652	0.553	0.849	0.311	0.012

Statistical significance color coding for t-test groups: black: no significance; red: p < .01; blue: p < .05

Table C-3: Statistics	for Figure 6: Avera	ge Responses – l	Domestic Graduate	Students by G	Gender – Revised Survey
	0			<i></i>	

Figure 6. Males vs. Females	1a Faith+Reason	1b All Faiths	2 Truth	3 Non-Competition	4a Common Good	4b Reasoned Discourse	5 Diversity	6 Excellence	7a Future Trust	7b Social Responsibility	8 Moral Dimension	9 Person(s)/Group	10 Culture of Service	All Scores
Average Male Grad Student	4.78	7.62	7.69	7.55	7.28	7.36	7.81	7.63	7.54	7.36	7.49	6.74	7.32	7.24
N=74 SD	2.42	1.88	1.73	1.52	1.79	1.61	1.54	1.66	1.87	1.93	1.90	2.18	2.02	2.01
Average Female Grad Student	5.29	7.34	7.50	7.68	7.18	7.50	7.82	7.53	7.11	7.42	7.55	7.05	7.08	7.23
N=38 SD	2.84	2.20	1.72	1.85	1.74	1.59	1.66	1.71	2.08	1.81	1.75	1.99	2.19	2.03
Statistical Significance (t-test groups)	0.326  0.483  0.584  0.691  0.779  0.674  0.987  0.786  0.263  0.882  0.858  0.466  0.555  0.963 $Statistical significance color coding for t-test groups: black: no significance; red: p<.01; blue: p<.05$													

Table C-4: Statistics for Figure 7: Average Responses – International Graduate Students by Gender – Revised Survey

Figure 7. Male vs. Female International Grad Students	1a Faith+Reason	1b All Faiths	2 Truth	3 Non-Competition	4a Common Good	4b Reasoned Discourse	5 Diversity	6 Excellence	7a Future Trust	7b Social Responsibility	8 Moral Dimension	9 Person(s)/Group	10 Culture of Service	All Scores
Average Male International Student	5.11	8.67	8.78	8.33	7.11	8.00	8.56	7.33	7.67	8.56	7.56	7.44	7.78	7.77
N=9 SD	2.57	0.50	0.44	1.00	1.76	1.12	0.73	0.52	1.66	0.73	1.88	2.13	1.64	1.68
Average Female International Student	5.75	6.25	6.75	6.00	5.88	5.25	7.00	6.75	6.75	7.00	6.50	5.88	6.50	6.33
N=8 SD	2.55	2.60	2.38	2.27	2.42	1.67	1.77	2.31	2.49	1.51	2.14	1.89	2.14	2.12
Statistical Significance (t-test groups)	s) 0.615 0.015 0.023 0.013 0.243 0.001 0.029 0.559 0.381 0.015 0.295 0.130 0.184 0.0 Statistical significance color coding for t-test groups: black: no significance; red: p<.01; blue: p<.05										0.000			