

Moral and Ethical Development Case Study

2020-2021 Administration

Table of Contents

Executive Summary	2
Introduction	4
Sample and Respondent Characteristics	6
Case Study	7
Figure 1: Case Study Decision	
Figure 2: Commitment to Case Study Decision	8
Table 1: Frequency of Case Study Response Reasons	9
Table 2: Pre-Test Level of Importance Assigned to Chosen Response Reasons	
Table 3: Post-Test Level of Importance Assigned to Chosen Response Reasons	
Table 4: Case Study Aggregate Level Scores	
Table 5: Case Study Aggregate Level Score Descriptive Statistics	
Table 6: Case Study Paired-Sample t-tests	
Moral Foundations Questionnaire (MFQ20)	14
Table 7: Moral Foundations Questionnaire – Factor Comparisons	15
Table 8: Moral Foundations Questionnaire – Care/Harm	
Table 9: Moral Foundations Questionnaire – Fairness/Cheating	16
Table 10: Moral Foundations Questionnaire – Loyalty/Betrayal	16
Table 11: Moral Foundations Questionnaire – Authority/Subversion	17
Table 12: Moral Foundations Questionnaire – Sanctity/Degradation	
Table 13: Correlations of MFQ Averages and Self-Reported Rankings	
Personal and Social Responsibility Inventory	
Table 14: Academic Integrity	
Table 15: Academic Integrity (cont.)	
Table 16: Perspective Taking	
Table 17: Perspective Taking (cont.)	
Table 18: Ethical and Moral Reasoning	
Table 19: PSRI Factor and Item Means and Standard Deviations	
Conclusion	

Executive Summary

This report demonstrated the following key findings:

Student Learning Outcomes

- 1. Approximately 86%-88% of students surveyed indicated that cheating should be reported to the professor in the case study.
- 2. Nearly two-thirds of respondents in both the pre- and post-test indicated a high-level of commitment (e.g., very committed or extremely committed) to their decision regarding whether to report a cheating classmate to the professor. See Figure 2.
- 3. Overall, the three most influential decision factors included "Cheating is against the class rules" (lower-level, or Level 1 reasoning), "Tim does not deserve an academic scholarship if he cheats" (mid-level, or Level 2 reasoning), and "Maria believes cheating is morally wrong" (upper-level, or Level 3 reasoning). Approximately 67% to 87% of the respondents who identified each of those decision factors indicated the decision factor was very important. See Table 2 and Table 3.
- 4. Overall, the students indicated an increase in all the third level of reasoning. Among students who completed both surveys, there were no statistically significant changes in reasoning scores. Additionally, student responses indicated increased consistency in their prioritization of influences for the first two levels of reasons and a decrease in consistency in the third. See Table 5.
- 5. Of the five moral foundations ranked and scored in the pre-test, the care/harm scale and the fairness/cheating scale had the highest average rating among students. See Table 7.
- 6. There was variation in the strength of correlations (.26-.57) between students' computed scores on the five moral foundations and their self-reported rankings of the importance of the five foundations when considering what is right and wrong. See Table 13.

Personal and Social Responsibility Items for QEP Progress Tracking

- 1. More than 8 out of 10 students agreed somewhat or strongly agreed that their experiences at St. Philip's College increased their ability to learn from diverse perspectives. See Table 17.
- Approximately 8 out of 10 students agreed somewhat or strongly agreed that their experiences at St. Philip's College helped them develop a better understanding of academic integrity. See Table 14.
- 3. More than 8 out of 10 students agreed somewhat or strongly agreed that faculty at St. Philip's College understand the campus academic policies. See Table 14.
- 4. More than 8 out of 10 students indicated that faculty at St. Philip's College often or almost always reinforce the campus academic policies. See Table 15.
- 5. Approximately 8 out of 10 students agreed somewhat or strongly agreed that helping students recognize the importance of taking seriously the perspectives of others is a major focus of St. Philip's College. See Table 16.

- 6. More than 8 out of 10 students agreed somewhat or strongly agreed that faculty at St. Philip's College help students think through new and challenging ideas or perspectives. See Table 16.
- 7. Approximately 8 out of 10 students agreed somewhat or strongly agreed that St. Philip's College has high expectations for students in terms of their ability to take seriously the perspectives of others, especially those with whom they disagree. See Table 16.
- 8. Approximately 8 out of 10 students agreed somewhat or strongly agreed that helping students develop their ethical and moral reasoning is a major focus of St. Philip's College. See Table 18.
- 9. Approximately 8 out of 10 students agreed somewhat or strongly agreed that St. Philip's College helps students develop their ethical and moral reasoning, including the ability to express and act upon personal values responsibly. See Table 18.
- 10. Approximately 8 out of 10 students agreed somewhat or strongly agreed that St. Philip's College provides opportunities for students to develop their ethical and moral reasoning in their academic work. See Table 18.

Students' Perceptions of Campus Climate for Personal and Social Responsibility

- 1. Students generally had positive perceptions of the campus climate factor related to faculty roles in academic integrity at St. Philip's College. See Table 19. The average student rating on the climate factor was 4.47 out of 5. This indicated that most students the institution more positively (i.e., above the neutral point of the scale). Low variability indicated that students tended to agree about their perceptions of climate.
- 2. Students generally had positive perceptions of the campus climate factor related to the importance of perspective taking at St. Philip's College. See Table 19. The average student rating on the climate factor was 4.28 out of 5, with a variance below 1 point on the 5-point scale. This indicated that most students the institution more positively (i.e., above the neutral point of the scale). Relatively low variability indicated that students tended to agree about their perceptions of climate.
- 3. Students generally had positive perceptions of the campus climate factor related to developing ethical and moral reasoning at St. Philip's College. See Table 19. The average student rating on the climate factor was 4.38 out of 5. This indicated that most students the institution more positively (i.e., above the neutral point of the scale). Relatively low variability indicated that students tended to agree about their perceptions of climate.

Introduction

These assessments provides data to support the St. Philip's College Quality Enhancement Plan (QEP) and Student Leaning Outcomes Assessment. We ask students to examine their values as part of understanding their ethical and moral development.

The assessment consists of three parts, which were assembled to align with the three student learning outcomes outlined in the St. Philip's College QEP:

- 1. Students gain the skills to assess their own values and the origins of those values (e.g., fairness, respect)
- 2. Students identify and know about ethical issues (e.g., academic integrity, broad issues)
- 3. Students analyze ethical perspectives (e.g., how perspectives might differ by character)

The following components comprise the St. Philip's assessment:

- 1. *An original case study* was developed using Lawrence Kohlberg's theory of moral development, as well as the AAC&U Characteristic Traits of the Dimensions document. The case study asked students to consider an incident of academic dishonesty, make a decision, and provide their reasoning for the decision.
- 2. *Items and factors from the Personal and Social Responsibility Inventory* (PSRI) were selected by a team of assessment professionals at St. Philip's College to evaluate students' perceptions of the campus climate. The PSRI is a nationally-administered climate instrument designed to assess students' perceptions of institutional support and opportunities for education in personal and social responsibility.
- 3. *The Moral Foundations Questionnaire* (MFQ) was selected as a way through which to assess the student values from a different conceptual lens than Kohlberg. Jonathan Haidt, the social psychologist who created the instrument, suggests that societies develop their moral systems from five foundations: harm/care, fairness/reciprocity, loyalty/betrayal, authority/subversion, and sanctity/degradation.

Table A outlines how each step and task intentionally correspond to the three outcomes, as well as the rationale for each decision.

Survey Methodology

The assessment was delivered online to 11,240 students for both the pre- and post-tests – all data were collected electronically through the Qualtrics platform. The students were contacted through email with a personalized message inviting them to complete an electronic survey. Each student was assigned an individual link, which allowed them to start, leave, and return to the survey without losing progress.

The pre-test was administered in late-August 2020. The pre-test included the case study and the MFQ. Students who had not completed the survey received up to four reminders, ending in late September. Of the 11,240 students invited to complete the pre-test, 1,226 responded. The post-test was administered in early-November 2020. The post-test, which included both the case study and the PSRI factors and items, was distributed to students who had completed the pre-test. Again, students who had not completed the assessments received up to four reminders through November and early December. There were 229 total respondents to both post-test surveys.

The Moral Foundations Questionnaire was designed with two "catch" items meant to identify students who (a) do not read and consider the questions as they answer or (b) respond in a pattern (e.g. responding

solely with the extreme ends of a scale). Once identified, these students are removed from the analysis. The two items asked (a) whether or not someone was good at math; and (b) it is better to do good than bad.

Of the 953 students who provided a response for "whether or not someone was good at math" on the pretest, 350 were removed from the analysis for selecting somewhat relevant, very relevant, or extremely relevant. Similarly, of the 916 students who provided a response for "it is better to do good than bad," 31 were removed for selecting slightly disagree, moderately disagree, or strongly disagree.

Note on Assessing Change over Time

While change can be assessed over time using a pre-post design around specified experiences, we would not expect major change over the short period of time (i.e., several months) between the pre- and post-assessments. We expect to be able to chart student progress over several years of data.

Table A: Assessment Alignment with Student Learning Outcomes

	Step and task	Rationale	Outcome
1.	Students read a scenario and make a decision	Step 1 allows students to consider and react to an ethical issue	2 – issues 3 – perspectives
2.	Students identify and rank three items that influenced their decision	Step 2 allows us to see what values are influencing students decisions	1 – values 3 – perspectives
3.	Students rate their commitment to the decision they made in Step 1	Step 3 allows us to understand their commitment to the decision	1 - values
4.	Students complete the MFQ Short Form, a psychometrically sound instrument that identifies which of five values inform decision-making processes.	Step 4 allows us to understand broader foundations in students values	1 – values 2 – issues 3 – perspectives
5.	Students rank five statements, which align with the previously assessed moral foundations. The survey does not indicate to the student that the previous 20 questions form five foundations.	Steps 4 allows us to understand broader foundations in students' values, as well as the congruence between what they believe influences their decisions (ranking in Step 5) and what we have found influences their decisions (Step 4)	1 - values

The assessment aligned with the three student learning outcomes outlined in the St. Philip's College QEP:

- 1. Students gain the skills to assess their own values and the origins of those values (e.g., fairness, respect)
- 2. Students identify and know about ethical issues (e.g., academic integrity, broad issues)
- 3. Students analyze ethical perspectives (e.g., how perspectives might differ by character)

Sample and Respondent Characteristics

	Initial S	Somplo			ndents	
			Pre	Test	Post	-Test
	N	%	n	%	n	%
Gender						
Male	4563	41%	336	27%	59	26%
Female	6651	59%	885	72%	169	74%
Not Reported	26	*	5	*	1	*
Total	11240	100%	1226	100%	229	100%
Class Year						
First Year	5798	52%	644	53%	115	50%
Second Year	5442	48%	582	48%	114	50%
Not Reported	-	-	-	-	-	-
Total	11240	100%	1226	100%	229	100%
Race						
American Indian/Alaska Native	15	*	2	*	1	*
Asian or Pacific Islander	73	1%	8	1%	2	1%
Black or African American	409	4%	57	5%	11	5%
Hispanic	1935	17%	240	20%	47	21%
International	2	*	-	-	-	-
White Non-Hispanic	794	7%	107	9%	23	10%
Two or More Races	6	*	3	*	1	*
Other	266	2%	37	3%	34	15%
Unknown or Not Reported	7732	69%	772	63%	110	49%
Total	11240	100%	1226	100%	229	100%
Status						
Full-Time	1974	18%	313	26%	86	38%
Part-Time	9266	82%	913	75%	143	62%
Not Reported	-	-	-	-	-	-
Total	11240	100%	1226	100%	229	100%

Note: Items with * instead of a percentage rounded to 0%. Some items may not total 100% due to rounding.

This table presents response frequencies in relation to the overall panel provided by St. Philip's College, with the pre-test administration garnering a response rate of 11% and the post-test administration garnering a response rate of 0.02% (the post-test response rate among those who had previously completed the pre-test was 19%).

Case Study

This case study and the subsequent value ranking items were designed with Lawrence Kohlberg's theory of moral development as a foundation (Evans, Forney, Guido, Patton, & Renn, 2010), as well as the AAC&U Characteristic Traits of the Dimensions document. Rohan (2000) suggested that value identification, value prioritization, and the consistency of prioritization over time are good measures of personal value development. Based on Rohan's research and the QEP student learning outcomes, the case study included opportunities for students to identify values and prioritize influences. The case study additional measures also allow us to better understand change overtime at St. Philip's College.

The case study was administered online, and students were asked to make a decision based upon a scenario involving academic integrity. This process provides an opportunity for respondents to consider and react to an ethical issue. The selection of reasons for their initial decision provides potential opportunities to see what values are shaping student decisions and where students generally stand within the stages of moral development.

Text of the Case Study

Maria has spent the past two weeks studying hard for her final exam. Every night, Maria's friends knew they could find her in the library or at a local coffee shop pouring over notes, flashcards, and various textbooks. On the day of the exam, Maria felt confident that her hard work would pay off. She sat at her usual desk and greeted her good friend Tim as he sat at an adjacent desk. Maria had offered to study with Tim multiple times over the past two weeks, and each time he declined. Tim asked Maria how much she had studied for the test. After she responded, Tim slouched in his chair and said that he didn't study much at all. Tim had another important test in his major subject tomorrow, he said, which took up more of his time. He was a little worried, as he had an academic scholarship to maintain.

At the start of the exam, the professor handed out the exams and sat at the front of the room. Ten minutes later, the professor's phone rang: It was an important call from his son. The professor stepped outside to speak with his son. After the door closed, Maria looked up and noticed that, once the professor had left the room, Tim had pulled a sheet of class notes from his pocket to help answer the questions. Maria was annoyed – after all, she had spent innumerable hours studying for this exam, while Tim had not put in any effort. Tim completed his exam using his notes, and handed it in once the professor returned. As Maria stood up to hand in her exam, she considered informing the professor of Tim's cheating.

References

Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2010). *Student development in college: Theory, research, and practice* (2nd ed.). San Francisco, CA: Jossey-Bass.

Rohan, M. J. (2000). A rose by any name? The values construct. *Personality and Social Psychology Review*, 4(3), 255-277.

A student's decision whether Maria should tell the professor of Tim's cheating does not represent their level of moral reasoning; however, the question frames later reasoning decisions, especially when students are asked to select and rank reasons for their decision.

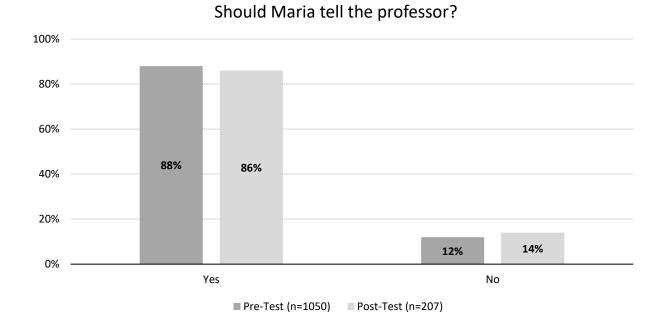
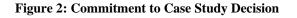
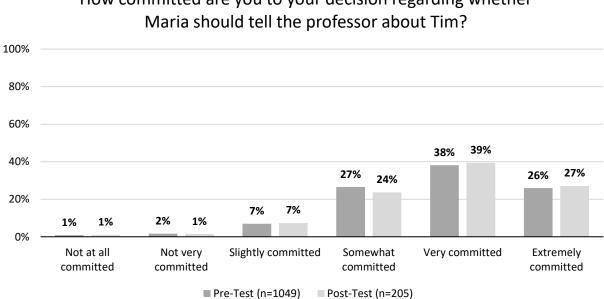


Figure 1: Case Study Decision





How committed are you to your decision regarding whether

Prior to administering the survey and informed by Kohlberg's understanding of moral development, potential reasons for a decision in the case study were generated in line with three hierarchical levels of moral reasoning. Level 1 reasons are rooted in concrete perspectives, which are individually-focused and responsive to authority. Level 2 reasons align with social roles and expectations, as well as the rule of law. Level 3 reasons reflect the social system as a contract, which protects fundamental human rights and welfare.

Table 1 presents the frequency with which respondents selected each reason as part of their case study response. Respondents could each select 3 reasons - as a result, frequency numbers do not correspond to the number of respondents in each administration. Additionally, more students selected yes on both the pre- and post-test, which means that yes-leaning reasons were selected more frequently.

Table 1: Frequency of Case Study Response Reasons

	Pre-Test	Post-Test
Level 1 Reasons		
Cheating is against the class rules.	539	110
Tim does not deserve a better grade than Maria.	192	33
Tim's grade doesn't affect Maria's grade.	166	29
Tim will no longer be Maria's friend.	37	5
Level 2 Reasons		
Tim does not deserve an academic scholarship if he cheats.	384	74
Cheating hurts everyone in the class.	334	66
It is not Maria's job to turn in Tim.	131	23
Reporting Tim will not end all cheating – why bother?	88	12
Level 3 Reasons		
Maria believes cheating is morally wrong.	619	113
Maria compromises her ethics by allowing Tim to cheat.	370	84
It does not matter because learning is more important than good grades.	137	27
It wouldn't be fair for Tim to lose his scholarship because of one mistake.	93	15

Once their reasons were selected, students were then asked to rank how important a particular reason was in coming to their initial decision. The importance scale ranged from not important (1) to very important (4). By ranking the importance of each reason in their decision-making, we can discern what level of reasoning is prioritized.

	Valid	Not	Slightly	Somewhat	Very
	Responses	Important	Important	Important	Important
Level 1 Reasons					
Cheating is against the class rules.	535	0 *	10 2%	58 11%	467 87%
Tim does not deserve a better grade than Maria.	191	3 2%	17 9%	41 22%	130 68%
Tim's grade doesn't affect Maria's grade.	165	12 7%	24 15%	49 30%	80 49%
Tim will no longer be Maria's friend.	37	9 24%	8 22%	11 30%	9 24%
Level 2 Reasons					
Tim does not deserve an academic scholarship if he cheats.	382	2 1%	33 9%	90 24%	257 67%
Cheating hurts everyone in the class.	330	2 1%	20 6%	73 22%	235 71%
It is not Maria's job to turn in Tim.	130	7 5%	23 18%	55 42%	45 35%
Reporting Tim will not end all cheating – why bother?	87	6 7%	23 26%	32 37%	26 30%
Level 3 Reasons					
Maria believes cheating is morally wrong.	613	2 *	25 4%	115 19%	471 77%
Maria compromises her ethics by allowing Tim to cheat.	366	0 *	14 4%	82 22%	270 74%
It does not matter because learning is more important than good grades.	136	2 2%	11 8%	29 21%	94 69%
It wouldn't be fair for Tim to lose his scholarship because of one mistake.	91	4 4%	7 8%	38 42%	42 46%

Table 2: Pre-Test Level of Importance Assigned to Chosen Response Reasons

Note: Percentages may not equal 100% because of rounding. Items with * instead of a percentage rounded to 0%.

Scale: (1) Not important to (4) Very important.

Table 3: Post-Test Level of Importance Assigned to Chosen Response Reasons

	Valid	Not	Slightly	Somewhat	Very
	Responses	Important	Important	Important	Important
Level 1 Reasons					
Cheating is against the class rules.	110	0 *	3 3%	18 16%	89 81%
Tim does not deserve a better grade than Maria.	33	0 *	3 9%	12 36%	18 55%
Tim's grade doesn't affect Maria's grade.	29	4 14%	5 17%	10 35%	10 35%
Tim will no longer be Maria's friend.	5	1 20%	0 *	3 60%	1 20%
Level 2 Reasons					
Tim does not deserve an academic scholarship if he cheats.	74	2 3%	6 8%	18 24%	48 65%
Cheating hurts everyone in the class.	66	1 2%	4 6%	14 21%	47 71%
It is not Maria's job to turn in Tim.	23	2 9%	4 17%	8 35%	9 39%
Reporting Tim will not end all cheating – why bother?	12	1 8%	1 8%	5 42%	5 42%
Level 3 Reasons					
Maria believes cheating is morally wrong.	113	0 *	2 2%	19 17%	92 81%
Maria compromises her ethics by allowing Tim to cheat.	84	1 1%	3 4%	11 13%	69 82%
It does not matter because learning is more important than good grades.	27	1 4%	1 4%	6 22%	19 70%
It wouldn't be fair for Tim to lose his scholarship because of one mistake.	15	0 *	1 7%	7 47%	7 47%

Note: Percentages may not equal 100% because of rounding. Items with * instead of a percentage rounded to 0%.

Scale: (1) Not important to (4) Very important.

Case Study Scoring

In order to assess the long-term change in students' responses to the case study dilemma, as well as developments in their reasoning and prioritization, each student respondent was assigned a weighted score for each level of reasoning (1 to 3). The score was calculated using the following steps:

- 1. When a student selected a reason for their decision, they were assigned a 1, 2, or 3 according to the level of moral reasoning associated with the choice. For example, a student who picked two Level 1 reasons and one Level 3 reason would be assigned a 1, 1, and 3.
- 2. Next, the three assigned level values were then multiplied by the prioritization of the respective reason. Prioritization was scaled from 1 (Not important) to 4 (Very important). This product was calculated for all three reason levels and then summed together within level. For example, the student who selected two Level 1 reasons and one Level 3 reason prioritized each reason as 1 (Not important), 2 (Slightly important), and 4 (Very important), respectively. Accordingly, the student received a Level 1 score of 3, a Level 2 score of 0, and a Level 3 score of 12. Scores of 0 were assigned to students who did not select a reason in a particular level.
- 3. Finally, the average score for each level was calculated for the entire institution.

These level scores are useful for assessing change over time. The scores themselves allow us to understand whether students are picking more or fewer reasons from different levels. Additionally, a reduction or increase in the standard deviation (SD) of a score will show whether students are selecting similar or different degrees of prioritization for each level.

Over time, we want to see the mean scores for Level 1 decrease and the scores for Levels 2 and 3 increase, indicating that students are improving their ethical and moral reasoning in response to the case study. We also want to see decreasing SDs over time, meaning that students are becoming more consistent in their prioritization of a given level of reasoning.

	Level 1 Score	Level 2 Score	Level 3 Score
Pre-Test Aggregate	2.74	2.62	3.61
Post-Test Aggregate	2.74	2.65	3.90

Table 4: Case Study Aggregate Level Scores

Table 5: Case Study Aggregate Level Score Descriptive Statistics

	I	Pre-Test			Post-Test		
	n	Μ	SD	n	Μ	SD	
Level 1 Score	1226	2.74	2.37	229	2.74	2.30	
Level 2 Score	1226	2.62	2.40	229	2.65	2.38	
Level 3 Score	1226	3.61	2.89	229	3.90	3.05	

There were slight changes in student responses from the pre- to the post-test, primarily on the Level 3 score. Further, standard deviations for Levels 1 and 2 decreased, indicating more unanimity among students in terms of their prioritization of Level 1 and 2 reasons.

Analysis of Linked Case Study Scores

In order to assess whether there were statistically significant differences between students' Level scores from the pre- to post-tests, we performed paired-sample t-tests using the 58 students who completed both assessments.

Table 6: Case Study Paired-Sample t-tests

Pair	Mean	SD	t	p-value
Level 1	-0.57	3.14	-1.980	0.17
Level 2	0.08	2.89	0.227	0.82
Level 3	-0.10	3.79	-0.208	0.84

Using a significance level of 0.05, there were no statistically significant changes in mean scores from preto post-test for all case study scores. Overall, this result was not unexpected – it would be unlikely to see any statistical shift in scores on moral reasoning over the course of a single semester. It is more likely that change will be evident over the course of years rather than months. This data provides an institutional snapshot that can be used to compare across years.

Moral Foundations Questionnaire (MFQ20)

Haidt and Graham (2007) present a conceptualization of morals different from the work of Lawrence Kohlberg, Carol Gilligan, and James Rest. Their thesis, based on anthropological work, suggests societies develop their moral systems from five foundations. The foundations are harm/care, fairness/reciprocity, loyalty/betrayal, authority/subversion, and sanctity/degradation.

The first foundation exists because humans have developed a natural aversion to suffering, and the harm/care foundation is based on normally developed humans dislike of and empathy toward others' pain. The foundation of fairness/reciprocity is related to justice from human interaction and reciprocal altruism. Loyalty/betrayal examines the tribal nature of groups and ones self-sacrifice for the group. Authority/subversion is concerned with leadership, followership, and individuals' deference to legitimate authority. The final foundation, sanctity/degradation, is tied to emotion of disgust; in this foundation disgust is conceived as socially-related to a particular set of virtues and the purity of individual souls rather than body.

Individuals place different weight on each of the foundations, which shapes their values and moral judgment. Moral foundations theory suggests these five foundations encompass a wide variety of social and ideological differences and are helpful in explaining tensions related to moral issues in society.

Five Foundations

- 1. **Care/harm**: This foundation is related to our long evolution as mammals with attachment systems and an ability to feel (and dislike) the pain of others. It underlies virtues of kindness, gentleness, and nurturance.
- 2. **Fairness/cheating**: This foundation is related to the evolutionary process of reciprocal altruism. It generates ideas of justice, rights, and autonomy.
- 3. **Loyalty/betrayal**: This foundation is related to our long history as tribal creatures able to form shifting coalitions. It underlies virtues of patriotism and self-sacrifice for the group. It is active anytime people feel that it's "one for all, and all for one."
- 4. **Authority/subversion**: This foundation was shaped by our long primate history of hierarchical social interactions. It underlies virtues of leadership and followership, including deference to legitimate authority and respect for traditions.
- 5. **Sanctity/degradation**: This foundation was shaped by the psychology of disgust and contamination. It underlies religious notions of striving to live in an elevated, less carnal, nobler way. It underlies the widespread idea that the body is a temple which can be desecrated by immoral activities and contaminants (an idea not unique to religious traditions).

References

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20(1), 98-116.

The Moral Foundations Questionnaire was designed with two "catch" items meant to identify students who (a) do not read and consider the questions as they answer or (b) respond in a pattern (e.g. responding solely with the extreme ends of a scale). Once identified, these students are removed from the analysis. The two items asked (a) whether or not someone was good at math; and (b) it is better to do good than bad

For the following tables, we determined the number of respondents using these catch items. Of the 953 students who provided a response for "whether or not someone was good at math" on the pre-test, 350 were removed from the analysis for selecting somewhat relevant, very relevant, or extremely relevant. Similarly, of the 916 students who provided a response for "it is better to do good than bad," 31 were removed for selecting slightly disagree, moderately disagree, or strongly disagree.

Table 7: Moral Foundations Questionnaire – Factor Comparisons

Foundation	n	Μ	SD
Care/Harm Foundation Scale	586	3.97	0.87
Fairness/Cheating Foundation Scale	587	4.14	0.74
Loyalty/Betrayal Foundation Scale	588	2.65	1.00
Authority/Subversion Foundation Scale	586	3.00	0.94
Sanctity/Degradation Foundation Scale	586	3.30	0.90

Table 8: Moral Foundations Questionnaire - Care/Harm

	n	Μ	SD
Care/Harm Foundation Scale			
When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?*			
Whether or not someone suffered emotionally	579	3.79	1.28
Whether or not someone cared for someone weak or vulnerable	580	3.69	1.39
Please read the following sentences and indicate your agreement or disagreement.**			
Compassion for those who are suffering is the most crucial virtue.	561	4.08	1.06
One of the worst things a person can do is hurt a defenseless animal.	561	4.38	1.13

*Responses ranged from, 0 = Not at all relevant to 5 = Extremely relevant

**Responses ranged from, 0 = Strongly disagree to 5 = Strongly Agree

Table 9: Moral Foundations Questionnaire – Fairness/Cheating

	n	Μ	SD
Fairness/Cheating Foundation Scale			
When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?*			
Whether or not some people were treated differently than others	584	4.05	1.20
Whether or not someone acted unfairly	582	3.84	1.17
Please read the following sentences and indicate your agreement or disagreement.**			
When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.	563	4.52	0.93
Justice is the most important requirement for a society.	560	4.22	0.98
*Responses ranged from, $0 = Not$ at all relevant to $5 = Extremely relevant$			

**Responses ranged from, 0 = Strongly disagree to 5 = Strongly Agree

Table 10: Moral Foundations Questionnaire – Loyalty/Betrayal

	n	Μ	SD
Loyalty/Betrayal Foundation Scale			
When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?*			
Whether or not someone's action showed love for his or her country	584	2.35	1.60
Whether or not someone did something to betray his or her group	580	3.35	1.38
Please read the following sentences and indicate your agreement or disagreement.**			
I am proud of my country's history.	561	2.54	1.66
People should be loyal to their family members, even when they have done something wrong.	560	2.34	1.70

*Responses ranged from, 0 = Not at all relevant to 5 = Extremely relevant

**Responses ranged from, 0 = Strongly disagree to 5 = Strongly Agree

Table 11: Moral Foundations Questionnaire – Authority/Subversion

n	Μ	SD
584	3.63	1.35
581	2.16	1.43
561	4.01	1.17
561	2.19	1.76
	584 581 561	584 3.63 581 2.16 561 4.01

*Responses ranged from, 0 = Not at all relevant to 5 = Extremely relevant

**Responses ranged from, 0 = Strongly disagree to 5 = Strongly Agree

Table 12: Moral Foundations Questionnaire – Sanctity/Degradation

	n	Μ	SD
Sanctity/Degradation Foundation Scale			
When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking?*			
Whether or not someone violated standards of purity and decency	583	3.63	1.29
Whether or not someone did something disgusting	582	3.08	1.51
Please read the following sentences and indicate your agreement or disagreement.**			
People should not do things that are disgusting, even if no one is harmed.	561	3.74	1.34
I would call some acts wrong on the grounds that they are unnatural.	558	2.78	1.49

*Responses ranged from, 0 = Not at all relevant to 5 = Extremely relevant

**Responses ranged from, 0 = Strongly disagree to 5 = Strongly Agree

Self-Assessment of Moral Foundations

In addition to using the Moral Foundations Questionnaire, each student was provided a brief description of each of the five foundations. Students were then asked to, "Please indicate the importance of each when you consider what is right or wrong." This rank-order of each foundation provides students with an opportunity to assess their own "foundations" in ethical and moral decision making (student learning outcome 1).

The rank order of students' self-assessed foundations were compared to student scores on the MFQ using a correlation matrix (see Table 13). A correlation examines the relationship between two variables on a scale from 0 (no relationship) to 1 (identical relationship) – we generally consider a correlation of 0.4 to be relatively strong. In order to assess the relationship between students' self-identified values and their MFQ scores, we expect correlations to increase over time. Such an increase would suggest an increased capacity of students to accurately identify the origins of their values.

Table 13: Correlations of MFQ Averages and Self-Reported Rankings

	Care/Harm Ranking	Fairness/ Cheating <i>Ranking</i>	Loyalty/ Betrayal <i>Ranking</i>	Authority/ Subversion <i>Ranking</i>	Sanctity/ Degradation <i>Ranking</i>
Care/Harm Average	0.35	0.21	0.05	0.04	0.15
Fairness/Cheating Average	0.31	0.26	0.10	0.11	0.22
Loyalty/Betrayal Average	0.14	0.01	0.54	0.54	0.17
Authority/Subversion Average	0.15	0.04	0.43	0.57	0.24
Sanctity/Degradation Average	0.21	0.12	0.28	0.35	0.53

Note: All correlations except those in italics are statistically significant at the 0.01 level.

The highlighted numbers represent the correlation between students' self-identified ranking and the rankorder as determined by their MFQ results. Overall, students demonstrated a relatively strong ability to identify their own ranking of moral foundations as compared with the MFQ assessment.

Personal and Social Responsibility Inventory

A team of assessment professionals at St. Philip's College originally selected 10 items from the Personal and Social Responsibility Inventory (PSRI) as an institutional climate measure for their QEP. The items closely aligned with the student learning outcomes assessment. The PSRI is a nationally-administered climate instrument designed to assess students' perceptions of institutional support and opportunities for education in personal and social responsibility. The PSRI not only provides data for institutional improvement, but also continues exploration into interventions and strategies that will inform a national conversation on ways to strengthen learning for personal and social responsibility. The research emerging from this project informs good practice for the development of personal and social responsibility for all students.

Based upon the 10 PSRI items selected by the St. Philip's College QEP team, three factors from the PSRI dimensions of Cultivating Academic Integrity, Taking Seriously the Perspectives of Others, and Refining Ethical and Moral Reasoning were administered to derive a more comprehensive snapshot of the campus climates for personal and social responsibility. Although the 10 items most closely align with the student learning outcomes, the composite factors that include those 10 items provide a greater understanding of the campus climate related to the learning outcomes. Both the individual items and the climate factors provide information to strengthen learning and development for ethical and moral reasoning on campus.

Personal and Social Responsibility Inventory Sample Survey Items to Track for QEP						
PSRI Item	Related student learning outcome	Related Process Outcome				
My experiences at this campus have increased my ability to learn from diverse perspectives	3	2, 3, 4				
My experiences at this campus have helped me develop a better understanding of academic integrity	1, 2	3, 4				
Faculty at this institution understand the campus academic policies	2	4				
Faculty reinforce the campus academic policies	2, 3	3, 4				
Helping students recognize the importance of taking seriously the perspectives of others is a major focus of this campus	3	3,4				
Faculty at this institution help students think through new and challenging ideas or perspectives	1, 2, 3	3, 4				
This campus has high expectations for students in terms of their ability to take seriously the perspectives of others, especially those with whom they disagree	1, 2, 3	3, 4				
Helping students to develop their ethical and moral reasoning is a major focus of this campus	1, 2, 3	2, 3, 4				
This campus helps students to develop their ethical and moral reasoning, including the ability to express and act upon personal values responsibly	1, 2, 3	2, 3, 4				
This campus provides opportunities for students to develop their ethical and moral reasoning in their academic work	1, 2, 3	3, 4				

Note: This assessment did not track process outcomes (4).

Table 14: Academic Integrity

Please rate your level of agreement with the following items:*

	Valid Responses	Strongly Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Strongly Agree
My experiences at this campus have helped me develop a better understanding of academic integrity**	182	6 3%	1 1%	23 13%	40 22%	112 62%
Faculty at this institution understand the campus academic honesty policies**	176	5 3%	3 2%	16 9%	31 18%	121 69%
Faculty at this institution support the campus academic honesty policies	176	5 3%	1 1%	17 10%	29 16%	124 70%

Note: Percentages may not equal 100% because of rounding. Items with * instead of a percentage rounded to 0%.

Scale: (1) Strongly disagree to (5) Strongly agree.

** The St. Philip's team selected this as one of 10 items to track for the QEP.

Table 15: Academic Integrity (cont.)

How often do the following occur on this campus?*

	Valid Responses	Almost Never	Not Very Often	Occasionally	Often	Almost Always
Faculty reinforce the campus academic honesty policies**	168	6 4%	5 3%	14 8%	48 29%	95 57%
Formal course syllabi define academic dishonesty (including such issues as plagiarism, improper citation of Internet sources, buying papers from others, cheating on assignments or tests, etc.)	178	4 2%	5 3%	11 6%	29 16%	129 72%

Note: Percentages may not equal 100% because of rounding. Items with * instead of a percentage rounded to 0%.

Scale: (1) Almost never to (5) Almost always.

Table 16: Perspective Taking

Please rate your level of agreement with the following items:*

	Valid Responses	Strongly Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Strongly Agree
Helping students recognize the importance of taking seriously the perspectives of others is a major focus of this campus**	179	5 3%	2 1%	22 12%	48 27%	102 57%
This campus helps students understand the connections between appreciating various opinions and perspectives and being a well-informed citizen	178	7 4%	1 1%	21 12%	41 23%	108 61%
It is safe to hold unpopular positions on this campus	163	11 7%	7 4%	26 16%	49 30%	70 43%
Faculty at this institution teach about the importance of considering diverse intellectual viewpoints	179	6 3%	2 1%	29 16%	31 17%	111 62%
Faculty at this institution help students think through new and challenging ideas or perspectives**	178	6 3%	4 2%	24 13%	43 24%	101 57%
Students at this institution are respectful of one another when discussing controversial issues or perspectives	174	8 5%	1 1%	21 12%	39 22%	105 60%
This campus has high expectations for students in terms of their ability to take seriously the perspectives of others, especially those with whom they disagree**	178	6 3%	2 1%	27 15%	44 25%	99 56%

Note: Percentages may not equal 100% because of rounding. Items with * instead of a percentage rounded to 0%.

Scale: (1) Strongly disagree to (5) Strongly agree.

Table 17: Perspective Taking (cont.)

My experiences at this campus have:*

	Valid Responses	Strongly Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Strongly Agree
further developed my respect for perspectives different from my own	182	5 3%	2 1%	23 13%	48 26%	104 57%
increased my ability to learn from diverse perspectives**	178	5 3%	1 1%	26 15%	43 24%	103 58%
increased my ability to gather and thoughtfully use evidence to support my ideas	182	4 2%	3 2%	25 14%	38 21%	112 62%

Note: Percentages may not equal 100% because of rounding. Items with * instead of a percentage rounded to 0%.

Scale: (1) Strongly disagree to (5) Strongly agree.

Table 18: Ethical and Moral Reasoning

Please rate your level of agreement with the following items:*

	Valid Responses	Strongly Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Strongly Agree
Helping students to develop their ethical and moral reasoning is a major focus of this campus**	182	6 3%	3 2%	20 11%	43 24%	110 60%
This campus helps students to develop their ethical and moral reasoning, including the ability to express and act upon personal values responsibly**	178	4 2%	2 1%	23 13%	33 19%	116 65%
The importance of developing a personal sense of ethical and moral reasoning is frequently communicated to students	177	5 3%	4 2%	23 13%	40 23%	105 59%
My experiences at this campus have further developed my ability to consider the moral/ethical dimensions of issues	180	5 3%	5 3%	22 12%	37 21%	111 62%
My experiences at this campus have further developed my ability to consider the moral/ethical consequences of my own actions	179	4 2%	4 2%	23 13%	34 19%	114 64%
This campus provides opportunities for students to develop their ethical and moral reasoning in their academic work**	180	4 2%	4 2%	23 13%	44 24%	105 58%
This campus provides opportunities for students to develop their ethical and moral reasoning in their personal life	182	6 3%	3 2%	20 11%	43 24%	110 60%

Note: Percentages may not equal 100% because of rounding. Items with * instead of a percentage rounded to 0%.

Scale: (1) Strongly disagree to (5) Strongly agree.

Table 19: PSRI Factor and Item Means and Standard Deviations*

	Μ	SD
Faculty Roles in Academic Integrity	4.47	0.74
Faculty at this institution understand the campus academic honesty policies	4.48	0.94
Faculty at this institution support the campus academic honesty policies	4.51	0.91
Faculty reinforce the campus academic honesty policies	4.32	1.00
Formal course syllabi define academic dishonesty (including such issues as plagiarism, improper citation of Internet sources, buying papers from others, cheating on assignments or tests, etc.)	4.54	0.90
General Climate for Perspective Taking	4.28	0.89
Helping students recognize the importance of taking seriously the perspectives of others is a major focus of this campus	4.34	0.94
This campus helps students understand the connections between appreciating various opinions and perspectives and being a well-informed citizen	4.36	0.99
It is safe to hold unpopular positions on this campus	3.98	1.17
Faculty at this institution teach about the importance of considering diverse intellectual viewpoints	4.34	1.01
Students at this institution are respectful of one another when discussing controversial issues or perspectives	4.29	1.01
This campus has high expectations for students in terms of their ability to take seriously the perspectives of others, especially those with whom they disagree	4.33	1.03
General Climate for Ethical and Moral Reasoning	4.38	0.85
Helping students to develop their ethical and moral reasoning is a major focus of this campus	4.38	0.94
This campus helps students to develop their ethical and moral reasoning, including the ability to express and act upon personal values responsibly	4.36	0.98
The importance of developing a personal sense of ethical and moral reasoning is frequently communicated to students	4.43	0.92
This campus provides opportunities for students to develop their ethical and moral reasoning in their academic work	4.40	0.95
This campus provides opportunities for students to develop their ethical and moral reasoning in their personal life	4.34	0.94

*Response ranged from 1 = Strongly disagree/Almost never to 5 = Strongly agree/Almost always

Overall, the PSRI factor scores indicate that students generally selected "Agree" or "Strongly agree" in response to the climate survey items suggesting positive climates. The standard deviations are also relatively consistent, indicating that student scores did not vary much below the "Neutral" response option.

Conclusion

This report detailed the results from two administrations of the moral and ethical development case study. In addition, the pre-test included the Moral Foundations Questionnaire and the post-test included items and factors from the Personal and Social Responsibility Inventory. Results from the case study indicated that approximately 86%-88% of students in each assessment decided that cheating should be reported. Moreover, nearly two-thirds of students selected a high-level of commitment to their earlier decisions. Overall, students indicated an increase in Level 3 reasoning and greater prioritization of their Level 1 and Level 2 decisions; however, among students who completed both surveys, there were no statistically significant changes.

Students were relatively consistent in self-identifying their own moral foundations as compared to their scores on the overall questionnaire, though less so in comparison to prior years. The care/harm scale and the fairness/cheating scale both received the highest average rating. Moreover, most students indicated positive perceptions of the campus climates for perspective taking, academic integrity, and ethical and moral reasoning.