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# Democratizing the Practices of Design and Innovation through Transdisciplinary Coursework

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# Democratizing the Practices of Design and Innovation through Transdisciplinary Coursework

## Abstract

In the face of today's complex challenges, it is clear that the convergence of academic disciplines in the support of creating innovative solutions is more important than ever. To enable this convergence, universities can adopt transdisciplinary learning experiences that promote the integration of different academic fields. One common method for integration is the application of design thinking methods and the development of cross-cutting innovation-focused skills. The Mission, Meaning, Making (M3) model is an example of a transdisciplinary educational model that aims to transform traditional undergraduate learning experiences by combining the strengths of different academic units. The M3 model includes co-teaching and co-learning from faculty and students across different academic units/colleges, as well as learning experiences that span multiple semesters to foster student learning and innovative ideas. This collaborative initiative is designed to reach the broader campus community, regardless of students' backgrounds or majors. Therefore, the study presented in this paper explores how student participation in this transdisciplinary learning model and their perceptions of their innovation skills may vary regarding major and gender. This exploration can be important as 1) the model may or may not be meeting the needs of participants across areas of study and 2) perceptions of abilities may influence a sense of belongingness for people within the model's programming. This paper will first highlight the details of the M3 model and its coursework and then provide the details related to the statistical analysis of 119 post- and retrospective pre-survey responses from students across diverse majors as well as any implications for the results.

## Introduction

Every profession has its own version of messy, open-ended problems. Addressing them often involves identifying and isolating the problem, researching what has been done in similar problems, and brainstorming new approaches to solve the problem in the given context before making a prototype or testing the design. To be good at brainstorming is to be good at divergent or creative thinking, something viewed as a skill that can be developed, rather than a trait, an innate ability that someone is born with [1].

Design thinking is one method for approaching messy, real-world problems that has been adopted by many organizations and universities [2] for its potential to transfer into a wide variety of problem spaces. In this study, nearly all students within the university's polytechnic college, made up of over 35 majors including engineering technology, take an initial requisite course in design thinking. Students who find the coursework especially beneficial have the option to complete courses toward a minor in a transdisciplinary educational model, referred to as the Mission, Meaning, Making (or M3) model focused on design and innovation (D&I). These courses utilize design thinking practices across the institution's engineering/technology, liberal arts, and business colleges/units, building on the strengths of each program. For example, the coursework enables each colleges' disciplinary expertise to converge through establishing a "mission" for carrying ideas beyond the classroom and supporting them financially (business), understanding the "meaning" behind the problems people face and how solutions can be designed to fit their needs (liberal arts), and bringing ideas to life through the "making" and implementation of designs (engineering/technology). The two collaborative course elements of the D&I minor at the center of the M3 program have evolved to a) be co-taught with faculty across colleges and b) provide the space for students across all degree programs to interact with each other and begin to learn shared practices authentic to innovation. The first core course, *Designing Technology for People: Anthropological Approaches*, is collaboratively taught by technology faculty as well as anthropology faculty from the liberal arts college. This course immerses students in ethnographically studying human and technology interactions to support identifying problems and designing appropriate solutions for, and with, the people they impact. The second core course, *Prototyping for People: Thinking Strategically & Making Decisions*, is collaboratively taught by technology faculty and business faculty. This course guides students through the process of iteratively prototyping design solutions as well as prototyping potential business models related to these solutions. The students are led through the practice of making strategic decisions related to their designs as they deepen their understanding of customer/user needs, market opportunities, costs of goods, competitor operations, and market strategies. The type of student who is drawn to the M3 transdisciplinary learning model and what benefits they receive when framing problems is a topic of interest as the program is relatively new, established in the fall of 2018.

## Literature Review

Globalization, facilitated by widespread use of the internet, has resulted in widespread advances in education, infrastructure, and tools of scientific discovery, greatly enhancing the process of making well-informed decisions [3]. It also stands to reason that our interconnected global economy has provided us with a wide variety of potential solutions to many problems. However, as problems are rarely straight-forward, and there are a wide range of pre-existing potential solutions, finding the 'best' solution becomes problematic. One widely adopted approach to identifying the best solution for a problem in a specific context is that of design thinking [2].

Design thinking is one method for systematically solving problems through human-centered design, taking the user into consideration throughout the process. The phases of the design process, "inspiration, ideation, and implementation" [4] have similarities to other well-known problem-solving methods, such as the engineering design process or scientific method. It differs, however, by integrating ethnographic practices to develop empathy for how users encounter the problem in context [5]. This involves observations, as well as interviews informed by observations and research, including the client in the process of problem solving to make a unique and well-suited solution for the given situation [6]–[8].

When teaching the design thinking process, particular attention is paid to inspiration and ideation to develop a design thinking mindset. While inspiration is a unique aspect of design thinking, ideation has a good deal of overlap with the engineering design process, and is composed of two main steps, 1) idea generation and 2) concept development [9]. Idea generation, synonymous with brainstorming, focuses on generating a large quantity of ideas in a short period of time, with lists ranging from 50 - 100+ ideas. Concept development works to pare down and combine elements of this list into manageable numbers, no more than a dozen or so for consideration. As human-centered design is a defining characteristic of design thinking, the finalized list of solutions should reflect the user's needs in an end product [9]. For those who wish to develop a design thinking mindset, practice in divergent thinking or thinking creatively, is an essential step.

Creativity is often referred to in the idea generation step of design thinking, as it is of great aid when developing a large list of potential solutions and has been shown to vary across majors [10]. In one study of college students ($n$ = 226), a divergent thinking task challenged students to identify alternate uses for simple items as a measure of creativity. Students from creative college majors differed in creativity by nearly one standard deviation (.97) from more conventional peers, while the top-two scores of creative college majors (fine arts, interior architecture, music performance) differed by 1.7 standard deviations [10]. This is in alignment with other studies on creativity in artistic and investigative occupations [11]. As students from a wide variety of colleges and majors work toward completion of courses within the M3 transdisciplinary learning model, it is of particular interest if these students feel they equally benefit from the course, regardless of where they start on the creativity spectrum.

Potentially as a result of societal and structural difference, creativity may be shown in different ways across populations. For example, gender differences in creativity have also been explored with mixed results. Studies find creativity advantages in men over women [12], women over men [13], effeminate men and androgenous women over other gender role categories [14], and some studies showing no difference in creativity across genders at all [15]. Other studies find that outside influences such as assignment instructions can play a role in creativity across genders [16].

While creativity can be shown and measured in different ways across genders, majors, and their subsequent professions, it is still seen as a skill that people can develop. One approach to enhancing creativity in individuals is to provide multiple opportunities to use the design thinking framework in the context of real-world problems. This is reflected in the implementation of the course sequence in the M3 transdisciplinary learning model. When used as a treatment, students that were exposed to design thinking curriculum showed significant differences from control groups utilizing teacher-centered learning [17]. This is in alignment with findings in other studies that investigated positive benefits of design thinking on creativity [18], [19].

In summary, creativity varies across demographics and areas of study, and design thinking is identified as a treatment to build creativity in individuals. What remains to be studied is how a variety of individuals may benefit from or be influenced by design thinking coursework. Are students from more creative majors more likely to benefit from courses in the M3 transdisciplinary learning? Do students from different subject majors perceive the benefits of the M3 transdisciplinary learning model differently? Does gender play any role in the influence of courses on a design thinking mindset? These questions can be summarized into the following two research questions:

> **RQ1**: Do courses in the M3 transdisciplinary learning model have an equal influence on developing a design-thinking mindset across majors?
>
> > **H0**: Students across majors show no significant difference in pre- and post-analysis on design thinking mindset after completing a course in the M3 transdisciplinary learning model sequence.
> >
> > **H1**: There is a significant difference in at least one major when analyzing the results of pre- and post-analysis on design thinking mindset after completing a course in the M3 transdisciplinary learning model sequence.

**RQ2**: Do courses in the M3 transdisciplinary learning model course sequence have an equal influence on students regardless of gender?

**H0**: There is no significant difference by self-identified gender in pre- and post-analysis on design thinking mindsets after completing a course in the M3 transdisciplinary learning model sequence.

**H1**: There is a significant difference in self-identified gender in pre- and post-analysis on design thinking mindsets after completing a course in the M3 transdisciplinary learning model sequence.

The answers to these questions can help course coordinators and instructional designers understand their target audience and make adjustments to courses and sequencing to better meet the needs of participating students.

**Methods**

Post-survey and retrospective pre-survey analyses (n = 119) were collected from students in the M3 transdisciplinary learning model at the conclusion of each course since the spring of 2021 utilizing a six-point Likert-style survey to investigate three constructs of developing a design thinking mindset, 1) integrative learning, 2) problem solving, and 3) teamwork, with a fourth section dedicated to qualitative input. As students completed these surveys as part of their coursework, information such as the student's major and previous courses is available along with basic demographic information. This data set includes students from nine of the university's 13 colleges, spanning 64 unique majors. However, these data were simplified into three categories: 1) Polytechnic, 2) Liberal Arts, and 3) other. Of the 119 survey respondents, 58 identified as female, while all others identified as male (as course data was used for identification, no students were identified as non-binary). Using SPSS, three 2x2 ANOVAs were conducted to investigate gains from retrospective pre- to post-course survey data on each construct the using student gender, and three 2x3 ANOVAs using major as independent variables for analysis against retrospective pre- and post-course survey data.

The pre- and post-course survey instruments were developed prior to this study focused on the constructs of integrative learning, problem solving, and teamwork that were adapted from the validated AAC&U VALUE rubrics [20]. These three constructs were selected based on their alignment to design thinking. The post-course survey consisted of 34 questions – 10 questions for each construct and four open-ended response questions. A sample of quantitative questions can be seen in Table 1. Additionally, to aid students in the interpretation of their experience, descriptors were appended to each Likert scale value, as seen in Table 2.

**Table 1**
*Design Thinking Mindset Evaluation*

| **Integrative Learning - As a result of participating in this Design & Innovation (M3) Course, I am able to:** |
|---|
| Synthesize connections among experiences outside of the formal classroom. |
| Deepen understanding of fields of study to broaden my own points of view. |
| Independently create a whole out of multiple parts. |
| Draw conclusions by combining examples, facts, or theories from multiple fields of study or perspectives. |
| Adapt and apply skills, abilities, theories, or methods gained in one situation to new situations. |
| Solve difficult problems or explore complex issues in original ways. |
| Fulfill assignments by choosing a format, language, or graph that enhances meaning. |
| Make clear the interdependence of language and meaning, thought, and expression. |
| Envision a future self. |
| Make plans that build on past experiences that have occurred across multiple and diverse contexts. |

**Table 2**
*Likert Scale Values*

| |
|---|
| 1: Not at all - I am not aware of or do not recognize this behavior. |
| 2: Low Degree - I am only aware of and recognize this behavior. |
| 3: Somewhat Low Degree - I cooperate or comply with this behavior if required by others. |
| 4: Somewhat High Degree - I recognize the value of and prefer this behavior. |
| 5: High Degree - This behavior is an important priority to me. |
| 6: Very High Degree - This behavior is natural to me, is habitual to me, and embodies who I am. |

In an effort to minimize response bias that may occur in traditional pre-surveys, students were asked to reflect on their experiences before completing the course immediately following post-course surveys using a retrospective pre-course survey [21]. These retrospective pre-course survey consisted of 34 questions and were used to measure the change in each student's perceptions or attitudes over time. The same 10 questions were used to analyze each area of the student's design thinking mindset, while qualitative questions were used to assist students in reflecting on their collaborative-taught course experience. Administration of the post-surveys and retrospective pre-surveys occurs at the conclusion of the co-taught courses. Surveys were included as part of normal coursework, allowing for a high return/participation rate and very little missing data. It should be noted, however, that when measuring integrative learning, six female students failed to complete the post assessment, and their data was dropped from this construct. Descriptive statistics for these three constructs can be found below (see Tables 3 – 5).

**Table 3**
*Integrative Learning Construct Descriptive Statistics*

| | Integrative Learning Retrospective Pre | | | Integrative Learning Post | | |
|---|---|---|---|---|---|---|
| | **N** | **M** | **SD** | **N** | **M** | **SD** |
| **Male** | 61 | 46.16 | 10.834 | 61 | 48.90 | 7.143 |
| **Female** | 52 | 45.83 | 10.461 | 52 | 50.69 | 6.261 |
| **Polytechnic** | 74 | 47.08 | 11.358 | 74 | 50.26 | 6.983 |
| **Liberal Arts** | 11 | 46.00 | 5.727 | 11 | 46.55 | 4.967 |
| **Other** | 28 | 43.18 | 9.760 | 28 | 49.57 | 6.697 |

**Table 4**
*Teamwork Construct Descriptive Statistics*

| | Teamwork Retrospective Pre | | | Teamwork Post | | |
|---|---|---|---|---|---|---|
| | **N** | **M** | **SD** | **N** | **M** | **SD** |
| **Male** | 61 | 47.05 | 9.278 | 61 | 49.46 | 9.204 |
| **Female** | 58 | 48.81 | 8.591 | 58 | 52.76 | 6.359 |
| **Polytechnic** | 77 | 47.91 | 9.268 | 77 | 51.17 | 8.899 |
| **Liberal Arts** | 11 | 47.09 | 7.259 | 11 | 48.27 | 6.513 |
| **Other** | 31 | 48.19 | 8.942 | 31 | 51.81 | 6.231 |

**Table 5**
*Problem Solving Descriptive Statistics*

| | Problem Solving Retrospective Pre | | | Problem Solving Post | | |
|---|---|---|---|---|---|---|
| | **N** | **M** | **SD** | **N** | **M** | **SD** |
| **Male** | 61 | 46.02 | 9.300 | 61 | 49.59 | 6.857 |
| **Female** | 58 | 46.52 | 8.772 | 58 | 51.17 | 6.339 |
| **Polytechnic** | 77 | 46.86 | 9.283 | 77 | 51.04 | 6.864 |
| **Liberal Arts** | 11 | 47.27 | 5.985 | 11 | 47.09 | 5.127 |
| **Other** | 31 | 44.42 | 9.186 | 31 | 49.84 | 6.272 |

Levene’s test indicated equal variances, while residual Q-Q plots and histograms showed homoscedasticity and normality assumptions were largely met. Exceptions to normality were found in integrative learning post for females (kurtosis = -1.076), as well as teamwork post for males (kurtosis = 5.060). ANOVA is robust to violations of normality, however a kurtosis value over +/- 2.0 is too much of a violation of normality, and as such cannot be used to analyze the interaction of teamwork and gender.

Similar to measuring each construct against gender, residual Q-Q plots and histograms showed homoscedasticity and normality assumptions were largely met against college as well. Exceptions to normality were found in integrative learning post for liberal art majors (kurtosis = -1.082), problem solving pre for ‘other’ majors (kurtosis = -1.297), teamwork post for liberal art majors (kurtosis = -1.452), and teamwork post for polytechnic majors (kurtosis = 5.543). ANOVA is robust to violations of normality, however with a kurtosis value over +/- 2.0 is too much of a violation of normality, and as such cannot be used to analyze the interaction of teamwork and college major.

Boxplots of polytechnic majors measured on the teamwork construct identified two outliers that were likely contributing to skewness of data (see Appendix A and B). These two data points were removed, and descriptive statistics were run a second time, yielding changes to 'male' and 'polytechnic' independent variables (see Table 6). Adjusted box plots for the teamwork construct against college and gender are included in the appendix (see Appendix C).

**Table 6**
*Updated Teamwork Construct Descriptive Statistics*

| | **Teamwork Retrospective Pre** | | | **Teamwork Post** | | |
|---|---|---|---|---|---|---|
| | **N** | **M** | **SD** | **N** | **M** | **SD** |
| **Male** | 59 (61) | 47.44 (47.05) | 8.777 (9.278) | 59 (61) | 50.56 (49.46) | 6.956 (9.204) |
| **Female** | 58 | 48.81 | 8.591 | 58 | 52.76 | 6.359 |
| **Polytechnic** | 75 (77) | 48.24 (47.91) | 8.847 (9.268) | 75 (77) | 52.08 (51.17) | 6.900 (8.899) |
| **Liberal Arts** | 11 | 47.09 | 7.259 | 11 | 48.27 | 6.513 |
| **Other** | 31 | 48.19 | 8.942 | 31 | 51.81 | 6.231 |

*Note – original values shown in parenthesis*

Where previously an ANOVA would not have been possible for this set of data, removal of these outliers shifted the data to a normal range such that an ANOVA would be appropriate. Teamwork post for males shifted from a kurtosis of 5.060 to -0.113, while teamwork post for polytechnic majors shifted from 5.543 to -0.017. This is reflected in updated residual Q-Q plots and histograms showing homoscedasticity and normality assumptions for this construct. Box plots of each construct against gender are also included to visualize outliers in the data (see Appendix C).

While results from ANOVA speak to the significance of the data, it is clear from the means in the retrospective pre- and post-course data that students made gains in each of the three constructs over the course of the semester. As students are engaged in projects to build on these skills, this change is to be expected.

## Results

Over 100 retrospective pre- and post-course surveys were analyzed using mixed factorial ANOVA to investigate this study's research questions and hypotheses. We were interested in seeing if there was an influence of college or gender on the growth in these concepts so multiple one-way ANOVAs were conducted to compare the effect of gender/college on the constructs (teamwork/integrative learning/problem solving) measured by the surveys. When analyzing the influence of college major on a design thinking mindset using a 2-way mixed analysis of variance, a significant main effect of exposure was evident in each of the three constructs (teamwork, integrative learning, problem solving) at the .05 significance level, with effect size ranging from $\eta^2 = 0.137$ to $\eta^2 = 0.224$. However, no significant main effects of college or interaction effects between exposure and college could be found (see Figure 1). This results in retaining the null hypothesis, that students across majors show no significant difference in pre- and post-analysis on design thinking mindset after completing a course in the M3 transdisciplinary learning model sequence. See Table 7 for detailed results.

**Figure 1**

*Estimated Growth of each Construct Over Duration of Course by College*

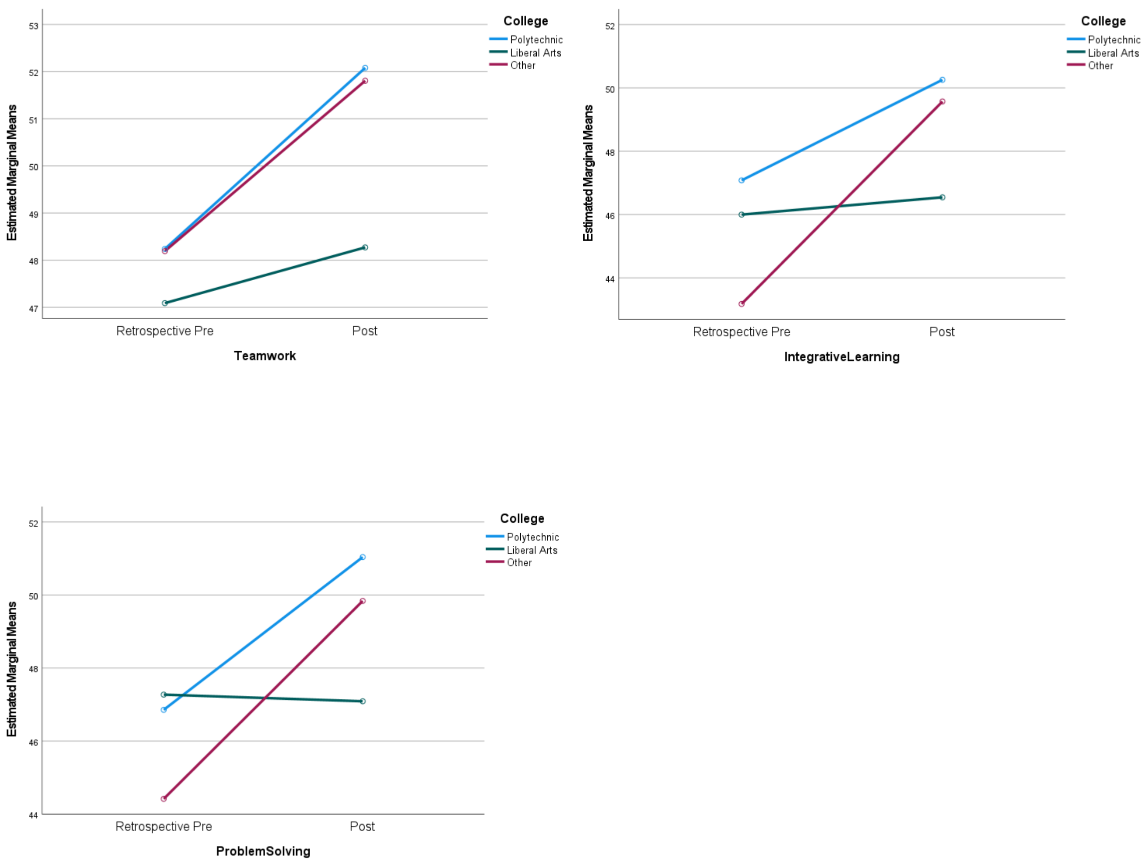


**Table 7**

*Statistical summary of 2x2 ANOVA results of gender*

| Construct | Effect | Results | Effect Size ($\eta^2$) |
|---|---|---|---|
| Teamwork | Time | F = 33.191, p < 0.001* | 0.224 |
| Teamwork | Gender | F = 1.903, p > 0.05 | |
| Teamwork | Time x Gender | F = 0.457, p > 0.05 | |
| Problem Solving | Time | F = 33.698, p < 0.05* | 0.224 |
| Problem Solving | Gender | F = 0.674, p > 0.05 | |
| Problem Solving | Time x Gender | F = 0.582, p > 0.05 | |
| Integrative Learning | Time | F = 17.556, p < 0.001* | 0.137 |
| Integrative Learning | Gender | F = 0.262, p > 0.05 | |
| Integrative Learning | Time x Gender | F = 1.375, p > 0.05 | |

*Indicates significance

Likewise, when analyzing the influence of gender on constructs relating to a design thinking mindset (teamwork, integrative learning, problem solving) using a 2-way mixed analysis of variance, a significant main effect of exposure was evident in each of the three constructs at the .05 significance level, with effect size ranging from $\eta^2 = 0.068$ to $\eta^2 = 0.098$. However, no significant main effects of gender or significant interaction effects between exposure and gender could be found (see Figure 2). This results in retaining the null hypothesis, that there is no significant difference by gender in pre- and post-analysis on design thinking mindsets after completing a course in the M3 transdisciplinary learning model sequence. See Table 8 for detailed results.

**Figure 2**

*Estimated Growth of each Construct Over Duration of Course by Gender*

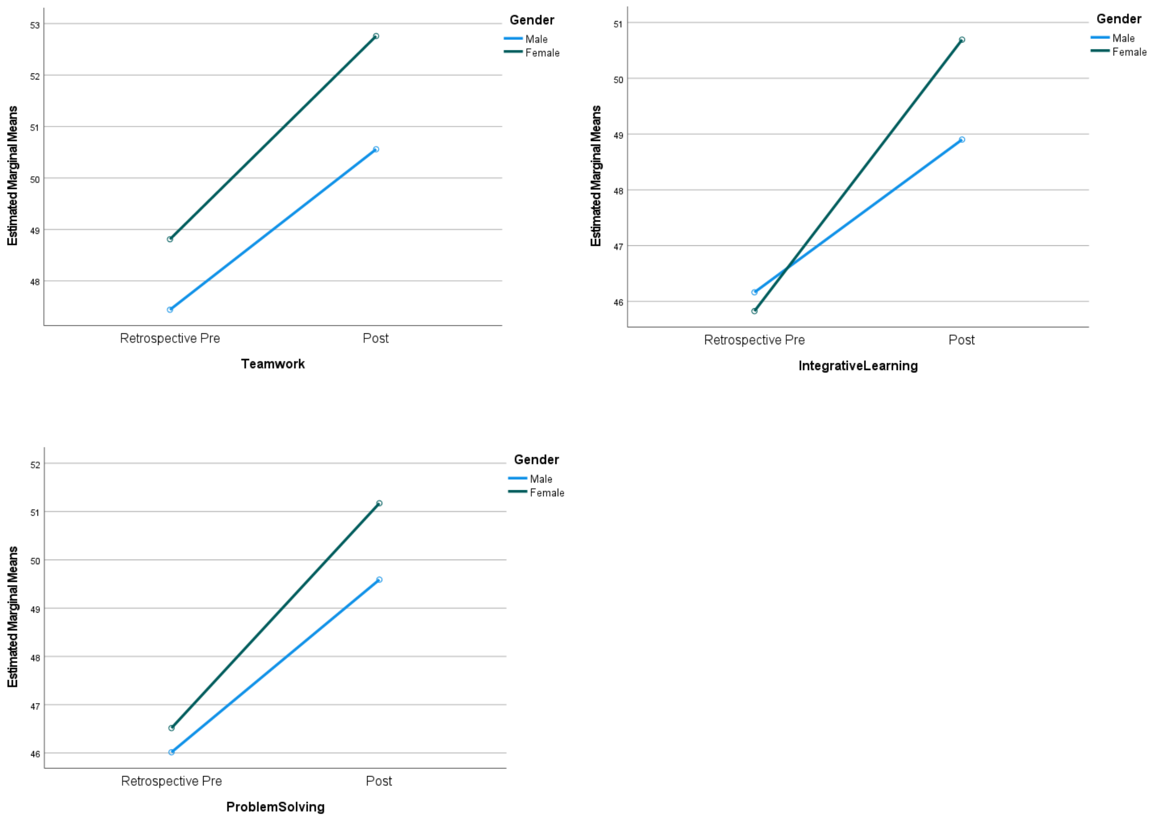

**Table 8**
*Statistical summary of 2x3 ANOVA results of college*

| Construct | Effect | Results | Effect Size ($\eta^2$) |
|---|---|---|---|
| Teamwork | Time | F = 12.421, p < 0.05* | 0.098 |
| Teamwork | College | F = 0.599, p > 0.05 | |
| Teamwork | Time x College | F = 0.774, p > 0.05 | |
| Problem Solving | Time | F = 11.168, p < 0.05* | 0.088 |
| Problem Solving | College | F = .928, p > 0.05 | |
| Problem Solving | Time x College | F = 2.195, p > 0.05 | |
| Integrative Learning | Time | F = 7.986, p < 0.05* | 0.068 |
| Integrative Learning | College | F = 1.232, p > 0.05 | |
| Integrative Learning | Time x College | F = 1.821, p > 0.05 | |

*Indicates significance

## Discussion

This report sought to investigate the influence of college major or gender on a design thinking mindset for students participating in the M3 transdisciplinary learning model and its associated transdisciplinary design and innovation minor degree, as measured through the constructs of problem solving, integrated learning, and teamwork. While growth of students trended positive for all constructs, no significant main effect could be found when investigating the influence of gender or college major, indicating that there is not enough evidence to identify a difference in effectiveness for students. This could be an indication that courses taught collaboratively by faculty across the business, polytechnic, and liberal arts colleges are currently functioning as intended, that all students, regardless of gender or previous college experience, are improving on each construct at the same rate.

While these results may seem to conflict with literature investigating how creativity varies by gender and college major [10], [13], it does bring two main limitations of the study to the forefront. First, regardless of gender or major, as students self-enroll in the M3 transdisciplinary learning model they may be less resistant to adopt a design thinking mindset. Second, even though survey data was collected from nearly 120 students representing 11 colleges, seven of those colleges had less than five student surveys. This led to combining groups such as agriculture and health/human sciences together to form the “Other” category. Likewise, the “Liberal Arts” category (n = 11) was much smaller than that of “Polytechnic” (n = 77) or “Other” (n = 31). While useful to see if students in polytechnic majors and those outside of it benefitted equally, the noise created by the cacophony of dissimilar colleges, and small sample size for “Liberal Arts” reduces the likelihood of finding a significant effect.

This research focused on identifying the influence of gender and college major on a design thinking mindset, with the intent to analyze and potentially refine methods of delivery to be equally effective for all students. Therefore, as data continues to be collected on transdisciplinary coursework related to design and innovation, the following recommendations for future research are proposed:

1. As noted in the limitations above, sample sizes for students across majors required grouping dissimilar majors together for analysis. As more data is collected, it is

recommended that students continue to be refined into more unique colleges, and eventually individual majors for future analysis.

2. This was an investigation of gender and college major; however, a student's lived experiences may also play a role in creativity and a design thinking mindset. It is therefore recommended to consider independent variables such as ethnicity and domestic or international student status for further research.
3. Student gender was collected through roster data instead of self-identification through retrospective pre- and post-course surveys. As students may identify as either a different gender or non-binary, if this variable is to be considered for future studies, surveys should be modified for self-reporting of the data.

## Conclusion

In conclusion, coursework in the M3 transdisciplinary learning model appears to be effective as students show improvement throughout the duration of the collaboratively taught courses on the constructs of teamwork, integrative learning, and problem solving. Further, no main effect could be found when investigating the influence of gender or major on a design thinking mindset, showing that no one group is benefiting significantly more than another group in the course.

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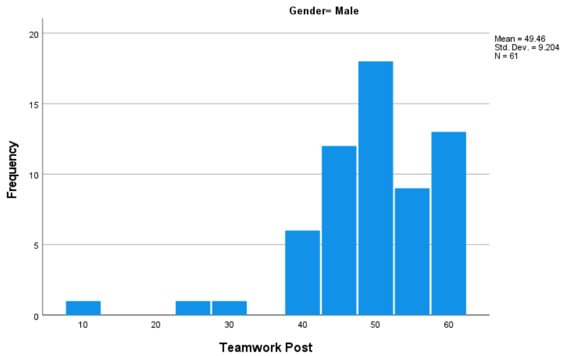
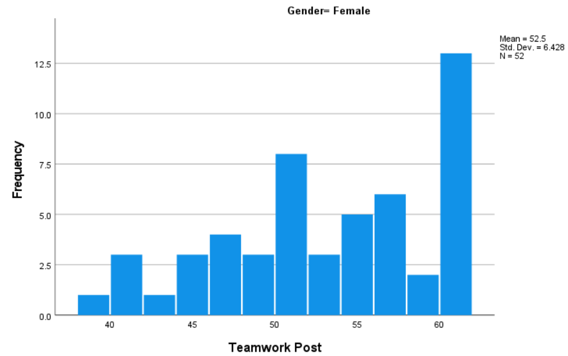
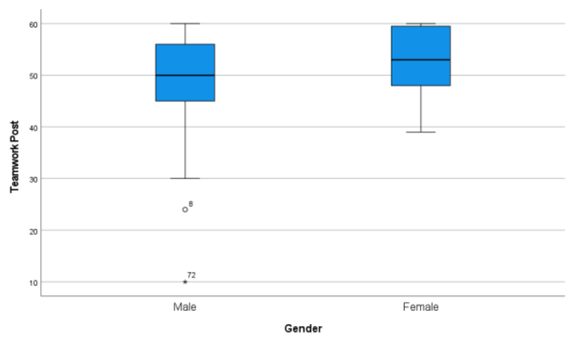
## Appendix A: Data Visualization of Gender vs Teamwork – Outliers Included

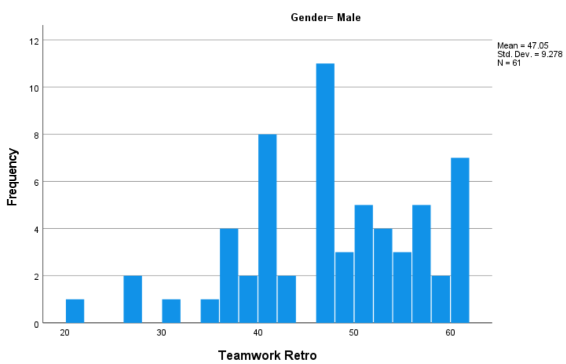
*Distributions of Gender Data across Post Teamwork Constructs*

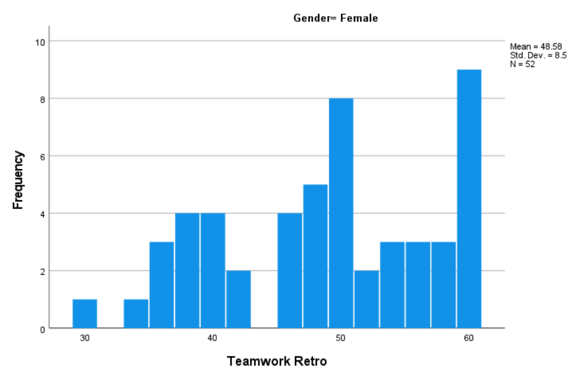


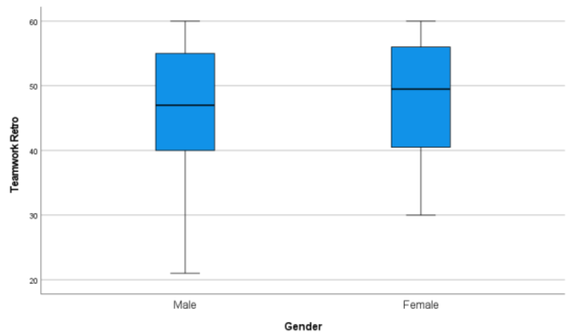




*Distributions of Gender Data across Retrospective Pre-Teamwork Constructs*



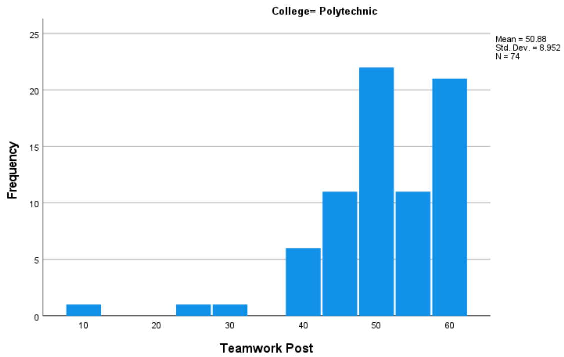



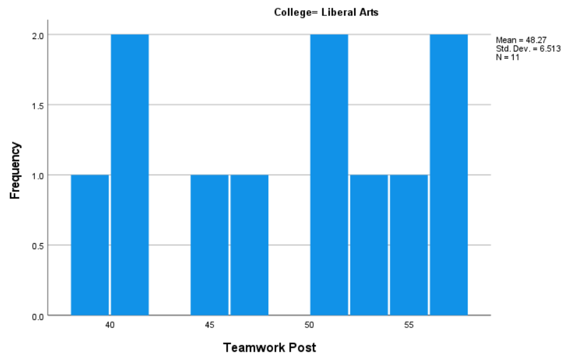


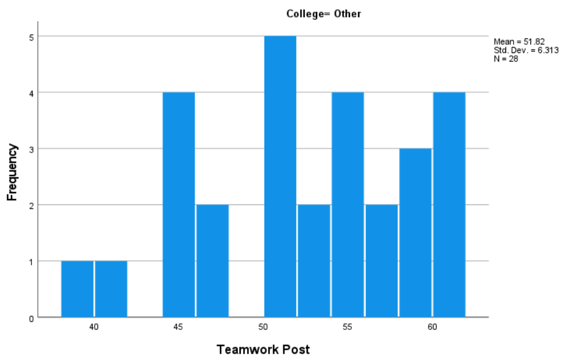
60
50
40
30
20
Teamwork Retro
Male
Female
Gender

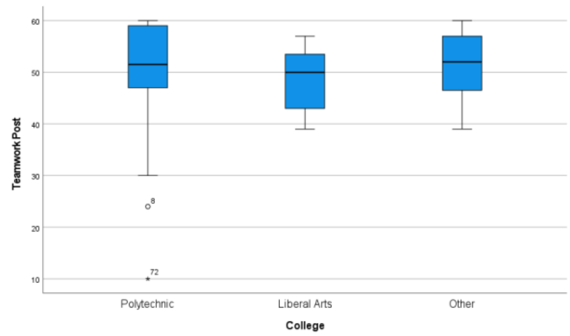
## Appendix B: Data Visualization of College vs Teamwork – Outliers Included

*Distributions of College Data across Post-Teamwork Constructs*

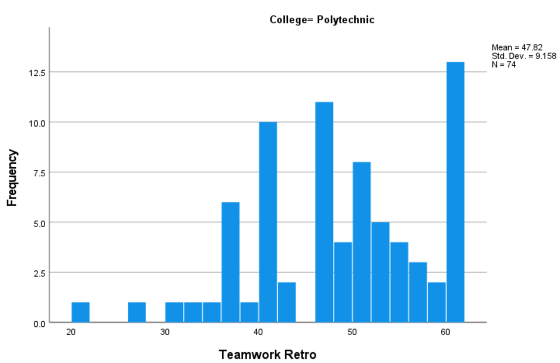


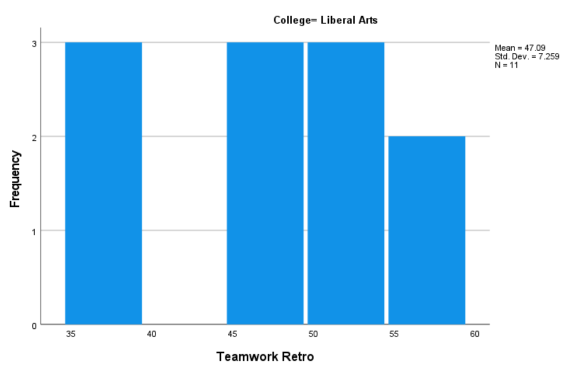



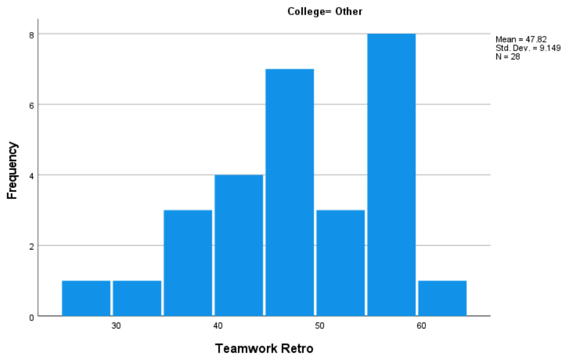



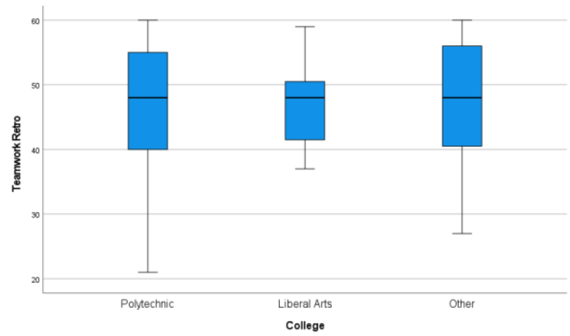




*Distributions of College Data across Retrospective Pre-Teamwork Constructs*



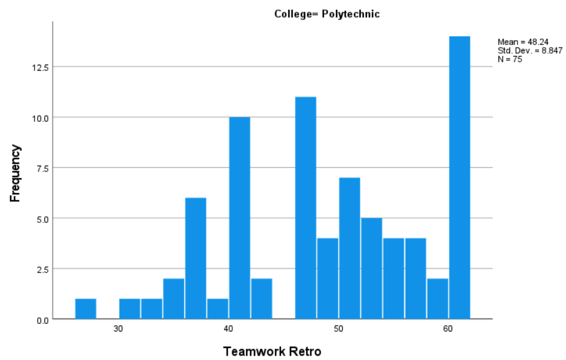



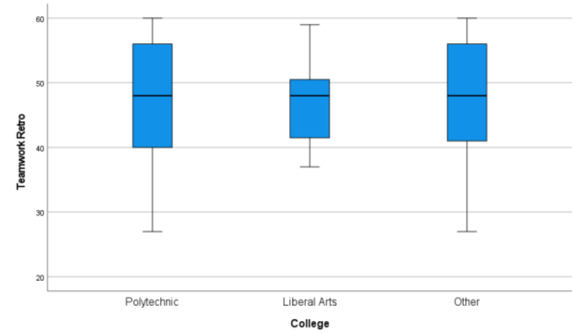

College= Other
Mean = 47.82
Std. Dev. = 9.149
N = 28
Frequency
Teamwork Retro
0
2
4
6
8
30
40
50
60

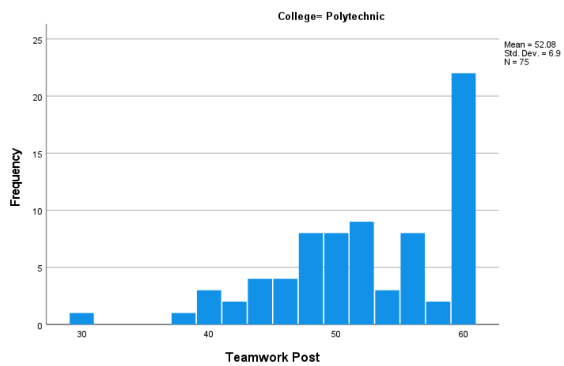

Teamwork Retro
College
Polytechnic
Liberal Arts
Other
20
30
40
50
60

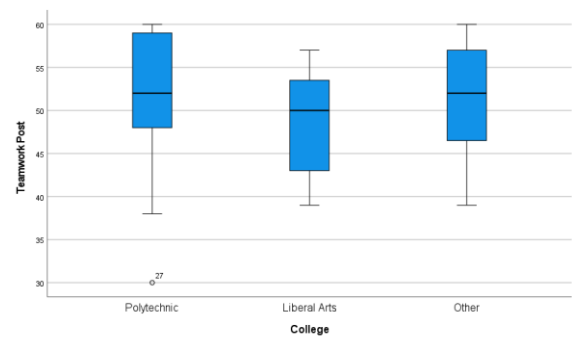
## Appendix C: Adjusted Data Visualizations – Outliers Removed

*Adjusted Distributions of College Data across Retrospective Pre- and Post-Teamwork Construct*

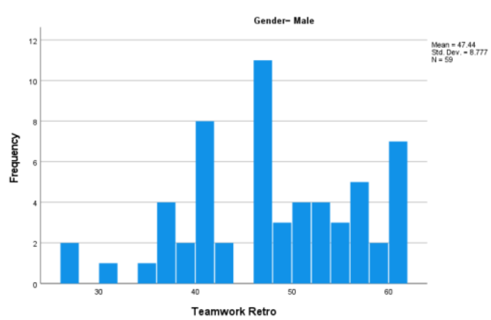


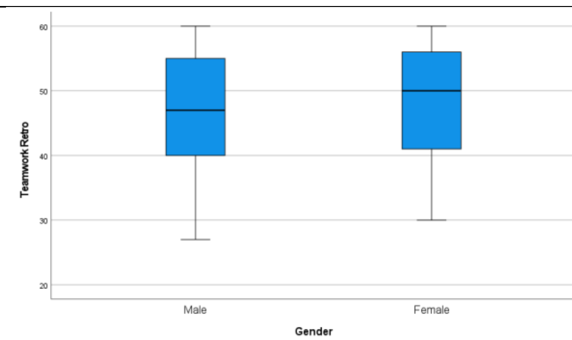



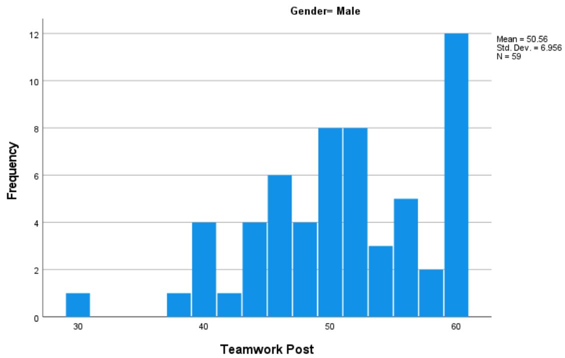



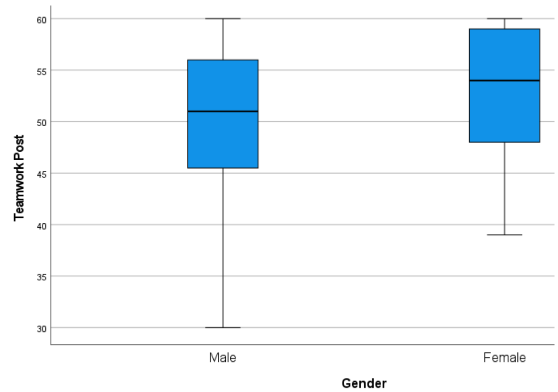




*Adjusted Distributions of Gender Data across Retrospective Pre- and Post-Teamwork Construct*




Gender= Male
Mean = 50.56
Std. Dev. = 6.956
N = 59
Frequency
Teamwork Post
0
2
4
6
8
10
12
30
40
50
60


Teamwork Post
Gender
Male
Female
30
35
40
45
50
55
60