



Lilly Endowment Inc.

A Private Philanthropic Foundation

Charting the Future Initiative (Phase 3)

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Background

- **Goals & Objectives**

- Increase retention of students at each partner school
 - Increase 4- and 6-year graduation rates at each partner school
 - Improve financial standing of each partner school
 - Improve the Indiana state economy through increased employment opportunities due to increased degree achievement
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- Identify/assess key retention processes and apply process improvement at each of the partner schools

INDIANA**TECH**



Partner
Institutions

Selection of Projects

- Lean Six Sigma Consultants conducted workshop on retention challenges and opportunities at USI in February
- Outcomes
 - Retention Process Map for USI created by employees and students
 - USI chose three topics for process improvement
 - Retention of First-Year Underrepresented Students
 - College of Liberal Arts Advising
 - Strategic Deployment of Merit Scholarship Funds
 - Identified three USI employees to learn and apply the Lean Six Sigma model to generate process improvements in the three topic areas
 - Received training through in two week-long workshops in March and April

Overview Lean Six-Sigma Methodology

- ▶ **Lean**: Focus on eliminating Waste in Organizational Activities and Processes.
 - NVA, 5S, Process Flow Improvement, Changeover Reduction, Standard Work, Visual Controls, and Mistake Proofing.
- ▶ **Six-Sigma**: Focus on reducing process variation due to defects by applying the DMAIC method
 - Define, Measure, Analyze, Improve, and Control

Project 1: Retention of First- Year Underrepresented Students

The Team



Tim Fitzgibbon
Adivising



Cathy Nickens
Financial Aid



John Race
New Student
and
Transitional
Programs



Angie Nickens
Student
Support
Services



Nathan Payne
Center for
Campus Life



Erin Altman
Housing and
Residence Life

Charter

▶ Problem Statement

- After the first year of implementation of 2021-2025 strategic plan, retention of underrepresented students was 5.9 percentage points below the target goal of 66.8%

▶ Current Process

- Lack of formal process

▶ Goal of Project

- Increase first-year retention rate of underrepresented students to the 2023 target identified in the 2021-2025 strategic plan

▶ Business Impact

- Revenue generation and improved student persistence and completion

Suppliers, Inputs, Process, Outputs, Customers (SIPOC)

- ▶ SIPOC helped us understand the current process, or lack there of, the institution has in place to help retain underrepresented students
 - We learned the institution has certain services in place to serve underrepresented students, but there is no university-wide systematic coordination of these services.

Voice of the Customer (VOC)

- ▶ In order to better understand the reasons why underrepresented students do not return to USI after their first year, a survey was created
 - Survey focuses on time period from first day of fall semester to end of spring semester
 - Questions specific to overall experience in utilizing campus services, relationships with faculty/staff, sense of belonging, and experience of being student of color on predominately white campus/community
 - Distributed survey via e-mail and postal service (postcard w/ QR code)
 - Distributed to 1,091 students who attended USI between 2018 and 2021
 - Retained and non-retained students
 - Goal was to receive at least a 25% response rate
 - Survey deadline: August 29, 2022

Next Steps

▶ Complete the process map

- Identify areas and/or services focused on retaining underrepresented students but were not identified in the university-wide process map that was conducted by the Lean Six Sigma team

▶ Measure phase

- Interpret data

▶ Timeline

- September 30th – Complete Measure/Analyze phases
- October 31st – Complete Improve/Control Phases

Project 2: Process Improvement for College of Liberal Arts Advising

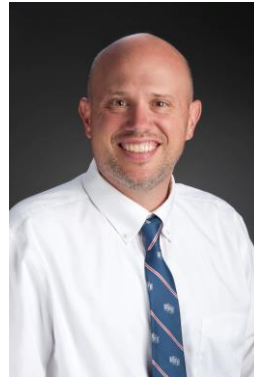
The Team



**Shelly
Blunt**
Associate
Provost for
Academic
Affairs



**Renee
Rowland**
Director of
Advising



**Brody
Broshears**
Assistant VP
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**Urska
Dobersek**
Associate
Professor of
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**Jason
Hardgrave**
Chair of
History
Department



**Susan
Todd**
Academic
Advisor

Charter

▶ Problem Statement

- After first year of implementation of the 2021-2025 strategic plan, the College of Liberal Arts retention rate was 65.6% compared to the university average of 69%.

▶ Current Process

- Succinct process in advising center
- Faculty advising varies by academic discipline (department)
- Scheduling of advisees vary by faculty advisor
- Some administrative assistants and department chairs are involved in the advising process
- Faculty advisors don't use a "universal" system to keep notes, appointment times, etc.

▶ Goal of Project

- Increase retention rates for the College of Liberal Arts by 5% by 2025
- Increase graduation rates for the College of Liberal Arts by 5% by 2025
- Create positive and consistent advising interactions for 2nd, 3rd, and 4th year students in the College of Liberal Arts

▶ Business Impact

- Revenue generation and improved student persistence and completion

SIPOC

Suppliers	Input	Process	Outputs	Customers
Students	Student interests (majors/minors)	Students attend orientation	Student belonging to Liberal Arts College	Students
Faculty	Academic Programs	Students sign up for classes	Classes offered by semester	Students
Liberal Arts College Academic Programs, Students, Advisors	Class Schedules	First time freshman goes to advising center through 1 st year	Schedule for Semester	Students/Faculty /Advisors
Financial Aid Office	4-year Plans	Transfer students go to faculty advising through graduation	Graduation Rates	Students and University
	Financial Aid	2 nd year students transition to faculty advising once completing 1 st year in advising center	Persistence & Graduation rates	Students & University

Voice of Customer (Survey Results)

- ▶ 1 Survey conducted to find voice of customer
 - 106 respondents
- ▶ 26% of students were not satisfied with the overall advising process
- ▶ 27% of students were not satisfied with their Advising Center experience
- ▶ 38% of students found the transition process from Advising Center to faculty difficult to understand
- ▶ 17% of students were not satisfied with their Faculty Advising experience

Next Steps

- ▶ Identify Root Causes
- ▶ Validate Root Causes
- ▶ Tollgate with Sponsor
- ▶ Improve Phase

Project 3: Strategic Deployment of Merit Scholarship Funds



**Andrea
Gentry**
Director of
Development



Joanna Riney
Associate
Director of
Student Financial
Assistance



Ryan Ross
Manager of
Foundation
Scholarships



Shawn Robey
Student Financial
Success
Specialist

Charter

▶ Problem Statement

- Over the past 3 years, merit scholarship funds have been deployed to 64% of eligible* undergraduates who also had the greatest financial need**.

▶ Current Process

- Merit scholarships have been awarded based almost exclusively on academic eligibility.

▶ Goal of Project

In 2025, increase the deployment of merit scholarship funds to 80% of eligible undergraduates who also have the greatest financial need.

▶ Business Impact

Recruit new students, generate revenue, and improve student persistence and completion

*Eligibility is based on academic performance

**Students with greatest financial need are students with expected family contribution below \$30,000

Suppliers, Inputs, Process, Outputs, Customers (SIPOC)

- ▶ SIPOC helped us understand the current process the institution has in place to distribute merit scholarship funds.
 - We learned the institution distributes merit scholarship funds based primarily on academic performance with limited consideration given to student financial need.

Root Causes

Prioritized root causes

- ▶ Policy and procedure
- ▶ Committees
- ▶ Data
- ▶ Interviews

Next Steps

- ▶ Identify and test best improvements that address the root causes.
- ▶ Prioritize and implement solutions

Our Experience

- ▶ **Learned** how to solve a problem applying the Lean Six-Sigma method
- ▶ **Interacted** with peers and administrators in other universities in Indiana
- ▶ **Opened** opportunities to communicate and work with university staff as a team
- ▶ **Observed** close applications of statistics
- ▶ **Explored** how important the Lean Six-Sigma method in quality improvement not only in industries but also in educational institutions
- ▶ **Plan** to use the Lean Six Sigma methodology to improve processes in the future

