

# We are the DISCOVERY CENTER

## PROJECT OVERVIEW

### Design Concepts of a Propane Lawn Mower

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**Advisor:** Noah Norton

#### University of Wisconsin-Stout

The project was a collaboration between UW-Stout's Discovery Center, Industrial Design faculty and students and Fiskars to create design concepts for a propane powered lawnmower. The purpose of the research was to upgrade one of the lawnmowers in the Fiskars line and to create design concepts for a user friendly lawnmower which delivers the brand promise of Fiskars and its tagline "empowering simplicity."

The main objectives of the research were:

1. Create concepts in terms of design, functionality, quality and cost
2. Create a simple yet user friendly model
3. Create a design aligned with the brand identity of Fiskars

*"It was a unique opportunity to work on professional-level design challenges in an academic environment. It was a great experience to work on such a collaborative project."*

- Linnea Londborg,  
Senior Student (Industrial Design)

## METHODOLOGY

#### Task Analysis

- User interface with the existing product
- Identification of the user friendly design opportunity

#### Competitive Market Analysis

- Identification of standard feature sets and cost
- Employing brand language and unique feature to attract customers
- In-store research

#### Brand Identity of Fiskars

- Ingeniously functional
- Unique and user friendly
- Aesthetically iconic
- Impressively lasting

#### User's Survey

- User Identification in terms of features and functionality

*"The students had an opportunity for some real-world experience, and they pushed their level of knowledge and creativity beyond their academics. They outperformed what they have done in the past."*

- Noah Norton,  
Assistant Professor

# FISKARS®

## CONCEPTS & DEVELOPMENT

#### Development of the Model

- Compiling preliminary ideas
- Brainstorming sessions
- Sketching the design ideas
- Initial concept development
- Model development and exploration
- Final design

#### Identified Design Concepts

- Ergonomics, usability and cost
- Visual recognition
- Mechanical action
- System interface
- Fiskars brand language



Identified Design Concepts



Initial Design Development



Initial Concept Development



Model Development and Exploration

#### Final Model Features

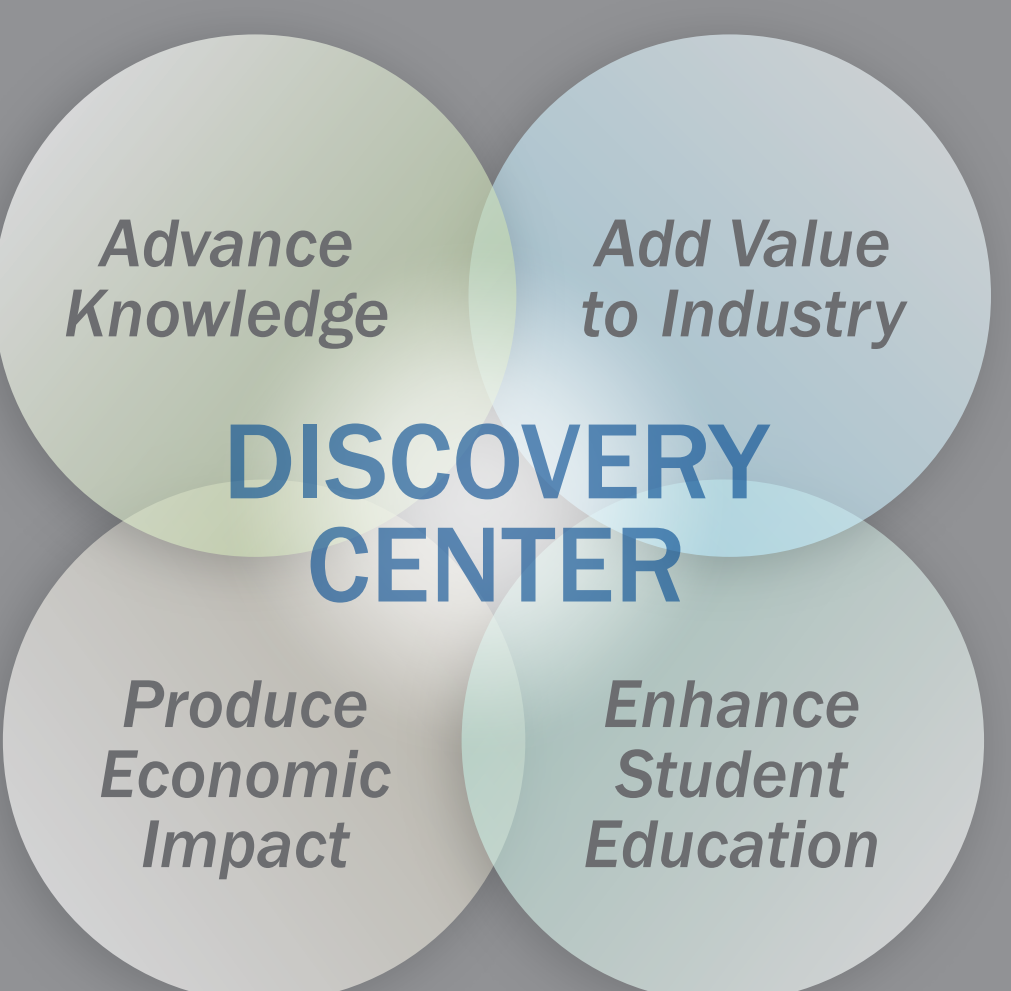
- Blade height adjustable with foot (no bending over) and rotating lever
- Easy removal and replacement of tank
- Ski boot style secure clip and press fit holster to hold the propane tank
- Vacuum cleaner style pedal and pull release lever for adjusting handle position
- Easily accessible bags
- Intuitive "guide ins" which speaks Fiskars brand language, such as orange touch points, easy snap-fit attachment, easy-to-handle push clips and easily accessible filter angle
- Easy grip and uniquely shaped oil cap for easy attachment while filling oil



Concept 1



Concept 2



The UW-Stout Discovery Center aligns the applied research and technical assistance assets of the university and facilitates common access to a broad range of stakeholders, bolstering these vital intellectual and physical resources.

## FINAL DESIGN



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