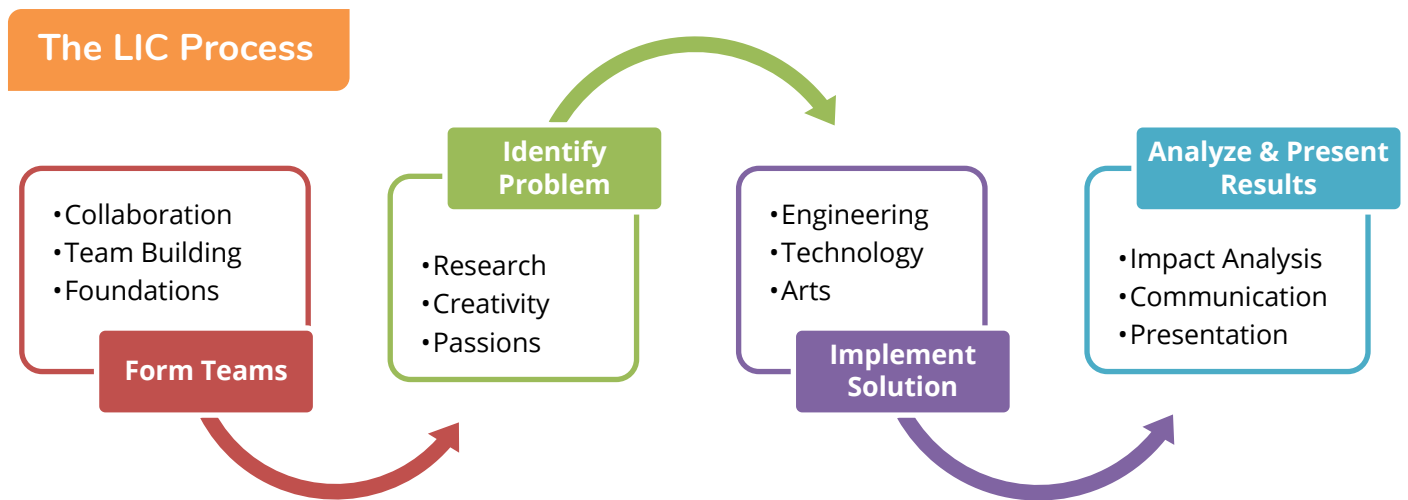


The Lambaye Innovation Challenge Curricular Outline

The Process

The guided workshop series is crafted to allow for **student driven learning with expert support**. This method means that each team of students will take a slightly different path through the curriculum and will focus on the areas most relevant to their project, but each will meet all key foundational learning objectives.



The entire program is being and will continue to be developed in close collaboration with the leadership in Lambaye. The establishment of the Lambaye Leadership Oversight Group will allow for the organized creation and implementation of detailed lesson plans for each workshop series as well as the procurement of resources and supplies before the student portion of the program begins in the fall.

Supplement Curricular Outline

Workshop Series

The core of the LIC Each series has a brief description of its key learning goals and a description here. More details and learning objectives for any section or workshop and/or a more detailed outline of the full curriculum can be provided if needed.

This program will be refined, and all details fully planned during Phase 2 of the Lambaye Innovation Challenge.

Workshop Number and Title	Key Learning Objectives & Milestones	
<i>Workshop Series A: Introduction, Team Building, and Problem Solving</i>		
<i>Series A Description</i>	Students will engage in welcome activities to create a sense of community and purpose within the LIC. They will participate in teambuilding and group work centered lessons, focusing on developing skills that will allow them to work successfully with a team. Students will get to know one another, on the ground mentors, and U.S. peer mentors. Students will also be introduced to the concept of change and change agents.	
1	Welcome and Introduction	<p><i>Learning Objectives</i></p> <ol style="list-style-type: none"> 1. Understand the purpose and scope of LIC program 2. Begin building a community between participants and faculty 3. Discuss student interest and passions <p><u>Project Milestones</u> Students submit areas of interest, similar interests grouped into teams for next session. Pre-test administered.</p>
2	Team Building Skills & Team Formation	<ol style="list-style-type: none"> 1. Describe fundamentals of teamwork 2. Apply newly developed team-building skills within the context of a small scale real-world problems <p>First team meeting; U.S. students assigned to teams</p>
3	How Do Things Change?	<ol style="list-style-type: none"> 1. Recognize their role in their own community 2. Understand individual's impact on larger systems 3. Introduce students to role model change agents within their community and world <p>Teams continue to work on small scale projects within workshop</p>
4	What Is the Purpose of Government?	<ol style="list-style-type: none"> 1. Describe role of government leaders 2. Analyze the role of the individual in a democratic society 3. Describe differences in governments within one country and between nations <p>Teams assigned to return next time with a list of 3 issues facing their community that a government could help with.</p>



Supplement Curricular Outline

<i>Workshop Series B: Problem Identification, Research, Research Methods, and Strategization</i>		
<i>Series B Description</i>	Students in the village will identify a problem that they are passionate about within their community and will learn the research skills needed to identify and solve it.	
5	<p style="text-align: center;">Problem Identification</p> <p><i>Part 1: Introduction to research methods</i></p> <p><i>Part 2: Application of research methods</i></p>	<ol style="list-style-type: none"> 1. Articulate specific examples of problems and their root causes 2. Engage in preliminary field research to identify what community members see as problems 3. Analyze objective measures to find other potential problems <p>Teams will develop unique, focused problem statements based on their research and passions.</p>
6		
7	<p style="text-align: center;">Search For Solutions</p> <p><i>Part 1: <u>Every</u> problem has a solution</i></p> <p><i>Part 2: <u>My</u> problem has a solution</i></p>	<ol style="list-style-type: none"> 1. Identify the relationship between problems and solution 2. Describe what makes a reliable source 3. Propose solutions to personal/local problems <p>Teams will submit a written plan with documents, drawings, and budgets for their proposed solutions. Teams may apply for supplemental funds as needed at this time.</p>
8		
<i>Workshop Series C: Engineering and Implementing a Solution</i>		
<i>Series C Description</i>	Students will create a solution to their topic of choice. They will decide the most effective method to implement their solution in the village, with the guidance of their US mentors. Students will have the opportunity to reflect on their solution and revise, if necessary.	
9	Thinking Like a Designer: "Sketching" a Plan	<ol style="list-style-type: none"> 1. Gain exposure to art-based scientific mediums (blueprints, design plans, etc) 2. Apply mediums to team problem 3. Explain the importance of thorough planning <p>Teams will use models to create the first draft of their solution</p>
10	Thinking Like an Engineer	<ol style="list-style-type: none"> 1. Describe the concept of logical design 2. Propose <i>how</i> something can be created 3. List what materials are needed and why <p>Teams will begin construction or implementation of their proposed solution</p>
11	Thinking Like a (Disciplinarian)	<ol style="list-style-type: none"> 1. Research a career that would be helpful in solving the team's problem 2. Understand the role of an expert in that field 3. Take on the role of field expert and modify their project accordingly <p>Teams will continue working on their solution and begin testing to see it's effects</p>



Supplement Curricular Outline

12	How a Scientist Deals with Failure	<ol style="list-style-type: none">1. Explain how failure can lead to success2. Describe steps that can be taken after a failure Teams continue work on solutions, addressing challenges as they arise
Workshop Series D: Redesign, Analysis, Re-implementation & Presentation		
<i>Series D Description</i>	The final series of workshops will focus on reflecting and measuring the work the students have accomplished to learn how to assess and reassess a process for success. Emphasis will also be on communicating their ideas to others to prepare them for the Capstone Presentation	
13	Testing a Hypothesis	<ol style="list-style-type: none">1. Define what a hypothesis is2. Articulate what they hypothesis their solution is testing Teams will begin revising their solutions and preparing to reimplement
14	Measuring Outcomes	<ol style="list-style-type: none">1. Describe what makes a good measure2. Describe basic statistical methods (mean, median, mode)3. Practice making graphs and using spreadsheets Teams will analyze data collected about their project for success
15	Final Project Preparation	Dedicated time for teams to prepare final presentation
16	Communicating Ideas Effectively	<ol style="list-style-type: none">1. Describe and hone the main idea of their project2. List effective communication techniques3. Rehearse final presentations Continue preparing final presentation and practice delivering it

