Innovation and the Revitalization of the Iowa Idea at the University of Iowa

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The Iowa Idea has long articulated the University of Iowa's commitment to cross-disciplinary collaboration, experiential learning, and the belief that knowledge is most powerful when it emerges at the intersection of diverse ways of knowing. *The Iowa Idea at Great Heights: Iceland Solar Eclipse High-Altitude Ballooning Project* represents a contemporary revitalization of this principle—adapting it to a moment defined by complexity, uncertainty, and the urgent need for integrative educational models.

At the center of the course is the 2026 solar eclipse, treated not only as a scientific event but as a boundary object—a shared phenomenon that enables artists, scientists, engineers, educators, and designers to work together while maintaining disciplinary rigor. This structure reflects an expanded understanding of innovation at the University of Iowa: innovation as synthesis, translation, and adaptability rather than isolated technical achievement.

Innovation is embedded not only in the project's content but in its pedagogy. The syllabus functions as a *map for making*, prioritizing inquiry, iteration, testing, and reflection over predetermined outcomes. Students learn to work productively with uncertainty, treat failure as information, and integrate drawing, fabrication, documentation, data collection, and narrative as active components of research. This mirrors contemporary creative practice, scientific investigation, and engineering design—where understanding emerges through doing.

A core deliverable of this project is the development of a research-grounded model for interdisciplinary teaching. The course itself operates as a site of educational research, generating data through collaborative processes, design iterations, documentation practices, and reflective writing. These materials will be analyzed to articulate a transferable framework that integrates design thinking, boundary objects, making, and experiential fieldwork—providing a replicable model for future interdisciplinary courses at the University of Iowa.

Complementing this pedagogical research is a second, strategically aligned deliverable: a documentary film of the course and fieldwork. The documentary is not conceived as promotional material alone, but as a form of institutional storytelling that makes visible how interdisciplinary learning unfolds in practice. By following students and faculty through moments of uncertainty, collaboration, failure, and discovery—from campus makerspaces to high-altitude launches in Iceland—the film will communicate what the University of Iowa can be at its best: a place where disciplines meet through shared problems, where making and thinking are inseparable, and where education extends beyond the classroom into the world.

For students, the documentary offers a tangible, aspirational vision of learning at Iowa—demonstrating pathways for intellectual risk-taking, collaboration across fields, and engagement with real-world questions. For faculty, it serves as an imaginative and practical resource, illustrating how interdisciplinary teaching models can be designed, supported, and sustained. In

this way, the film functions as a translational bridge between research and practice, extending the impact of the project well beyond the original course cohort.

Faculty participation across departments further reinforces this model. Short, embedded conceptual interventions throughout the semester demonstrate a scalable, distributed approach to expertise—one that is both pedagogically effective and institutionally sustainable. The documentary captures these moments, preserving not only outcomes but processes, conversations, and decision-making structures that are often lost in traditional documentation.

The project culminates in fieldwork in Iceland, where students test their systems under extreme environmental conditions and interpret results in relation to place, experience, and global ecological systems. This outward-facing dimension reinforces the Iowa Idea's public mission while providing rich material for both pedagogical research and documentary storytelling.

Taken together, *The Iowa Idea at Great Heights* advances innovation at the University of Iowa by pairing a revitalized institutional philosophy with rigorous educational research and strategic communication. The project produces not only technical and artistic outcomes, but a documented teaching model and a compelling narrative artifact that together articulate how the Iowa Idea can function as a living framework for contemporary higher education—inviting students and faculty alike to imagine new forms of learning, collaboration, and impact.