Fall 2018 Immersive Learning Provost Grant-Funded Projects:

**Analysis of Fluid Viscosities Used to Treat Human Dysphagia**
Faculty Mentors: Mary Ewing, Department of Speech-Language Pathology and Audiology; Ranjith Wijesinghe, Department of Physics
Community Partners: Meridian Health Services, St. Vincent Health System (Molly Jones, M.A., CCC-SLP and Catherine Seitz, M.A. CCC-SLP, BCS-S)

Description: There is lack of standardized recipes for thickened liquids used to treat patients with dysphagia. This project focuses on using physics and objective testing of viscosity, specifically examining the type of thickening agent used, time required to obtain viscosity, and temperature that is optimal for serving the thickened product. Students will use viscometers to conduct testing and compare results to the new International Dysphagia Diet Standardization Initiative flow test to create a digital app.

**The Children Facing Challenges Literature Project**
Faculty Mentor: Carolyn Hitchens, Department of Elementary Education
Community Partner: Wes Del Elementary

Description: Students enrolled in a two-course practicum will partner with Wes Del Elementary and learn about life-challenges faced by children in our community. Areas of research could involve such difficult topics as food insecurity, child neglect, divorce, drug addiction and/or other challenges. Ball State students will then evaluate and select children’s literature that provides support to these children and the immediate community. Supportive text-related activities will be developed around book selections and students will work within the school to provide in-service training for the curriculum. Finally, they will work to determine the impact of the project on the school community and the students themselves.

**DANCE! Muncie After School**
Faculty Mentor: Melanie Swihart, Department of Theatre and Dance
Community Partner: Muncie Community Schools

Description: Under mentorship from faculty, Dance Education Laboratory Ambassadors, and an Indianapolis Public School professional, Ball State students will work together to bring dance education to the Muncie Community Schools. The immersive team will conduct research and develop dance curriculums for grades 1-4, implement curriculums at different locations, and disseminate findings through presentations and a curriculum handbook. Upon completion of this project, students will have gained a greater understanding and appreciation for the importance and power of dance in young lives, will be well-versed in effective teaching methods, and will have developed strong collaborative skills.

**Discovery New Works Festival**
Faculty Mentor: Thomas Horan, Department of Theatre and Dance

Description: With the Discovery New Works Festival in April 2019, the Department of Theatre and Dance will look to substantially retool the festival based on what was learned from the first iteration in 2017. Twelve Ball State students will curate a festival of new theatrical works submitted by students from across the Ball
State campus. The aim of the project is to develop young theater artist-producers to enrich the local performance community.

Energy Assessment for Small Commercial Buildings in Muncie
Faculty Mentor: Sherif Attallah, Department of Construction Management
Community Partner: Muncie Chamber of Commerce

Description: In this immersive energy assessment course, students will receive instruction in current assessment techniques, then use tools and equipment to assess energy utilization for small commercial buildings locally in partnership with business professionals. After learning the proper role and methodology for each energy assessment tool, the collected data will be turned into readily understandable remediation information for building owners. The class will then investigate the feasibility of implementing suggested measures along with the anticipated long-term financial return.

Healthy Moms, Healthy Communities: Understanding Perceptions and Evaluating Maternal Opioid Treatment in Muncie
Faculty Mentor: Caitlyn Leonardson-Placek, Department of Anthropology
Community Partner: Suzanne Gresham Center

Description: In the United States, opioid prescriptions and subsequent use are on the rise, particularly among pregnant women. Opioid-addicted women, however, face numerous obstacles in receiving care. These obstacles are shaped by cultural and environmental factors surrounding them, such as access to transportation and community-wide stigma that often exacerbates addiction. In this immersive learning project, students will work with the Suzanne Gresham Center to learn about the opioid epidemic in the Muncie community. Students will conduct interviews with community members, learn how to analyze qualitative data, and develop an educational product that provides the community information on the opioid epidemic among pregnant women in Muncie.

i-Made (Indiana Made) Muncie: Custom Fabricated Design-through-Production
Faculty Mentor: Kevin Klinger, Department of Architecture
Community Partners: Indiana Hardwoods (IHLA), Midwest Metals, Minnetrista, Mobile Market

Description: The state of Indiana has a history of making things and the introduction of fabrication software and processes have the potential to revitalize this “maker” culture. This Provost Grant-funded project, i-Made, will directly apply “design-through-production” methods that build structures using digital design and fabrication techniques and locally sourced hardwoods and metals. Students, in concert with established industry partners in the region, will work to prototype and assemble customized full-scale design solutions for a series of community partners in Muncie and Delaware County.

Interior Design Studio 5: Immersive Learning at Children’s TherAplay Foundation
Faculty Mentor: Shireen Kanakri, Department of Construction Management and Interior Design
Community Partner: Children’s TherAplay Foundation

Description: The Children’s TherAplay Institute in Carmel, Indiana, utilizes hippotherapy, an innovative and life-changing rehabilitative treatment for children with special needs. Because these children often experience the world differently, they can be adversely affected by sensory inputs such as light, texture and
Using evidence-based research gathered in Phase I of the project, students will create design solutions that take these factors into consideration, optimize available space that encourages play and safety, meet/exceed building codes and regulations, and provide a custom furniture solution for clinic therapy rooms. Partnering with TherAplay, fifteen Ball State interior design undergraduate students will develop design solutions for TherAplay’s therapy clinics and administrative offices. Project deliverables include: floor plans, construction documents, and material and furnishing selections that meet/exceed safety codes. Additionally, each student will design a custom furniture piece for use in therapy clinics to assist in treatments.

**Media Management: Strategic Planning and Consulting for Local Media Outlets**  
Faculty Mentor: Miao Guo, Department of Telecommunications  
Community Partner: WTHR

Description: Today media professionals need strong strategic, analytical, financial, and managerial skills to be successful in broadcast industries. This immersive learning course will equip students with these skills as well as provide them with entrepreneurial leadership qualities by working with a local television station in Indianapolis. Through managing complex media projects (a strategic plan report and digital marketing proposal), students will develop knowledge in strategic direction-setting, deploy business-planning skills, and excel in leadership and concept realization.

**Partnering with the Whitely Community to Establish an Understanding of Community and Police Interactions**  
Faculty Mentor: Kiesha Warren-Gordon, Department of Criminal Justice and Criminology  
Community Partners: The Facing Project, Whitely Community Council

Description: Students will administer surveys to Whitely residents to develop an understanding of their overall perceptions of citizen-police interactions. They will also interview representatives of the local police department to understand community engagement protocols. Students will produce a manual that can be used to help citizens understand citizen and police engagement. A day-long forum will be held highlighting the stories from The Facing Project, the findings of the survey, and face-to-face dialogues between the Whitely community and police/city officials.

**Philosophy for High School Students**  
Faculty Mentor: Sarah Vitale, Department of Philosophy and Religious Studies  
Community Partner: Muncie Central High School

Description: Philosophy, which encourages students to ask questions, look at familiar things in new ways, listen to one another, and examine personal beliefs and positions, is a fantastic way for high school students to learn about themselves and the world around them. It also helps them prepare for their futures in a complex, ever-changing world. Students in this immersive learning class will explore best practices in philosophy education for high school students, run a high school philosophy club at Muncie Central, plan and host an innovative, state-wide, high school philosophy conference at Ball State.

**Serious Game Design with Minnetrista**  
Faculty Mentor: Paul Gestwicki, Department of Computer Science
Community Partner: Minnetrista

Description: Students from a variety of disciplines will explore educational game design opportunities using smartphone-based, augmented reality technologies. This Honors Colloquium developed game design and pre-production assets in the fall and will continue in the spring with a multidisciplinary game production studio course. The proposed project continues Dr. Gestwicki’s partnership with Minnetrista, which gives students access to the organization’s expertise, mission, and collections, while Minnetrista benefits from the efforts and insights of the student teams.

Sitting at the Feet of our Muncie Elders: Stories of Resistance and Resiliency
Faculty Mentor: Darolyn “Lyn” Jones, Department of English
Community Partners: Westminster Village, Muncie senior centers, Moth Danner and YART

Description: This immersive six-credit hour course brings together Ball State students in English, creative writing, journalism, public relations, and those in the humanities interested in telling the stories of senior citizens through narrative, book editing, design, publication, and spoken word performance.