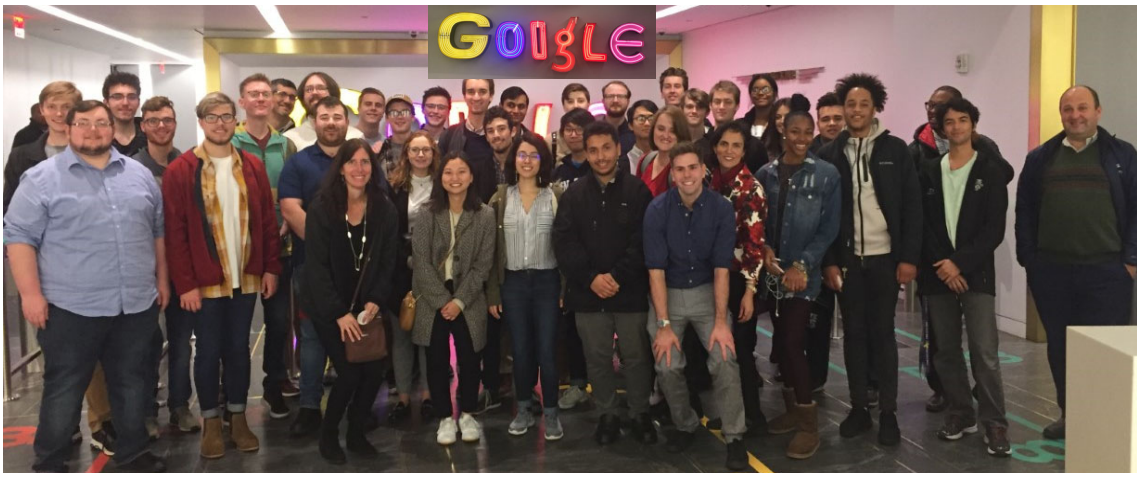
PennState Berks

Flemming Creativity, Entrepreneurship and Economic Development (CEED) Center

FLEMMING CEED CENTER NEWSLETTER

Creativity, Entrepreneurship, & Economic Development (CEED) Center



Features:

Our Mission:

The mission of the Flemming Creativity, Entrepreneurship and Economic Development (CEED) Center is to inspire an entrepreneurial spirit and innovative thinking in the Penn State University Berks Community. The Flemming CEED Center seeks to foster growth and development in the Greater Reading area through technology based solutions, human capital development and enterprise creation.

Editor: Sadan Kulturel-Konak, Ph.D.

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Entrepreneurship & Innovation (ENTI) Minor

at Penn State Berks

New Venture Cluster

This 18–credit, university-wide, interdisciplinary ENTI minor is designed to foster creativity, leadership, self-efficiency, and teamwork. This minor is open to all Penn State Berks students regardless of their major. The minor can be found under the academic program, Intercollege on LionPath.

This cluster is designed to help students develop skills and knowledge in the following fourteen areas:

Opportunity recognition

New product development

Innovative thinking

Tolerance for ambiguity

Resource acquisition

Effective negotiation

Entrepreneurial finance

Effective teamwork

Entrepreneurial marketing

Entrepreneurial and innovation strategy

Technology commercialization

Professors Teaching Entrepreneurship Courses at Berks:

Dr. Abdullah Konak (MGMT 215)
Dr. Sadan Kulturel-Konak (MGMT 425)
Prof. James Laurie (BA 250/ENGR 310)

Dr. Ada Leung (MGMT 427)

Dr. Pauline Milwood (HM 484)

Prof. James Shankweiler (MGMT 297/MGMT 497)
Prof. Mary Zervanos (BA 243)

PennState Berks

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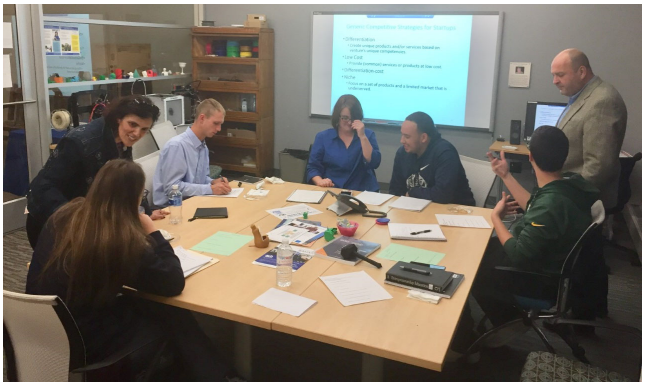
Penn State Berks Idea TestLab

In Fall 2019, the Flemming CEED Center hosted the third cohort of the Idea TestLab. The Invent Penn State NSF I-Corps Site is funded by the National Science Foundation (NSF) Grant No. 1735627. The IdeaTestLab allows participants to test the validity of their new business idea.

"From the first class to the last, I have learned about how to identify customer segments, identify pains/ gains/customer jobs, identify how my idea can address those factors and how to market and pitch my ideas. Furthermore, I also learned how to complete thorough interviews and choose appropriate customer segments to conduct them on. I believe this may have been one of the biggest challenges to overcome. However, through the process, I was able to prove test cards and hypothesizes regarding my project." **Emily Bowman, Senior– Occupational Therapy**



"The Idea TestLab was an amazing experience to help focus and develop our product. Without all of the lessons that we learned from this experience we would have no idea what the best steps to take to start our business." -**Andrew Karaffa, Senior– EMET**

"Prior to Penn State Berks Idea Testlab I did not know how to take the initial first step in starting a business. Thanks to the Professors and participants of the Idea Testlab I was able to understand customer discovery and embark on the first part of the journey in becoming an entrepreneur." -**Andrew Jones, Senior– EMET**

"The PSU Berks Idea TestLab was extremely insightful for taking an idea and developing a business plan around it. The instructors pushed us to think outside the box at different customer segments and evaluating opportunities they bring. They helped to break down the overwhelming idea of developing a business idea by equipping us with valuable knowledge, resources and connections." **-Gareth Yoder, Alumni, IST**

Entrepreneurship Student Club

Students in the Entrepreneurship Club meet to discuss ideas, events going on within the club, hosting 3D printing workshops, and future projects. The Entrepreneurship Club is a great opportunity for students in the Entrepreneurship and Innovation (ENTI) Minor who want to start their own business, or students from any discipline.

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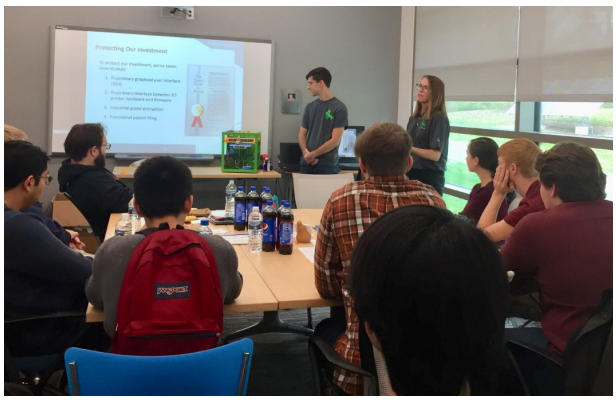
Entrepreneurship Student Club Events

Unity Day

On Unity Day (September 27, 2019), the Entrepreneurship Club asked students, “What can a company do to help its community?” They left the question very vague to inspire creative thinking. Two people received special 3D printed prizes. Club members discussed the concepts behind social responsibility at the event.

Guest Speakers

On November 18, 2019, the Entrepreneurship Club hosted a demonstration of the new Verde Mantis “Mantis” 3D printer, which is promoted as the easiest 3D printer in the world. It was developed by a team brought together by a PSU Berks/ University Park alumni, Joe Sinclair. The club was not only able to learn more about the printer itself, but how Verde Mantis developed their business model. The club provided some very helpful feedback to Verde Mentis. Given the importance of the recent advancements in additive manufacturing methods, the club was honored to have an early look at this 3D printer.



In an effort to inspire an entrepreneurial spirit among students and to seek partnerships with business and industry that foster economic growth for the local community, Penn State Berks–along with all of Penn State University-celebrated **Global Entrepreneurship Week (GEW), November 11-15, 2019.** The Flemming CEED Center organized the following events during the week.

Monday, November 11 **10:30AM-2:30PM** **Thun Library 145**	**Creativity & Entrepreneurship Workshop** **Guests:** Reading School District Students
Tuesday, November 12 **1:35PM-2:50PM** **Gaige 245**	**Topic: "Financing Startups"** **Speaker:** John Gotta, *CEO, JGO Services*
Wednesday, November 13 **12:15PM-1:15PM** **Gaige 121**	**Entrepreneurship Speaker Series** **Topic: "Women Entrepreneurs of Berks County"** **Speakers:** Lindsay Sokol Szejko, *Owner, SOLO Laboratories, Inc.* Jaimyn Westenhoefer, *President, SOLO Laboratories, Inc.* Natalie Parisi, *Owner, ROG Orthodontics* Alma Vasquez, *Owner, YAVE Investments LLC and*
Thursday, November 14 **4:30-5:30PM** **Gaige 249**	**Topic: "Modifying a Product Design for the EU Market"** **Speaker:** Randy Saylor, *Partner, Teq Group*
Thursday, November 14 **5:30-7:30PM** **Gaige 248**	**Topic: "Workshop on Design Thinking"** **Speaker:** Sadan Kulturel-Konak & Abdullah Konak
Thursday, November 14 **6:00PM-6:45PM** **Gaige 245**	**Topic: "Business Development for European Companies in the US- Challenges and Opportunities"** **Speaker:** Jochen Hager, *Business Development Executives LLC*
Thursday, November 14 **6:00PM-6:45PM** **Gaige 121**	**Topic: "How a Small Entrepreneurial Manufacturing Company Competes in the Global Market"** **Speaker:** Randy Saylor, *Partner, Teq Group*

Save the Date for

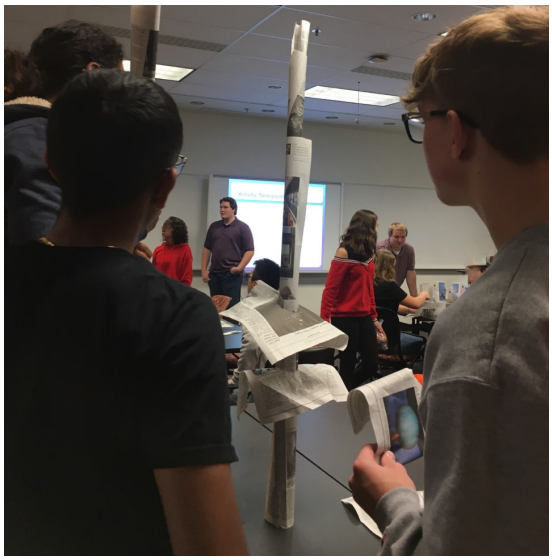
Global Entrepreneurship Week 2020!

November 18-22, 2020

GlobalEntrepreneurshipWeekPennState
Start something here.

K-12 Creativity Workshop

To start celebrating the GEW on Monday, November 11, 2019, the Flemming CEED Center hosted its bi-annual Creativity Workshop hosted by the Entrepreneurship Club. The purpose of this workshop is to inspire young children to think creatively, and ultimately develop an entrepreneurial mindset.



The students were introduced and practiced how to think creatively. This was accomplished through interactive PowerPoint presentations and multiple creative activities. The students started with the *Human Knot Game*, where they all held hands tangled in a knot and then had to work together to undo the knot. Then, the students were put into some friendly competition to see who could create the *Tallest or Coolest Standing Tower* out of a few sheets of newspaper. Two teams focused on being the coolest, while the other two focused on being the tallest. One team used the ceiling for support, which counted for creative thinking! Finally, the students were tasked with repurposing everyday items with the *Alternative Use Game*.

The participants were then given a chance to reflect and share what they have learned through their experience in the workshop. They expressed how they can apply some creative methods that they learned to the real world. They also identified that the workshop brought out realization of strengths and weaknesses not only within their teams, but within themselves.

Members of the Entrepreneurship Student Club enjoyed teaching creativity concepts to the 9th graders hosted at Penn State Berks.

Entrepreneurship Speaker Series

On November 13, 2019, the Flemming CEED Center hosted the biannual Entrepreneurship Speaker Series as part of the Global Entrepreneurship Week. The Speaker Series allow students to listen to entrepreneurs' real life experiences including what helped for the success of their businesses.

The title of the Fall 2019 Speaker Series was "Women Entrepreneurs of Berks County." The panel consisted of Natalie Parisi, Owner & Partner of ROG Orthodontics; Lindsay Sokol Szejko, CEO of SOLO Laboratories, Inc,; Alma Vasquez, Owner of YSVE Investments LLC and Pagoda Café & Catering Services; and Jaimyn Westenhoefer, President of SOLO Laboratories, Inc.

Each panelist had a chance to give a brief summary of their entrepreneurial experiences, and then Dr. Kulturel asked them questions., such as, their background, role models (if any), hardships, and a-ha moments. Afterwards, the floor was opened to questions from the audience. The overarching theme that kept arising from all of the panelists was how to change a business around to adapt to an everchanging environment, while keeping the same core values. Panelists also emphasized the importance of community. After the Q&A was completed, the panelists stayed longer for extra conversations if anyone interested. This allowed the audience to get up close and personal with the panelists to get to know them and ask further questions. There was a very social and laid-back atmosphere, which was a perfect way to conclude the event.

Nittany AI Challenge

The Resilient Resumes team was one of the top three teams in the Nittany AI Challenge, held at Penn State University Park campus on September 10, 2019. Resilient Resumes team is comprised of project lead Amie Croteau, Ethan Adams, and Ian Morrissey, all students at Penn State Berks; and also Bryan Cruz at Penn State Harrisburg; and Austin Tucker from University Park. Faculty advisers are Dr. Abdullah Konak and Dr. Yuan Xue. Dr. Sadan Kulturel-Konak coached the team to get ready for their final pitch.

"Resilient Resumes is an idea initially birthed from participation in the Penn State Nittany AI Coding competition. This team placed in the top three of the competition out of over 70 teams competing and won $7,000. Tasked with using AI to better the world of a college student, the team discovered a pain for students, creating a resume. Resilient Resumes is a web application designed to walk the user through the resume-creation process, asking guided questions to make sure that all necessary information has been included. Then the resume will be analyzed utilizing artificial intelligence and the application will output recommendations to help the user improve various features in the resume. "-**Amie Croteau, Senior IST**

"In the Nittany Ai Challenge, students work on engaging projects that can make a real-life impact. Students master not only technical skills, but also the skills necessary to be effective at collaboration, communication, and organizational skills throughout this process. The Challenge provides students with the opportunity to quickly test what is learned, high standards that push students beyond their comfort-zones, a safe place where they can fail without the concern of a bad grade along with the feeling of being a member of a supportive learning community and open interactions with faculty, staff, industry experts, and other students." **-Dr. Abdullah Konak**

VentureWell Grant for Creativity

VentureWell is a nonprofit organization that cultivates inventors, innovators, and entrepreneurs by funding the creation of new ventures, research labs, and entrepreneurship education. VentureWell's Faculty Grant, "Cross Pollination of STEM Courses to Sustain Entrepreneur teams' Disruptive-technology Solutions (STEM Seeds)," was given to a team of Penn State Berks faculty members in the amount of $14,394.

The team of faculty consists of Sadan Kulturel-Konak, professor of management information systems; Abdullah Konak, professor of information science and technology; Marietta Scanlon, assistant teaching professor of engineering; and Ed Sauer, instructor of engineering.

The purpose of the project that is being funded is to promote the formation of "E-teams," which is student entrepreneur teams. Their main goal being to increase the amount of E-teams that complete the ideation phase and move onto the testing phase.

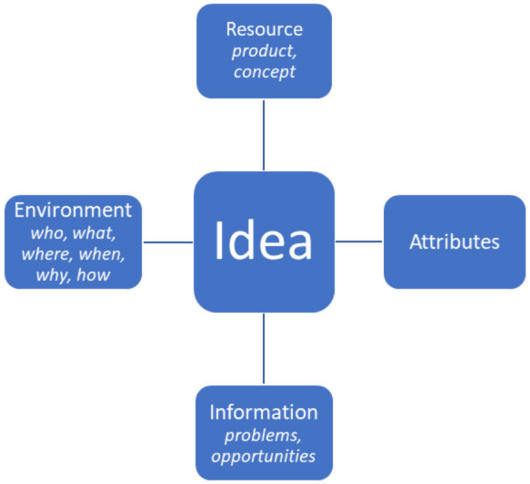
The project team started implementing the project with Faculty/Staff Creativity workshops and class sessions with Creativity Workshops before students start their projects.

Creative Problem-Solving Frameworks

by Sarah Hartman-Caverly , Penn State Berks Reference & Instruction Librarian

What's the cheapest way to test an idea? Pose this question to entrepreneurs and product designers, and they are likely to mention focus groups, technical drawings, computer models, and rapid protoyping, but each of these techniques presents skilled labor and material costs.

It turns out the cheapest way to test an idea is all in your head. Penn State Berks Engineering, Business, and Computing faculty members Abdullah Konak, Sadan Kulturel-Konak, and Marietta Scanlon shared strategies for creative problem-solving in a workshop with faculty/staff colleagues on Friday, September 6th, 2019. Two techniques in their creative problem-solving framework, Idea Space and the Bono's Six Thinking Hats, can be used in tandem to develop a marketable idea and then critically evaluate that idea before ever spending a cent on prototyping or focus groups.



In the Idea Space model, you start with a product or concept, identify opportunities or problems with this product, list the attributes of the product, and consider the contexts in which the product is (or could be) used. By recombining findings from each step in this analysis, you can create or innovate a new product or concept – hence, idea – that solves the problem, extends the environment, or fulfills the imagined opportunity.

With a new idea fresh in mind, try on each of de Bono's Six Thinking Hats to facilitate mental prototyping, feasibility analysis, and stress-testing. Each hat in de Bono's model is denoted by a color and analyzes the proposed idea or product from a specific perspective.

White hat	Objectively examines the idea, gathering facts and specifications
Black hat	Critiques the idea, identifying weaknesses, costs, and risks
Yellow hat	Praises the idea, identifying strengths, applications, and benefits
Green hat	Extends the idea, imagining new connections and applications and proposing solutions
Red hat	Reacts to the idea, expressing feelings and gut instincts
Blue hat	Implements the idea, planning logistics and order of operations

You know you have a good idea when it solves a problem, creates an opportunity, presents the possibility of high reward, and can be implemented with manageable risk. Not only do the Idea Space and de Bono's Six Thinking Hats pass this test, but incorporating them into your intellectual habits as creative-problem solving frameworks gives you reliable strategies for innovating and testing future ideas.

Bono's Six Thinking Hats for Design Projects

by Terry Speicher, Associate Teaching Professor of Engineering

I adopted Bono's Six Thinking Hats for team presentations in my capstone design project courses. The capstone project is designed by three to five member teams in the first semester's course and implemented in the second semester's course. EMET 403- Electromechanical Design Project Preparation- requires two presentations to the client. Midsemester is the Requirements Review, and near the end of the first semester is the Design review. EMET 440- Electro-Mechanical Project Design- requires three presentations to the client. At the third point in the second semester, an Assembly Review is presented to the client. At the two-thirds point, a Test Review is presented to the client. At the end of the semester, a Demonstration Presentation is conducted for the client.

In Fall 2019, six teams comprising twenty-eight students used the Bono Six Thinking Hats for peer feedback at the Requirements Review in EMET 403. Four teams comprising sixteen students used the technique for peer feedback at the Assembly Review and at the Test Review. The instructor prepared a packet of forms for students to role play to critique the presentations. One member of each team in the audience was selected to wear each of the Red Hat to focus on emotion, the Black Hat to focus on judgement, the Yellow Hat to focus on optimism, or the Green Hat to focus on creativity. Each presenting team received feedback from every audience team for all the hats.

The first time I used Bono's Six Thinking Hats was in EMET 440 at the Assembly Review. Since I had four teams in that course, the feedback was given orally after each presentation, cycling through the four hats. The second time I used Bono's Six Hats was in EMET 403 at the Requirements Review. With six teams in that course, the class period was devoted to the presentations without time for feedback. I collected the written comments and collated them by cut and paste into a document to provide feedback to each presenting team. The third time I used the technique was in EMET 440 at the Test Review. I redesigned the form, so each reviewer received a single page with two comment boxes on each side to cover all four hats. At the conclusion of the presentations, I collected the review packages. I sorted them by project and then again by hat. Scanning the forms, I then had a feedback document for each team that included comments for each of the four hats from all the audience teams.

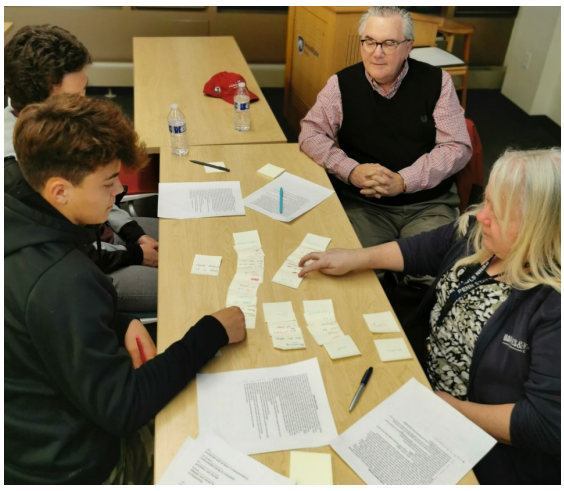
I was pleased with the quality of the feedback noted by each reviewer. Before using this technique, the audience lacked engagement with the presentations. By playing a specific role, the student peers in the audience were able to provide actionable feedback for the teams to improve their design's performance. I will continue to use this effective technique for capstone design project presentations.

Design Thinking Workshop

Engineers from the Reading Chapter of Institute of Industrial & System Engineers, Penn State faculty and students, and community members came together to learn about Design Thinking in a workshop jointly organized by the Reading Chapter of Institute of Industrial & System Engineers and the Flemming CEED Center on Wednesday, November 14th, 2019. This hands-on, boot camp style workshop aims to introduce the process of Design Thinking as well as several creative problem-solving techniques that can be leveraged to enhance the effectiveness of problem-solving sessions.

Design thinking is a human-centered problem-solving approach, which was popularized by the d.school at Stanford University. Today, organizations must continuously come up with new products, services, and processes that improve the status quo. However, not all innovations are up to this challenge. New products and services, even after investing significant time and resources, frequently fail. Design thinking encourages organizations to focus on people first. When we start to craft a solution to a problem, the first questions should always be: Who are we solving the problem for? What is the human need behind the problem? Thereby, design thinking leads to better products, services, and processes that work for the people.

In the 90-minute workshop, the participants were commissioned with designing an environmentally friendly, economical, and easy-to-use coffee brewing system for the customer (the workshop instructors). They went through all design thinking steps- empathize, define, ideate, prototype, and test- and applied the introduced concepts to the design challenge. In the empathize step, the participants tried to understand the customer's needs and problems. In the define step, the participants create need statements and prioritized them according to the Kano model. In the Ideate step, they used creative problem-solving techniques to conceptualize alternative new coffee brewing systems to address the customer's needs. Finally, the participants created a quick prototype to test their final design idea with the customer.



Chamber Business Competition

The Fall 2019 Greater Reading Chamber Alliance Business Plan Competition allows college students to possibly launch their business. The competition is open to undergraduate and graduate students currently or recently, within the past three years, enrolled at Penn State Berks. The higher-education institutions in Berks County will select their top three candidates. Each of these businesses will be enrolled in an Entrepreneur Academy, which will offer help in developing a "Pitch Video." In addition to the benefits of the Entrepreneur Academy, *three teams* will be awarded $20,000 in seed capital to support their business at the Business Pitch Competition. Winners will also receive one-year access to office space and support services at the GRCA Center for Business Excellence and the opportunity to participate in the Ben Franklin Technology Partners Big Idea Competition. Submission applications are due by December 4th. Top teams will have a short interview on Wednesday, December 11th during the common hour. The top three competitors to move on the second phase of the competition will be identified by December 15th. From this group, 8 to 10 businesses identified to participate in the Entrepreneurs Academy during the Spring of 2020. The actual business pitch competition & awards, a public event, will be on April 2020.