Student Enrichment Experience (SEE) Seminars

A Service of Lancaster-Lebanon IU13 2021-2022 School Year



Excerpt from That Fabulous Day with Those Fabulous Kids in Pennsylvania

What I observed: Gifted kids need to be together.

"In Pennsylvania, Intermediate Units serve gifted educators and students in regions. Lancaster is home to IU13, and it was IU13 that brought me in to work with the students. (I had worked with teachers and spoken with parents the night before).

These kids are offered the opportunity to attend seminars regularly, and it's so wonderful. They need to be in a place where it's safe to be smart.

Anyone who says that if there is an AP or IB program, that's all that gifted high school students need ignores this core idea. AP and IB are not gifted programs. They're rigorous, yes, but gifted is more than that. There's a social and emotional component that cannot be ignored except at great cost.

Kudos to IU13 for providing this."

Lisa Van Gemert, Gifted Guru--educator, administrator, gifted parent of three gifted children, national presenter at gifted conferences and valued presenter for IU13 Gifted Network meetings and SEE Seminars

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#IU13seeseminars



Chapter 16: Special Education for Gifted Students

§ 16.1. Definitions*

Mentally Gifted - Outstanding intellectual and creative ability the development of which requires specially designed programs or support services, or both, not ordinarily provided in the regular education program.

Specially Designed Instruction - Adaptations or modifications to the general curriculum, instruction, instructional environments, methods, materials or a specialized curriculum for students who are gifted.

§ 16.2. Purpose*

a) This chapter specifies how the Commonwealth will meet its obligations to suspected and identified gifted students who require gifted education to reach their potential. It is the intent of the Board that gifted students be provided with quality gifted education services and programs.

d) To provide services and programs efficiently, the Commonwealth will delegate operational responsibility to its school districts. Each school district shall, by direct service or through arrangement with other agencies, provide the following:

(2) Gifted education for each gifted student which is based on the unique needs of the student, not solely on the student's classification.

(3) Gifted education for gifted students which enables them to participate in acceleration or enrichment programs, or both, as appropriate, and to receive services according to their intellectual and academic abilities and needs.

* Selected excerpts from Chapter 16.

Student Enrichment Experience (SEE) Program

The Student Enrichment Experience (SEE) program provides innovative and thought-provoking seminars for advanced and gifted students throughout Lancaster and Lebanon counties. Various seminars throughout the school year are designed for students, grades 4-12.

In 2021-22, SEE seminars were offered both in person and online. The longstanding focus on academically challenging and engaging content with outreach to multiple schools and districts remained in place. For online seminars, flexibility was added to include instruction to students individually (at school or at home) or in a classroom setting. There was no limit to the number of students who could participate, and most seminars were recorded for viewing at a later date. Oftentimes, teachers engaged with students in classrooms and used materials provided by SEE presenters.

SEE Seminars offer a wide variety of topics and experiences not readily available in the regular classroom. When aligned with student academic strengths, they can supplement a gifted student's individualized education plan and can build upon the gifted services provided by the school district. Seminars enrich the curriculum while offering social and emotional support for students with intense interests and curiosity. They also offer students the chance to work with peers from across the IU13 region. Whether online or face-to-face, connecting students directly with experts who offer in-depth instruction, hands-on activities, and personal insights, creates a unique and beneficial learning environment.

Research-based information regarding specially designed instruction for gifted learners is outlined in the PA Gifted Education Guidelines. SEE Seminars are based on this type of learning and explain why the seminars have been so important to schools and students over the years.

Specially Designed Instruction

- Elaborate, complex, and in-depth study
- Challenging and specialized resources
- Higher-level thinking, creativity and problem solving
- Independent and self-directed
- Choice of topics across the curriculum
- Development of leadership and group interaction skills
- Extension of classroom activities into the real-world
- Development of social and self-awareness
- Resources that meet the student's level of learning
- Environments that foster a positive attitude toward creative challenges, investigative activity and knowledge creation

∼The PA Gifted Ed Guidelines

Making Connections

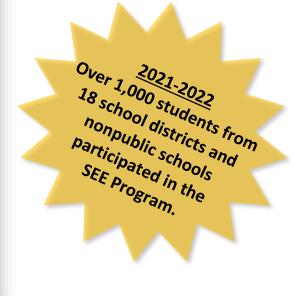
Students connect with:

- Expert presenters
- Local businesses
- Local nonprofit agencies
- Area colleges
- Intellectual peers from across schools and grades

Connections create:

- Strong, content-rich seminars
- Academic rigor and relevance
- Future student opportunities
- Real world applications





2021-2022 SEE Seminar Partners

Lindsay Bandy Jean Bordewich Braver Angels Steven Courtney Elizabethtown College Kyle Elliott Christine Fonseca Colleen Gergely Hershey Story Museum Jenny Hill Amber Kane Lancaster County Parks & Rec Middle Creek Wildlife Management Jay Parrish PA College of Health Sciences Stephanie Townrow Jon Weed Wittel Farm

Elementary SEE Seminars (Grades 4-6)

The Wonder of Wetlands

This educational day offered SEE students a hands-on experience in the wetlands surrounding at Lancaster County Central Park. Students collected macroinvertebrates, learned about their life cycles, evaluated the health of the water, and gained a greater understanding of this habitat's importance to the health of the environment.

Student Comments:

- I learned about the different types of creatures in the water and that most wildlife is harmless.
- I learned that exploring the outdoors is incredibly important.
- I am going to be more aware of what is around me.

Sphero Bolt Mazes

This challenging and creative SEE Seminar allowed students to have a hands-on learning experience with others who have an interest in coding. Participants learned to block code a Sphero Bolt in order to navigate a maze created by them. They witnessed how infrared communication allows Spheros to "talk" to each other.

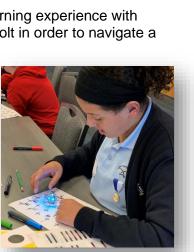
Student Comments:

- I would really love to remember the pride that I had when I finished the programming and the focus I had when I was coding the Sphero.
- I learned that there are two types of programming: block coding and text coding.
- Ms. Trusz helped me learn how to drive the Sphero and control it in my maze.

Poetry of Place

In this online seminar, students thought of the concept of "place" in new ways while working together to develop poems and explore the creative writing process. Using a bit of doodling, some writing, and collaborative play, SEE participants discovered their sense of "place" in the world. They learned to focus on how imagery works as a gateway to the imagination while exploring line breaks and musicality in poems.

- The presenter introduced a different type of poetry.
- I can learn more about topics from a different perspective.
- I learned all about the art of poetry. It got me very interested in doing more poetry, and I was able to express myself through poetry. It taught me a lot.
- I would like to remember how the presenter came up with metaphors using a metaphor generator
- I want to remember that we can all write poetry, even if we never have before.
- Now I can use what I learned today in poems, conversations, and paragraphs.





Microscopic Miracles

During this online seminar, led by Naturalist Lisa Sanchez, students investigated the intricacies of an individual flake, discussing things like symmetry and the structure of ice crystals. Students also learned how people have captured the beauty and wonder of snow in photographs, starting with Wilson Bentley (1865-1931).

Student Comments:

- Learning about how snowflakes form has inspired me to do an experiment.
- It was fun to learn about how to grow rock candy.
- I learned that snowflakes start off as a piece of dust and then, as they fall, snow and water attach to the dust and forms a hexagon shape.

A Curious Connection: Geology & Giggles

During this seminar, students had a fun time practicing writing a joke or two, learning about creating cartoons to accompany your jokes, hearing about what it is like to publish a joke book, exploring the origins for some unique words, and talking about some things in our language (like palindromes) that are very fun. Also a geologist, Dr. Parrish shared his observations that you must have a sense of humor with science because the world doesn't always do what you think it will.

Student Comments:

- Jokes are funnier when they are longer and more detailed.
- I learned what makes a joke funny.
- Dr. Parrish also talked about rocks and minerals which I liked.

PA Mammals: So Much Diversity!

At Middle Creek Wildlife Management Area, students learned about a great variety of mammals living in and around Middle Creek, including extirpated species and those that are threatened and endangered. Time was spent hiking in the woods and participating in an educational scavenger hunt inside the newly renovated visitor center.

- I learned that people have a large say in what happens in the state.
- I learned that Middle Creek uses fire to keep the fields the way they are.
- Mr. Brant helped by stopping during the hike and explaining each plant.
- I learned that a lot of the plants in PA are invasive.









Middle School SEE Seminars (Grades 6-8)

The Historic Conestoga River

This SEE seminar looked at the deep history of the Conestoga River and how the river has changed since the Native Americans were living along its shores or since Robert Fulton tested his steamboat in its waters. Working with Naturalist Lisa Sanchez at Lancaster County Central Park, SEE students hiked along the Conestoga, visited an archeological site in the park, learned about the wildlife that rely on a clean river environment, and explored the recreational and business history of the river. They learned about how the mills and covered bridges served vital functions for the expanding Lancaster community.

Student Comments:

- I learned that Native Americans had a trade center near here. I would like to search there for fossils.
- I learned that some tree nuts are edible and not to touch specific plants.
- The Conestoga River isn't as deep as it used to be.
- I now know a lot more about the history and ecosystem of the Conestoga River.

Farming to Save the Planet

In Elizabethtown, middle school students visited The Wittel Farm Growing Project which is a program that plants, grows, and shares fresh fruits and vegetables with food insecure households (over 50,000 people) in Lancaster County. At this seminar, students learned about pollinator habitats, plants and seeds, healthy food, the vital role of agriculture to fight climate change, and even helped plant winter crops and trees.

Student Comments:

- I would like to volunteer at a farm like this. I learned that using chemicals when farming is bad for the environment.
- I learned that there are river otters in PA, about how honey is made, and why planting native plants is good.
- The information presented was very helpful in learning how to grow more sustainable food.



Civil Discourse in The Room Where It Happened

Alexander Hamilton, James Madison, and Thomas Jefferson walked into a room and walked out with Hamilton's financial Assumption Acts and a new national capital in Washington, D.C. In this interactive seminar led by historian and educator **Stephanie Townrow**, students went back in time to 1790s New York City to develop their own political compromise, deciding what you stand for and what you are willing to sacrifice. Along the way, they learned the art of deliberative discussion, using George Washington's *Rules of Civility* as a framework for respectful and productive civil discourse.

- I really enjoyed the way the presenter presented things. I think that learning the lyrics of Room Where It Happened more in depth will make me even more interested when I listen to the song.
- I liked learning that Thomas Jefferson wrote everything that happened at the dinner table debate two years after it happened, so we don't even know if it's true or not.
- I learned how to make an agreement peacefully and not having fights break out.
- I got to learn more about the logic behind the song. The play on words was very interesting at times.

Taking Charge: Learn to Lead, Breathe, and Handle Life through Yoga

At this seminar, students learned eight principles that make a lifelong leader using hands-on projects, storytelling, breathing techniques, a brief anatomy lesson, and visualization. This unique leadership seminar fostered mindfulness, self-awareness, empowerment, and breathwork. Helping to manage stress and anxiety is vital, and students received this lesson with great enthusiasm.

Student Comments:

- I learned the benefits of yoga. I'm going to start doing this every day before bed!
- I learned how to calm myself by changing my breathing. I can use it when I get worried about something.
- Today's SEE Seminar helped me see how mental and physical health connect.
- Yoga helps relieve stress and take the weight off my shoulders.



Finding a Voice – Writing Monologues

During this creative seminar, participants explored the concept of a monologue and how to use it in storytelling. Students collected their internal thoughts and created imagined backstories of characters, and began to write, write, write! Many shared their monologues with the other students in attendance at the seminar.

Student Comments:

- I learned how to create an original character in my head. I can use this skill to create stories.
- I've written stories in school before with characters, and now I will be able to create a more unique, detailed character.
- The presenter was very knowledgeable and passionate about what she was presenting; she helped me gain new writing skills.

Don't Worry ... B. Happy!

Via Zoom, students enjoyed their time with Jon Weed who, with his wife and three children, started their small business, B.Happy, a peanut butter snack meant to be eaten with a spoon. Started in their kitchen in Indiana, B. Happy is now selling in large stores like Target and online throughout the United States. Students asked many great questions and learned a lot about entrepreneurship.

- I learned that one small idea can go very far if you put your mind to it.
- Being passionate about your product is very important.
- I loved learning about how he started the home business; I will use some of his strategies.
- It was interesting to learn the struggles that come from being a small business owner. It will help me be more cautious if I ever start my own business.



Heart Map

At this creative and introspective SEE Seminar, students created an "emotional landscape," using their own hearts as a guide. Using lists of geographical and emotional vocabulary, they discovered and uncovered their own inner world.

Student Comments:

- I learned about my emotions and how I can be more aware of them.
- Whenever I feel stressed or mad or any other negative emotion, I will think about how I can change it to a positive one.
- I learned something that I can actually use, instead of taking information and forgetting about it in a day or two.
- I found it interesting to learn how to make a map of my emotions and think about what all of them mean.

Writing Life

In this interactive seminar featuring examples and writing prompts, author Lindsay Bandy shared personal experience as a young, gifted student and tales of surviving middle school in the 90s. She shared how writing has become not only her career, but a way of life that has helped her overcome severe anxiety, explore life's big questions and emotions, and deeply connect with others.

Student Comments:

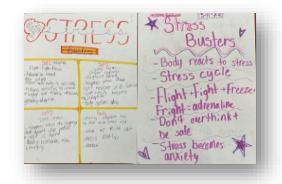
- You should put aspects of yourself in your characters.
- The presenter was gifted herself, so she was very relatable.
- I learned about all of the background and real-life experiences behind a good fictional novel.
 I learned about better writing strategies (writing true to yourself specifically), and I will be able to apply this to my every day writing now.

Stress Busters

Students who engaged in this seminar with educational psychologist, **Christine Fonseca**, developed a clear understanding of emotional flexibility and stress resilience and walked away with several ready-to-use tools to stop stress in its tracks!

Student Comments:

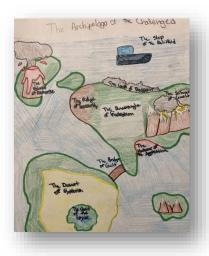
- I learned that stress comes in different stages. I will identify what stage I have when I feel stressed.
- Stress is hard to handle and can control you if you don't control it first.



Life as a Meteorologist

In this interactive seminar, Kyle Elliott, MU Director of Weather Information Services, spoke about what is involved with his job at Millersville and the challenges he faces when making a forecast. He explained how he uses local knowledge of the area's weather to consistently create accurate forecasts. He also shared how he prepared for his career with an intense study of math, science, geography, and communications.

- I learned how to read and understand weather maps and radar.
- I learned that weather models are not always right.
- It was nice meeting someone who understands all the ins and outs of the job and has had experience not only with reading the weather, but also speaking live.



Sweet Strategies

After becoming immersed in the sweet business of selling chocolate, students used real ingredients to create a new chocolate product along with designing the packaging and strategizing a marketing campaign to sell their new product. Guidance was offered through several interactive stations, where each person can explore and examine marketing materials, advertising techniques, and the power of packaging and design.

Student Comments:

- I learned how to please target audiences and that failure is valuable.
- I didn't know that Hershey used to have a factory in Cuba.
- I learned a lot about owning and running a business.
- This seminar connected to Junior Achievement in a lot of ways.
- I loved the hands-on experience of making chocolate.



Learning Academically, Socially & Emotionally

"Any program model that is to serve gifted students must include a personal/emotional and social dimension."

Diane Heacox and Richard Cash, Differentiation for Gifted Learners: Going Beyond the Bosics (p.47)



Supporting Gifted Learners

- 1. Learn new material faster, and at an earlier age, than age peers.
- 2. Remember what has been learned forever, making review unnecessary.
- 3. Are able to deal with concepts that are too complex and abstract for age peers.
- Have a passionate interest in one or more topics, and would spend all available time learning more about that topic if he or she could.
- Do not need to watch the teacher to hear what is being said, can operate on multiple brain channels simultaneously and process more than one task at a time.

Susan Winebrenner, Teaching Gifted Kids in the Regular Classroom (p. 9)

High School SEE Seminars (Grades 9-12)

The Historic Conestoga River

This SEE seminar looked at the deep history of the Conestoga River and how the river has changed since the Native Americans were living along its shores or since Robert Fulton tested his steamboat in its waters. Working with Naturalist Lisa Sanchez at Lancaster County Central Park, SEE students hiked along the Conestoga, visited an archeological site in the park, learned about the wildlife that rely on a clean river environment, and explored the recreational and business history of the river. They learned about how the mills and covered bridges served vital functions for the expanding Lancaster community.



Student Comments:

- I learned where the Conestoga River comes from and the history behind it.
- I learned about the different uses of plants and how to use them in cooking.
- This seminar connected with environmentalism, something I've studied and want to pursue.
- I would like to go into a career in botany or forestry, so I enjoyed learning about plants today.

Skills for Bridging the Divide (Braver Angels)

Braver Angels facilitator **Jerry Silberman** led a team in teaching skills for setting a good tone for a conversation, for listening, for speaking, and for handling difficult moments. Students had the opportunity to practice and observe newly learned skills in pairs and small groups. Donegal High School students shared with students from other districts how they have created a dynamic, on-going debate club as a result of their participation in a Braver Angels' training.

Student Comments:

- I learned how to address differing viewpoints in a way that is respectful, even with the inclusion of personal experiences. I would like to utilize this when discussing controversial topics with family members who I am aware have a view that is opposite to mine.
- I learned how to navigate a conversation when I gets to a difficult point instead of getting mad or shutting down.
- Finding common ground between varying points of view is important!
- I learned how to be kinder and less confrontational in conversation.

How Life Happens ...

Performing songwriter, **Steven Courtney**, shared his life experiences and lessons learned at this SEE Seminar, reinforcing that developing, re-inventing, and changing were vital during his 30 years of self-employment as a musician, producer, and content creator.

- All your experiences help you in some way so don't worry if you can't seem to find your passion early in life.
- I learned to go about life with no expectations and to do what makes you happy. I will use this information to help me continue through life on a more positive note.
- This seminar connected well to creative writing in school, learning about his process of writing lyrics has given me another outlook on writing that might allow me to write better.
- I am a musician by nature, so hearing another musician's perspective on how he got where he is and how he applies life to his music was nice.

Transforming History into Theater

This seminar with playwright Jean Bordewich explored the process of writing a history-based play. Students enjoyed excerpts from Bordewich's recent play entitled, "Now's the Time." The play features two important historical figures from Pennsylvania: Congressman Thaddeus Stevens and Lydia Hamilton Smith, his long-time confidante and manager, in the fight for voting rights and racial equality for Black Americans and women immediately after the Civil War (Reconstruction).

Student Comments:

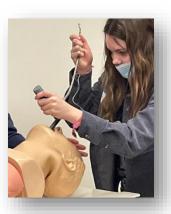
- I learned that theatre can be an effective medium for recounting history in a way that is both engaging and in-depth.
- I've been taking Creative Writing this semester after almost a year of writer's block. This seminar sparked the idea of writing a short script myself about history that is important to me, either as a project for class or on my own.
- I respected how the presenter has so much experience working with Congress. I think it's cool that she has had this much exposure to how our legislative branch works, and that she was able to transcribe this knowledge into her personal writing.

Being a Part of a Healthcare Team

Pennsylvania College of Health Sciences partnered with IU13 to offer high school students an explorative journey through their State-of-the Art simulation lab, an educational experience within their health care degree programs, and hands-on health care lessons for this three-hour seminar.

Student Comments:

- I think the simulation was helpful to me to picture what it would be like to work in an ICU and use the other things that were discussed to decide what I want to do in the future.
- I was able to narrow down what I am interested in. That is what I came here to do so I'm glad that I came.
- I learned some tips on what to look for in a college as well as different areas in the medical field.
- I respect how all of the presenters had dozens of years of experience in the field. It really made me respect their insight.



Now's The Time





How to Create Better Solutions

In this online seminar with local educator and artist, Amber Kane, students explored where ideas come from and uncovered how they can increase their ability to develop ideas quickly to solve problems and create innovative solutions.

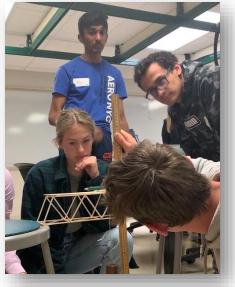
Student Comments:

- I learned to rephrase a problem in the form of a "Why" question. This could help me or others if I am in a group setting, come up with solutions faster.
- They opened my mind up to the idea that our brain puts constraints on basically everything without us knowing.
- I appreciated her knowledge in this beneficial topic and her interactive presentation.

Learning from Failure

Students explored the fundamentals of structural engineering by creating computational models to analyze truss bridges and conducted hands-on experimentation using small-scale physical models to validate their predictions and derived recommendations on how to design safer and more cost-effective structures.

- I learned valuable information on some engineering concepts and processes that I would like to learn more about and use to solve problems that I encounter.
- I learned how to understand the way bridges (truss) respond to forces & how to alter them.
- This seminar connects to a project I am doing in school requiring me to build a bridge with the highest weight to load ratio.
- The presenters involved us (the students) very well, and overall the topic was presented in an interesting, engaging manner.
- I respected how he was born in the Dominican Republic and came to the US to study civil engineering.





What makes SEE Seminars valuable to you as a student?



"At SEE Seminars, the presenters are very knowledgeable and make learning new things a lot of fun."

"I like how the SEE seminars cover topics in ways that are more in-depth and detailed than in the classroom."



How do teachers feel about the SEE Program?

"Academically, the students gain experiences and learning opportunities that directly relate to their curriculum, but they gain these experiences by actively doing instead of passively learning. The realworld experiences that the students gain through these seminars furthers their understanding of the topics on a much deeper level."

"I find that one of the many benefits of the SEE program is that our gifted students get a chance to network and work with students with GIEPs from other districts. It is a unique opportunity for them to branch out beyond their home districts."

"Many of the seminars were interactive and engaging and had some component of hands-on response. It was great when there were things students could continue to work on independently after the seminar! The variety of topics was great and the students who attended were interested in the subjects being presented."



"While I would like to get back to a sense of 'normal' soon, I love having access to these online seminars. It would be nice having these virtually available in the future to allow for more students to participate. I love that we had broad participation this year. Limiting numbers for the most popular seminars has been tough in past years."

"Students grow academically, socially, emotionally, and are exposed to career opportunities through these seminars. The learning experiences that they have at the seminars are ones that could not be replicated inside the classroom, as they are all real-world, hands-on experiences that utilize the community and professionals within that community."

"The elementary seminars this year were totally awesome. They had the kids up and moving and provided handouts for the kids to use throughout the experience. I loved that we had more opportunities for elementary students and that any number of students could attend. It didn't matter if students were in school or at home. "

What do students say about the SEE Program?

The following information was compiled from the **2021-2022 ELEMENTARY SCHOOL** Learning Reflections submitted by the students after each SEE Seminar/Program.

The percentage reflects Strongly Agree or Agree responses:

- 96% I learned new information, and we talked about things I had never thought about before today.
- 97% The presenter helped me learn about this topic.
- 90% The topic of this seminar was very interesting.
- 83% I felt comfortable enough to ask the presenter a question if I had one.
- 92% I enjoyed having the chance to hear ideas from students who attend other schools.
- 65% After today, I will see if I can learn more about this subject.
- 80% I will share what I learned today with someone else someone at home, my friends or my teachers.

"Miss Jenny made a seemingly hard topic easier for us kids." ~ IU13 Elementary SEE Seminar Student

The following information was compiled from the **2021-2022 MIDDLE SCHOOL** and **HIGH SCHOOL** Learning Reflections submitted by the students after each SEE Seminar/Program.

The percentage reflects Strongly Agree or Agree responses:

- 93% This seminar covered a topic in a way that was more in-depth and detailed than I have studied before.
- 88% After today, I would like to learn more about this topic.
- 96% I gained new insights based on information from the presenter and/or from other students in attendance.
- 87% I will share what I learned today with someone else -- someone at home, my friends, or my teachers.
- 88% I will be able to use what I learned today as I work on an assignment in school or a project/hobby at home.

"I like deepening my understanding of some subjects, especially if they are in my backyard." ~ IU13 Middle School SEE Seminar Student

"Today, I learned that it could take some time to discover what your passion in life is and where your path is headed, but every step along the way still matters." ~ IU13 High School SEE Seminar Student

"Giftedness is a greater awareness, a greater sensitivity, and a greater ability to understand and transform perceptions into intellectual and emotional experiences."

- Dr. Annemarie Roeper, 1982



I've worked with gifted teens for 35 years and, in that time, I have never witnessed an enrichment program for talented adolescents that is more focused, substantial, and engaging as the SEE seminars. Indeed, the SEE program is a model that school districts nationwide should emulate. I wish I could clone it across America."

- Dr. James R. Delisle, Advocate for Gifted Children, Teacher, Professor, Author and IU13 SEE Presenter

