

IPAA/PESA
Energy Education
Center





IPAA/PESA Energy Education Center



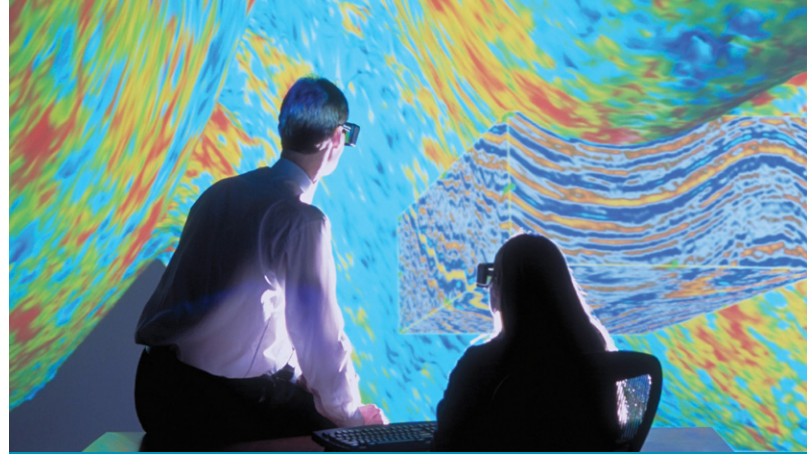
The **Independent Petroleum Association of America (IPAA)** and the **Petroleum Equipment & Services Association (PESA)** are committed to energy education outreach through the IPAA/PESA Energy Education Center. With the support of the **IPAA/PESA Education Advisory Board** and critical corporate and individual sponsorships, the **IPAA/**

PESA Energy Education Center is achieving an unprecedented level of success preparing the next generation of talented professionals who will lead the oil and natural gas industry forward.

The number of jobs in science, technology, engineering and mathematics, or STEM, will continue to grow in all industries, including oil and gas. To meet this need, our programs educate middle school and high school students, teachers and industry professionals about the oil and gas industry and its careers.

Please join us in our continuing efforts to support this industry-changing partnership with education.

Barry Russell
IPAA President & CEO



2019-20 SNAPSHOT ▶ IPAA/PESA PETROLEUM ACADEMIES

- **3,200** graduates
- **1,500** enrolled for the 2019-20 school year
- **Two-thirds** of students are economically disadvantaged
- **41%** female participation
- Significant impact on **1st generation** college participation
- **\$1,000,000** in college scholarships awarded
- **750** student oil and gas industry externships awarded

www.ipaa.org/education

The **IPAA/PESA Energy Education Center** supports energy education outreach by providing oil and gas industry education in six broad areas:

- 1 Award-winning **High School Petroleum Academies**
- 2 **Middle School STEM Career Exploration Initiative**
- 3 A Competitive student **Extern Program**
- 4 **Consulting Services** (national and international)
- 5 Live and/or Customized, In-house **Oil & Gas Courses***
- 6 Industry-focused **eLearning Online Courses***



AT LEFT: Galen Cobb, IPAA/PESA Education Advisory Board Co-Chairman with Azra Turajlic, IPAA/PESA Petroleum Academy graduate and Weir oil and gas engineer at the 2019 PESA annual meeting.

ABOVE: PESA President, Leslie Beyer with IPAA/PESA Petroleum Academy alumni and students.

**proceeds from these courses benefit the Energy Education Center*

SUPPORT Industry Education Today!

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Inspire young minds

80% of jobs this decade will require STEM skills, but only 40% of middle school students envision themselves with a STEM career.

Experiential learning

IPAA and PESA are seeking organizations to play a leading role in helping students explore STEM careers in a fun, impactful and innovative way.

Design your future

Empowering students with the knowledge of the incredible opportunities available in the oil and natural gas industry with a STEM education.



HIGH SCHOOL PETROLEUM ACADEMIES

Preparing students for degrees and careers in the oil and natural gas industry.



EXPLORING ENERGY CONFERENCE

Providing high school students with a glimpse into what a career in the oil and natural gas industry could look like for them.



EXTERN PROGRAM

An unique opportunity for high school juniors/seniors and college freshmen to work alongside career professionals and learn from the best.



MIDDLE SCHOOL CAREER EXPLORATION Power Your Future

Giving middle school students the information they need to pursue STEM classes in high school and beyond.



INDUSTRY COURSES

Providing a variety of courses to those currently in the industry and those looking to learn more.



CONSULTING SERVICES

Helping organizations get similar programs started in their school districts and towns.

Sample Middle School STEM Career Exploration Cards

Power Your Future

► CAREER DESCRIPTION

Includes sections on **Sample Projects, Skills Required, Education, and Average Salary**

► HOW TO GET THERE

Includes sections on **Starting Today, Classes to Take, and Down the Road**



Geologist

Geologists study the rocks, minerals, fossils, landforms, and the layers of the Earth's surface. They also study how and why the Earth has changed over time.

SAMPLE PROJECTS
Create a map that shows the rock types and land structures of an area. Use software to create a model of what the Earth is made of below the surface.

EDUCATION
Bachelor's or Master's Degree

SKILLS REQUIRED
Analysis Science Writing

AVERAGE SALARY
\$89,780

STARTING TODAY
Create a map that shows the rock types and land structures of an area. Use software to create a model of what the Earth is made of below the surface

CLASSES TO TAKE
• Geology
• Chemistry
• Statistics

DOWN THE ROAD
Volunteer at a local organization or nature center that studies the land in your area.

► Our Biggest Needs

FOR ORGANIZATIONS TO:

- Sponsor our core programs
- Sponsor our yearly fundraisers
- Host student externs in the summer
- Provide custom giveaways with logo for us to use at events
- Encourage employees to participate in AmazonSmile and/or an employee match program

► Fundraisers

2020 YEARLY FUNDRAISERS

Oil & Gas Overview Courses | February 4 & August 11

These courses are hosted by NAPE during their semi-annual shows and qualify for CPE, CPD, and AAPL recertification credits. The courses have an upstream focus with some midstream information and thoroughly cover: industry structure, petroleum geology and exploration, mineral rights and leasing, drilling and completion, and development and production operations.

Wildcatters' Ball | February 7

This annual, black tie event features a guest speaker, superb cuisine, a captivating silent auction, and opportunities to renew old friendships and make new acquaintances all while enjoying a live band. Buy a table and bring your coworkers and/or clients for a night of good food, wine and fun.

Wildcatters' Sporting Clays | September 17

This event features door prizes, team prizes and great networking opportunities.

ONGOING FUNDRAISERS

NEW! Online Donations – Did you know you can now make donations online? Please consider making a donation and helping us spread the word by telling your colleagues.

AmazonSmile – AmazonSmile donates 5 percent of your eligible purchases to a charity of your choice and our **IPAA Educational Foundation** is now listed as a charity option! This is a simple and automated way to support your favorite charitable organization every time you shop, at no cost to you!

eLearning Courses – We currently offer two courses online:

- 1) Petroleum Geology for Non-Geologists
 - 2) U.S. Mineral Rights and Leasing
- They are media-rich and information-packed. Upon completion, AAPL members receive 10 recertification credits.

In-house Oil & Gas Courses – We've partnered with **Energy Training Resources, LLC** and now offer customized courses to companies who are looking to train an entire department or function group.

► Visit www.ipaa.org/education



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Dave Wright | President & CEO, Dale Carnegie Austin/Houston

AT LEFT: Paul Parsons with Energy Training Resources, LLC, our Industry Courses partner, leading the Oil & Gas Orientation Course in Houston.

A Snapshot of Success

SINCE 2006



HIGH SCHOOL PETROLEUM ACADEMIES

Provides high school students with a multidisciplinary, advanced academic learning experience in science, mathematics and the emerging technology concepts needed to pursue professional training and degrees in engineering, geology, geophysics and global energy management in the oil and natural gas industry.

- 1,500 currently enrolled; 3,200 graduates
- Two-thirds of the students are economically disadvantaged
- 41% female participation
- Significant impact on 1st generation college participation
- \$1 million in college scholarships awarded

SINCE 2010



EXTERN PROGRAM

Provides professional development and job shadowing opportunities for future STEM and business students at various petroleum exploration, production and service company locations in Texas.

- High school juniors/seniors and college freshmen are eligible each summer
- More than 750 student industry externships awarded
- More than 35 participating oil and natural gas companies
- Increasing numbers each year since inception in 2010

SINCE 2016



INDUSTRY COURSES

We've partnered with Energy Training Resources, LLC and created a variety of courses to those currently in the industry and those looking to learn more. The proceeds from these courses are reinvested into the Energy Education Center making it a win-win for the industry. We currently offer:

- Public Courses
- In-house/Customizable Courses
- eLearning Courses

Our courses are reasonably priced, have had nearly 800 combined attendees, and are accredited through various organizations.

SINCE 2017



EXPLORING ENERGY CONFERENCE

This conference aims to educate high school students about the oil and natural gas value chain, and STEM careers in geology, business, engineering, supply chain management, landman, and computer science.

- Nearly 2,000 high school students
- 20 distinguished industry speakers
- 30 participating companies
- 60 college volunteers

SINCE 2018



MIDDLE SCHOOL CAREER EXPLORATION Power Your Future

Students go through interactive simulations to see 'STEM in their world' and are introduced to inspiring careers they never knew existed.

- 34 schools in the Permian Basin, Texas and New Mexico
- Over 2,500 students engaged in nearly 4,600 hours of learning
- 125% improvement in assessment scores
- 59% of students say the curriculum made them want to do better in science & math
- 47% of students say it helped them identify the steps to pursue a career in STEM
- 92% of teachers would recommend the course to a friend or colleague
- 82% of teachers say it covered content their students would not have seen otherwise
- 35 STEM Career Cards

NEW!



CONSULTING SERVICES

The **IPAA/PESA Energy Education Center** has provided guidance to organizations seeking to get similar programs started in their school districts and towns, nationally and internationally. In 2019, we provided guidance to 6 organizations to help launch their programs and are looking forward to more partnerships in years to come.