Post-Secondary Educational Outreach

**Undergraduate/Graduate Students**
- **Undergraduate Co-ops and Student Workers:** The CAER employs UK undergraduates informally and participates in the College of Engineering's Co-op program, where students perform research in their fields prior to graduation. This takes place on alternating semesters for three terms.

- **University Courses:** Several researchers are also adjunct faculty members of UK departments and teach courses in mining, mechanical, and chemical engineering; geology; and chemistry.

- **UK Courses:** A class called Energy Systems (CME599) is taught in UK's Dept. of Chemical and Materials Engineering by CAER staff. Among the topics included are: clean coal technologies, electricity transmission and distribution, natural gas generation, nuclear generation, renewable generation, carbon capture and sequestration, as well as economic considerations.

- **Graduate Research:** Research Assistantships are offered to graduate students pursuing an M.S. or Ph.D. The RA's research complements the Center's activities and in many cases, a student will be engaged in research sponsored by an outside organization. Researchers serve on thesis and dissertation committees for both UK students, and those in related fields at other universities.

**Exchange Programs**
- CAER hosts groups of French exchange students from the University of Burgundy's materials engineering school in Dijon, France. The Center has a similar exchange program with the University of Alicante in Spain.

**Postdoctoral Scholarships/Fellowships**
- Postdoctoral Scholarships are for students who have completed the requirements for a Ph.D. and meet the requirements of the University of Kentucky Graduate School. The postdocs work under the direction of a research mentor who provides advanced training to prepare the postdoctoral scholar for a research career.

**Community Outreach and Collaborations**
- **Regional Office:** An energy-extension agent extends our reach to Eastern Ky., maintaining an in West Liberty. The purpose is to assist local governments and industry in the development of energy projects by introducing them to the capabilities of the Center.