

Utility Gets Out of the Box and Online to Develop Workforce

The Oklahoma Gas & Electric Virtual High School Program

OG&E's Future: Looming Retirements and Few Qualified Replacements

Oklahoma Gas & Electric knew it was time to take action. As the electric utility company serving 777,000 customers in much of Oklahoma and part of western Arkansas, it assessed the future workforce needs and realized there was a looming retirement issue. Key positions currently staffed by employees planning for retirement had few qualified candidates preparing to step into those jobs. This was a troublesome concern for the company. The situation was aggravated by the fact that many of these important positions were in remote OG&E service areas where it was already a challenge to recruit personnel.

Creating a Pipeline to Address Future Workforce Needs

OG&E needed a strategy to identify and train individuals who could fill these key positions. The company knew it would need well-prepared candidates to step into these important jobs as they came open, but didn't know how to identify them.

Eugene Jenkins, leader of training, Environmental and Member Development for OG&E, was one of those at the utility who sought to fill this void. "Many universities have eliminated power programs, and so we found ourselves needing to put something together to address this problem. That's when we learned about the Virtual High School model," said Jenkins.

An early supporter of innovative strategies for building skills within the workforce, OG&E was a founding member of the Energy Providers Coalition for Education (EPCE) (epceonline.org) an industry group launched in 2001 to develop, sponsor, and promote industry-driven, standardized, quality online learning programs to meet the workforce needs of the energy industry.

In 2007, EPCE's managing partner, the Council for Adult and Experiential Learning (CAEL), received funding from the Xcel Energy Foundation and a Metro Denver WIRED grant to create a program model to reach into local high schools and attract and prepare students to enter careers in the energy industry. CAEL partnered with two education providers to deliver online courses. Virtual High School (govhs.org) is a non-profit collaboration of schools across the United States and has been a leader in online learning development in high schools since the mid-1990s. Bismarck State College has served the energy industry for over 30 years and since 2001 has partnered with CAEL and EPCE to offer online energy programs designed for and by the industry.

As OG&E searched for ways to create a pipeline for its future workforce needs, this virtual high school model seemed to be the right investment for the company to ensure that, as its existing employees retired, a pool of well-qualified new candidates was available to fill these vacating positions.

Objectives of the Virtual High School Program

Using EPCE as a platform, the high school program objective is to:

- Address critical employment needs in the energy industry
- Excite high school students about science, technology, energy and math
- Utilize industry specific online education
- Encourage exploration of career opportunities in the energy industry, and
- Connect students to energy-related college programs

The Online Feature was Appealing

The Virtual High School Program curriculum is delivered online, like all of EPCE's curricula, and is jointly developed by education partners and representatives from EPCE. This online feature was appealing to OG&E.

"It was important to us that the energy industry had input into the development of these courses—they are the most current and tie the whole industry together. The

courses go beyond simply providing foundational skills, and that made a difference for us as we were considering how to implement a high school initiative," says Jenkins.

The Program Components

OG&E's Virtual High School Program identifies high school students early in their junior year. After

completing a 500-word essay explaining why they wish to participate in the program and taking part in an interview with OG&E representatives, students who are selected enroll in an online math class in the second semester of their junior year. They enroll in two additional online courses in their senior year before completing the program.

Mathematics of Electricity - Careers in Electric Power (VHS): Designed to develop algebra and higher level mathematics skills using real-world electrical power industry activities and problems. Introduces high school students to career opportunities in the electrical power industry. Students receive elective high school credit for this 15-week online semester course. This course is taken during the spring semester of their junior year.

Introduction to the Electric Power Industry (BSC): Designed to familiarize students with the electric power industry, including the history, creation, development, and business structure of the industry. Three semester college credit course. This course is taken during the fall semester of their senior year.

Industrial Aptitude Test Preparation (BSC): Designed to expose students to the types of questions presented in industry pre-employment aptitude exams. Non-credit college course. This course is taken during the spring semester of their senior year.

Students Engage in Hands-on and On-the-Job Learning

In addition to the online courses, OG&E students will engage in hands-on learning, an important component of the program. The OG&E Summer Power Camp will increase the students' awareness of the energy industry. Students will be invited to an OG&E facility and tour different areas

“...all the senior leaders in the various business units have been supportive because they know that a well-prepared workforce doesn't come free or easy.”

of an energy plant. During the three days the students will spend on site, they will learn about the many parts and functions of a plant and will be given a team assignment to build a mock electric utility system.

When the students complete the high school program and move on to an electric power program in college, OG&E will offer them paid internships with an opportunity to do on-the-job training. The objective, of

course, is to create a career pathway for the students by sparking their interest in the energy industry, providing them with information, knowledge, and skills and encouraging them to prepare for jobs in an exciting, high potential field.

Currently OG&E is working with three high schools in their Virtual High School Program. OG&E targeted these schools because they are located in rural service areas where the company has identified key positions that must be filled. OG&E is committed to creating a diverse workforce, and these schools also meet criteria for certain levels of diversity.

“It Takes a Village” to Make It Work

It requires the commitment of a team of people from various locations within and outside OG&E to make the high school program successful. Representatives from OG&E's Human Resources and Organizational Development groups, as well as Power Supply and Transmission & Delivery, coordinate the selection and support of the program participants. Representatives from OG&E's local service areas support the students' on-site and hands-on experience throughout the course of the program, and administrators and teachers from each high school identify and encourage each student in their location. OG&E also understands that the student's and the program's success depends on the commitment of the student's family, and therefore makes every effort to engage parents in the process early on and provide accurate and timely information.

Many students and their families are interested in the Virtual High School Program because they see it as an opportunity to obtain a high quality education and secure a good job without having to leave home.

“Some have seen OG&E workers in the field in their own community and want to do what they do,” says Jenkins. “Some parents have told their children that a job with OG&E would be an excellent opportunity, which contributes to the student's interest.”

Occasionally, a student may not understand the value of an online program and the opportunity to learn about a career or an industry. “Some students are still thinking that a bricks and mortar education is their only option, but the local high school administrators and teachers are doing a great job of promoting the value of this program and its online component. Students start getting it when

they see their peers enjoying the experience and getting excited about a career in electric power,” says Jenkins.

In addition to the commitment from the OG&E team, CAEL (www.CAEL.org) provides overall project management, including support services for the OG&E Virtual High School program. This involves coordination with OG&E, VHS and the local high schools to connect and educate high school students with high quality online courses that combine career awareness, math concepts applied in real-world electrical power industry assignments, and industry orientation.

The Next Phase: Targeting the Middle School

OG&E’s next step in the development of its Virtual High School Program is to move into area middle schools and bring awareness to the students even earlier in their educational experience. OG&E hopes that by the time students get to high school they have a better understanding of career opportunities in the energy industry.

OG&E’s Commitment: A Smart Investment

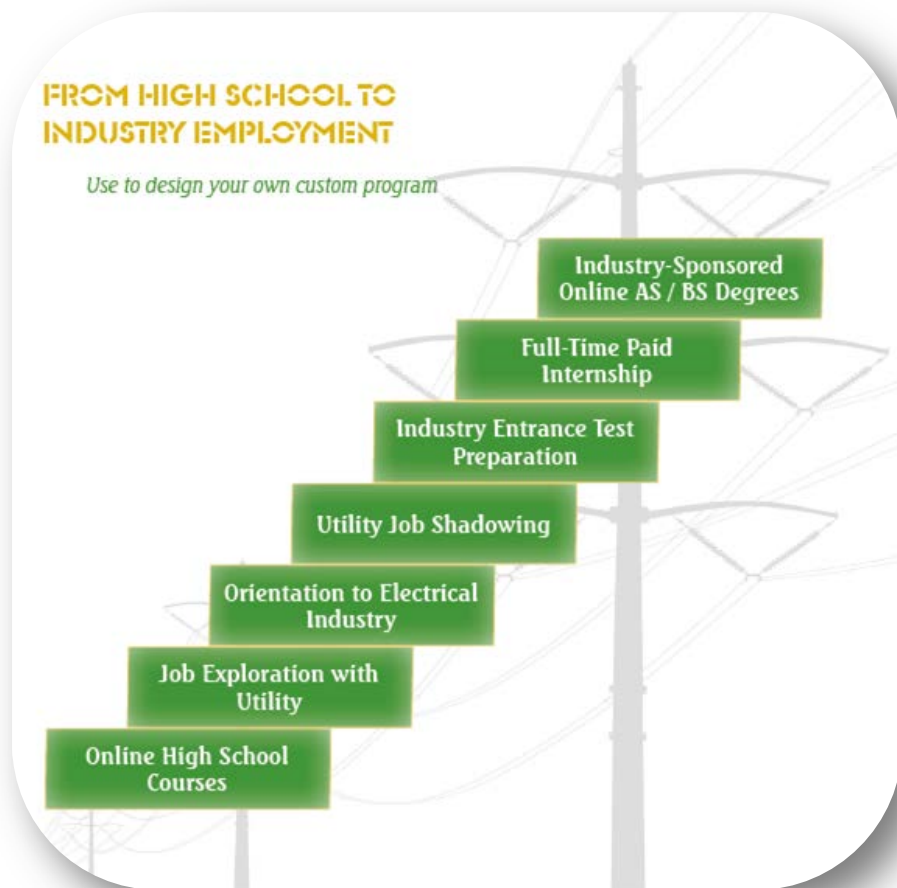
“OGE has made a significant investment in our Virtual High School Program,” Jenkins acknowledges. “We won’t be able to see the return on our investment until a student becomes a full-time employee, but OG&E is willing to make this investment for the payback of having qualified candidates in the future,” he says. “It may be difficult to predict exactly what the return on our investment will be, but we believe it will be high because students who go through the high school program and on into college energy programs won’t require as much training once they are hired.”

When students successfully complete the program, they are evaluated for an opportunity to receive a full scholarship to pursue an energy-related college degree.

Despite this commitment by the company, students make no reciprocal commitment to OG&E. There are no

strings attached to the scholarships. “Transparency is important,” says Eugene Jenkins. “We think this is worth our investment, even if some students don’t choose to work with us.”

There has been a lot of positive exposure for the program in the communities where students are participating, which been an added bonus for OG&E. “Local newspapers have published stories about our



program, and this has in turn created goodwill within the community. It is an important part of our long-term workforce recruitment and development strategy,” says Jenkins

To learn more about the various training, certificate, and degree programs for energy industry careers, and for enrollment information, visit www.epceonline.org.