TEACHERS, OTHER WORKERS DESPERATELY NEEDED
By Representative Kyle Hilbert, Oklahoma House District 29

Evidence of a workforce shortage is everywhere. Placing an online order to finish Christmas shopping, I was notified the company could no longer give an exact shipping date due to workforce and supply chain issues. Unfortunately, this problem is bigger than possibly not getting a family member’s Christmas present delivered before Dec. 25.

This workforce shortage is affecting our health care, students in our classrooms and many other sectors of society. We must get a handle on this if we want to thrive and make Oklahoma the top-10 state we all believe it can become.

The Legislature can start by looking at three critical areas where shortages existed pre-pandemic: nursing, teaching and engineering.

Nursing goes without saying. Every person in this country is aware of the shortage and the challenges it has caused. During multiple spikes in the pandemic, there were Oklahoma hospitals that had physical bed space yet were unable to take additional patients because they lacked staff. The bright side is that based on public testimony at our American Rescue Plan Act Health & Human Services hearings, we have enough students interested in nursing to address this shortage. We just don’t currently have the capacity at our postsecondary institutions to train them all.

Annually, Oklahoma is graduating only half as many students in our colleges of education as we have teachers retiring. This is according to a recent Legislative Office of Fiscal Transparency report. Simultaneously, only half of these graduates are staying in the profession more than five years. With our colleges of education graduates meeting only 25% of the demand five years post-graduation, our K-12 education system cannot possibly function without alternative and emergency certified teachers. It is imperative that we support alternative and emergency certified teachers while also increasing the number of education graduates.

Within the last decade the aerospace sector surpassed all but oil and gas to become the second largest industry in Oklahoma. This diversification of our state’s economy has been a goal of Oklahoma legislators for several generations now. However, the energy and aerospace industries – as well as many others – are going to have a difficult time growing in our state if we do not have adequate numbers of engineering graduates from Oklahoma universities. As a state we must do a better job of not only increasing interest in STEM careers, but also of providing tutoring and other services so that all students with an interest and ability to be engineers have the tools necessary to get across the finish line.

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Wind technicians are in high demand, and the need is growing at a very fast pace. Northern Oklahoma College has partnered with Enel Green Power, Oklahoma’s second-largest wind operator, to address this need by establishing the new wind turbine technician program at NOC, helping to meet the workforce needs of a growing industry in the state. Enel has established a scholarship to enable students to pursue a wind energy career and provided program development funding, as well as support for exploratory activities for youth.

Graduates of the NOC wind turbine technician program will be qualified for work as wind turbine service technicians, by far the fastest-growing occupation in Oklahoma with 68% projected growth from 2020-2030. With the shift of the country’s energy to renewable sources, wind power will continue for a long time to be an important industry.

Enel Green Power representatives coordinated with college officials for over three years to re-establish the wind energy program at NOC. Enel has pledged $69,000 in funding through the 2023 academic year. The company assisted in curriculum development, recruited and helped fund a program instructor, connected students with mentors, and has facilitated instructional activities such as a virtual wind turbine tour. Enel has provided funding for youth wind energy competitions and a statewide youth wind camp. They also provided support for NOC’s successful NASNTI grant proposal.

Oklahoma has enjoyed the benefits of Enel Green Power for over 10 years. Enel Green Power’s Oklahoma portfolio exceeds $3 billion in investment, with the creation of over 130 long-term jobs. NOC is proud to be a partner with Enel as they bring clean energy and high paying jobs to Oklahoma.

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There are certainly other shortage areas that could be addressed – IT jobs, plumbers, truck drivers, etc. – but tackling these first three is a good start. A quality health care workforce is essential to provide the quality of life necessary for our citizens. Without enough skilled K-12 educators to properly train the next generation, it makes addressing all other shortage areas all but impossible. Without enough engineers, our state will not be able to become the top-10 state we strive to be. These problems are not unique to Oklahoma, but that doesn’t mean we cannot come up with unique solutions to address them.

In closing, I will share a quote from my good friend Majority Floor Leader Jon Echols: “No one is dying because we don’t have enough political science graduates. But they are due to a lack of nurses.”

OSRHE LEGISLATIVE AGENDA
ONENET: RESEARCH NETWORK PROVIDES INCREASED ACCESS

Thanks to new connections to Oklahoma’s research network, smaller universities such as the University of Science and Arts of Oklahoma (Science & Arts) now have access to supercomputing resources across the state, allowing for a quicker computation of data and new opportunities for research initiatives.

In the fall, Science & Arts connected to the OneOklahoma Friction Free Network (OFFN) through a National Science Foundation (NSF) grant awarded to the Oklahoma State Regents for Higher Education and OneNet. OFFN is a 10 and 100 Gbps research network that provides higher education institutions with a dedicated internet route that is much faster than traditional internet highways.

The new connection opened doors for Science & Arts faculty and students to access supercomputing resources at Oral Roberts University (ORU), which was connected to OFFN in 2019 through a previous NSF grant award.

With the new OFFN connection, Science & Arts’ Associate Professor of Chemistry Dr. Dany Doughan requested use of ORU’s Titan supercomputer to conduct potential energy surface calculations of a multifunctional organic molecule and transfer the data at high-speed between the data transfer nodes (DTNs) on their OFFN connection network.

“The OFFN network allows for a quick transfer of the large set of molecular configurations to ORU’s Titan. The supercomputer speeds up the calculations and the OFFN connection sends them to Science & Arts,” said Doughan. “Without the OFFN connection, the data transfer between the two institutions would take a lot longer, which would impede the progress of the data analysis process.”

Doughan is leveraging his research in chemistry with the supercomputer to change certain aspects of pharmaceutical industry processes. Prior to utilizing the supercomputer, researching the potential energy surface of a multifunctional organic molecule would be a very slow and computationally taxing process run on a single machine. Due to the advanced computation required to successfully complete this project, Doughan put the research on hiatus for an extended time. Science & Arts' new connection to OFFN changed that timeline.

“This collaboration between ORU and Science & Arts is greatly enhanced by the OFFN network. From its inception, Titan has hosted external, non-ORU users. Dr. Doughan joins a diverse set of active external users of Titan,” said Dr. Stephen Wheat, ORU Professor of Computer Science. “Titan is readily available for additional external users from Oklahoma and regional academic institutions.”

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OTC, ECU Teacher Recruitment Partnership

During the 2020-21 academic year, East Central University (ECU) was awarded a collegiate grant from the State Regents’ Oklahoma Teacher Connection (OTC) to begin a program known as Recruiting Tigers to Teach (RTT). RTT targets undecided majors as potential students for teacher education and provides support for current pre-service teachers.

During the first RTT open house in fall 2020, kinesiology student Sebastian Cifuentes stopped by the event and inquired about becoming an educator through the alternative certification pathway. Sebastian graduated in December 2021 with a bachelor’s degree in kinesiology, and has already been hired to teach middle school and high school Spanish for a school system outside of Ardmore.

“I am thankful and grateful for the people that I have met along my journey to become a teacher. I know I was born to be a coach and an instructor. I want to influence and leave an impact on the next generation,” said Sebastian.

“This program, which the State Regents so graciously funded, is making a difference for ECU students interested in learning more about what it takes to become a teacher,” said Dr. Jessica Koch, ECU RTT. “Sebastian is just one example of this!”

“This program represents the commitment and dedication of OTC and its partners in recruiting bright, effective practitioners to Oklahoma classrooms,” said Dr. Goldie Thompson, OSRHE Assistant Vice Chancellor of Teacher Preparation and Special Programs. “Our hope is to change the educational landscape by supporting programs that elevate the teaching profession, improve teaching and learning, and provide a pipeline of future educators that represent the gold standard of preparation and effectiveness.”

OCAP: Student Loan Repayment Success

Since March 2020, most federal student loan payments have been on pause due to relief efforts through the Coronavirus Aid, Relief and Economic Security (CARES) Act. The U.S. Department of Education recently announced that the payment pause and interest waiver will be extended through May 1, 2022. This means borrowers with federal student loans need to begin preparing to restart the repayment process.

Ready Set Repay, the student loan management initiative of the Oklahoma College Assistance Program (OCAP), works with student loan borrowers and Oklahoma higher education institutions to help students make smart borrowing decisions and successfully repay their student loans.

The website, ReadySetRepay.org, provides information and tools for each stage of the student loan lifecycle, including borrowers who are currently in school, borrowers who just withdrew from school or graduated, borrowers who are currently in repayment, borrowers who’ve fallen behind in their payments, and borrowers with loans in default status who want to get back on track.

Ready Set Repay also provides a wide selection of educational resources, including publications like Borrow Smart from the Start (available in English and Spanish); RSR Rundown, a series of short videos covering key student loan related topics; frequently asked questions; student loan repayment tips; and interactive calculators.

As federal student loan payments resume and borrowers work toward successful repayment, it’s important to work collaboratively with the loan servicer to determine which repayment plan will best serve their current financial situation and help them meet their long-term goals. It’s also important to be proactive and reach out for help at the first sign they may have trouble making payments. To learn more about managing and successfully repaying student loans, visit ReadySetRepay.org.

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MORE THAN HALF of the top 100 critical occupations in Oklahoma (2019-2025) require a postsecondary degree.

Citizens with Bachelor’s Degree or Higher: Oklahoma & Surrounding States

SOURCE: U.S. Census Bureau, 2019 ACS 1-Year Estimates