

STEM PREPARES STUDENTS

cience, Technology, Engineering, and Math, or STEM — no longer a buzzword, but a way of life.

Schools are still finding ways to add STEM into their class curriculum. Linwood Starling, a teacher at Pine Forest High School, did so with a Bright Ideas grant and is giving his students a lot more options for study.

"I have been teaching 15 years, the last nine years I have been with Cumberland County Schools, Dissecting a sheep kidney to particularly Pine Forest High," he said. "Prior to that, I taught at a community college."



compare muscular outlines and how organ systems work together.

Being in public education, Starling realized how much better learning was when students had more hands-on opportunities. Students would have the ability to see and use several concepts for a goal, giving them a more real-world learning experience.

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However, those hands-on opportunities tend to require money that isn't always in the budget. And teachers are looking for ways to put materials in the classroom more than ever.

"I heard about Bright Ideas grants through an email from our district's grant coordinator," said Starling. "I think I might have applied before ... but this was my first time receiving a Bright Ideas grant."

He wrote his grant for 26 items to get students more involved, including a thin man chart, a digestion biokit, a neulog graphic display bundle, and more. The grant totaled over \$2,300 in classroom supplies to improve lessons.

"I was actually surprised when I found out that I received this grant, as I know grants are always a longshot, and with

A student doing a little hands-on work.

so many people applying with such amazing ideas," he said. "It was like being a small child and going to a large toy store, as I knew that my students would have the same feeling, when we begin doing more labs and activities with the new equipment."

Once the equipment arrived, it was all hands-on deck.

"It was a quick introduction since as soon as the materials arrived, my students began to put them into use with activities. I like for my students to dive head first into their learning because this is how the real world works most of the time," said Starling. "My students have loved the new equipment and like I said, it gives them more of an opportunity."

With STEM being such a part of today's careers, the ability to have the experiences

that Starling is providing his students with helps them reach their fullest potential.

"The resources and equipment have given my lessons a more hands-on collaborative learning approach," he said. "I have the ability to challenge my students with more real-world learning opportunities, which allows them to tie in our objectives with things they will see around

them and even on the news. It helps to break down the walls in the classroom, giving my students freedom for their learning abilities."

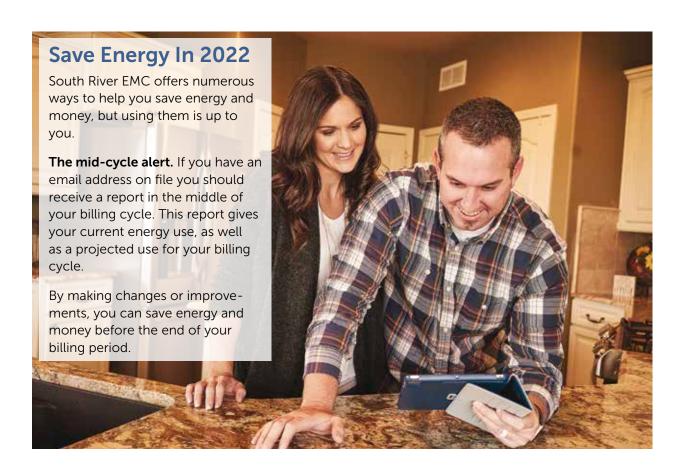
It has also given rise to interest in different career pathways that students may have not considered otherwise. And students can get even more exposure if they attend the Academy of Technology, where they focus on Internet technology and computers, or the Academy of Emergency Medicine, which focuses on nursing and other healthcare fields

"I have seen an increase in the overall scores during testing because hands-on learning allows the students to retain more information in ways that just memorizing data and objectives do not," said Starling. "But it's not only on test scores, that you can see the results, we are now able to have classroom discussions where you can see the students' full understanding of the material and how they refer back and relate the discussion to the lab or activity."

And it won't stop there, Starling is always looking for new ways to incorporate STEM topics and resources into his classroom.

If interested in learning about Bright Ideas grants at South River EMC, visit sremc.com/bright-ideas or email connections@sremc.com. You can also visit the North Carolina Bright Ideas web site at ncbrightideas.com.

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GUESS WHAT'S BACK? BASKETBALL CAMP

his year, South River EMC will have a chance for current fifth and sixth graders to apply for the Touchstone Energy Basketball camps offered at NC State and UNC-Chapel Hill.

The camp opportunity gives boys and girls a unique experience to attend basketball camp on one of two of the state's largest college campuses.

Students statewide are encouraged to apply for one of 50 all-expenses-paid scholarships to attend the Carolina Basketball Camp at the University of North Carolina at Chapel Hill and the Wolfpack Women's Basketball Academy at North Carolina State University in Raleigh. Both camps are typically held in June.

The overnight camps are held in the summer, and campers work closely with coaches and players to develop fundamental skills, helping them perform and excel both on and off the court.

Campers must:

- Be a rising sixth or seventh grader. This means the student should currently be in fifth or sixth grade.
- Attend a school in the Cooperative service area.
- Have permission from a parent or quardian to attend. An information sheet must be signed.
- Provide their own transportation to and from camp.

Winners will attend the camps courtesy of South River EMC. The Cooperative funds one scholarship to each camp.

Applications are scored on academics, extracurricular activities and an essay that must accompany the application. The application period runs from January 2 to March 31.

Eligible students interested in the scholarship can contact the Cooperative at 910.892.8071 or download an application from sremc.com/basketball-camps.



NEW YEAR, NEW GRADES

new year, means it is time for another chance at the 'Give Us An A" program.

The program recognizes students who achieve at least one A on their most recent report card. Simply make a copy of the report card and send it to:

South River EMC "Give Us An A" PO Box 931 Dunn, NC 28335

Or email it to: connections@ sremc.com.

You must include the member's name, address, South River EMC account number and daytime telephone number. Report cards will not be accepted without this information.

The drawing is held for students achieving at least one A on their report card, and 15 names will be drawn to receive a \$25 gift card.

The program is open to students who are members, or children of members, of South River EMC.



Don't miss an opportunity to celebrate good grades. Report cards should be submitted by close of business February 8.

INTERESTED IN POLITICS? A program for high school students

o you have a high schooler interested in government and its inner workings? If so, South River EMC has an opportunity for your student to learn, which also will look good on college applications.

The Youth Legislative Assembly is an opportunity for students ages 14-18 in grades 9-12 to get an inside look at the world of state politics.

The event, which takes place at the General Assembly in Raleigh, is a three-day, two-night look into how government works. Students who attend are selected for committees or positions in the student general assembly as they follow a bill from the point of proposal, debate and final vote.

The Cooperative is offering one scholarship to this event, which will take place April 8-10. The scholarship includes hotel, T-shirt, and meals.

Attire for the event is professional clothing for the daytime events and casual for most evenings.

Parents or guardians are responsible for transportation to



and from the event.

All transportation to and from the assembly will be handled by Youth Legislative Assembly staff.

South River EMC will accept applications online at sremc.com/YLA until February 15.

For more information, please contact South River EMC at connections@sremc.com.

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YOUR 2022 ANNUAL MEETING

lans for the 2022 Annual Meeting of Members are underway.

With such a well attended virtual meeting in 2021, the plan is to continue with the 2022 Annual Meeting virtually.

The meeting is planned for Thursday, April 21, so mark your calendars. Attendees will once

again receive a \$10 bill credit, as well as being entered to win a door prize bill credit.

What better way to join the Annual Meeting than from your own home, or patio?



HOW RIGHT-OF-WAY CLEARING HELPS YOU

outh River EMC's Rightof-Way, or ROW, program is important to the reliability and safety of electric service to Cooperative members.

ROW is a strip of land owned by another party where utilities place their facilities. The utilities must be given access to this land and as such, are responsible to maintain the area to ensure the facilities are clear of limbs, branches and general foliage found growing on and into power lines.

Currently, South River EMC has a three-year rotation of trimming vegetation along the 3,211 miles of overhead line, which includes 122 miles of high-powered transmission lines, which give our 46,000 members electricity.

South River EMC periodically trims trees to keep them from growing into the power lines. This not only improves reliability, but safety as well. Although we make great effort to keep branches out of power lines, it is important that before climbing any tree, you first inspect the area to ensure there are no power lines anywhere near the branches.

In fact, the Cooperative is required to cut 15 feet of clearance on either side of the electric pole, 30 feet of clearance total.

Power lines deliver electricity from substations to your home. When lights blink, this may be due to a branch or limb bumping the wire. There have also been trees that grow so close to energized electric lines, that it burns the leaves. This could cause a fire, so these branches and limbs need to be cut back.



The main focus in cutting is to clear the lines of any issues, and that does not always mean a beautiful product is left behind. The Cooperative will cut it in order to prevent future growth, however. South River EMC is not responsible for stump removal.

When it comes to clean up, the Cooperative is responsible for cleaning maintained lawn areas, which means, if a tree is cut in your front lawn, where you obviously have flowers planted, it will be picked up. However, if it is a wooded area, with no discernible clearing, the Cooperative might leave the cuttings there.

In short, the Cooperative does what is deemed necessary to provide reliable electric service.

Please be careful what you plant and where you plant it. The Arbor Day Society has some great information on their website, arborday.org.

ENERGY smarts



Heating And Cooling For Less?

How you heat and cool your home plays a part in your energy costs, but so does the age of your system, the efficiency of it, the efficiency of your home overall, and your thermostat settings.

That's a lot of factors at play, so take control of the ones you can and help keep yourself comfortable for maybe a little less money each month.

There's the type of system, be it an air source heat pump, a geothermal heat pump or a ductless mini-split heat pump. Each system has its strengths and weaknesses, so do your research and find the one that is going to work best for your home.

Your system's age contributes in that the older a system is, the more energy it tends to use. The same can be said for the most efficient systems 15 years down the line. By being

prepared to purchase a new system when your current one begins to have trouble, or starts costing more money to run, can help you save.

Efficiency, measured by the seasonal energy efficiency ratio, or SEER, rating in warmer climates, measures the cooling capacity for the unit. The higher the number, for example 17 SEER, the more efficient the model is, which helps you to save energy and money. When in the market for a new unit, look for a higher rated SEER.

Home efficiency is also important, because if you have leaks in your home, the air you are paying to heat or cool it, is getting out. Make sure insulation isn't patchy, and that weather stripping is complete and not split and broken. Caulking, another part of weatherization, should not be cracked, and should be present to prevent air infiltration.

As for thermostat settings, keep them consistent and around 68 degrees in the winter. That means anytime your home temperature falls below 68 degrees, your unit will come on to make that difference up. The higher you have a thermostat set in the winter the more your system will run. A lower setting in the winter not only helps you save energy, but also money.

Heating and cooling is the biggest part of your electric bill each month. By picking a more efficient unit, making some improvements, and setting and forgetting your thermostat, you can be comfortable while saving.

For details on rebates offered by South River EMC, visit sremc.com/energy-starheating-cooling or call 910.892.8071 x 2222.

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New Year, New Appliances?

Maybe it wasn't the plan, but it is what happened. Sure, you want a good deal, but what's better than an Energy Star certified appliance?

The price tag might be a little higher, however, an Energy Star appliance can make that up in energy savings. Appliances must undergo rigorous testing, and show that they save money while using no proprietary technology, in order to receive the Energy Star.

So, what does that mean? It means your Energy Star certified refrigerator is saving you nine percent each and every day.

Meanwhile an Energy Star certified clothes washer uses 25 percent less energy and

33 percent less water; dryers, meanwhile, use some 20 percent less energy. A little higher in purchase cost, but that's made up in energy savings.

South River EMC offers a bill credit on Energy Star certified appliances. For details, visit sremc.com/energy-starappliances, or call 910.892.8071 x 2153.

A Word On Space Heaters

Many people use portable space heaters to heat their entire home, which can take a toll on energy bills. The truth is, whether you should use one really depends on your home's efficiency and energy needs.

If you're using a space heater to compensate for problems in your home, like inadequate insulation, drafty windows and exterior doors, or an inefficient heating system, space heaters are not a practical solution.

Your best bet is to improve the overall efficiency of your home. If you're on a tight budget, caulking and weather stripping around windows and exterior doors is a low-cost, easy way to save energy. Depending on your home size, adding insulation can be a great next step. Loose fill insulation typically costs around \$1+ per square foot. Insulation upgrades and weatherization practices are eligible for rebates from South River EMC.

Remember in addition to safety concerns, space heaters can greatly increase your energy bills if used improperly.

By taking proactive energy-saving measures you can reduce your heating and cooling bills for years to come.

For details on energy efficient upgrades and the rebate offers available, visit sremc.com/ insulation-weatherization or call 910.892.8071 x 2222.



What A HERO Means For You

The high efficiency residential option, or HERO home, is some 30 percent more efficient than homes built to code.

This HERO alternative requires slightly better insulation, fenestration, air sealing, equipment, and lighting packages to deliver a home built tighter from the ground up.

There are two ways to achieve this HERO rating:

• The Prescriptive Path. A straightforward but inflexible option, it involves complying fully with a list of specific requirements for things like insulation, lighting, window

U-factors, whole house tightness and duct leakage testing, among other things.

• The Performance Path. A more flexible option, it requires an energy cost analysis as proof that the home being built will have energy costs less than or equal to that same home built to prescriptive requirements. Higher efficiency equipment will not help you, because the HERO Code is focused almost solely on improvements in the thermal enclosure.

If this is something you're interested in learning more about visit energycodes.gov, South

River EMC also offers several rebates on HERO homes, as follows:

Contractors who build a new HERO certified home that receives electricity from South River EMC, are eligible to receive a \$400 rebate.

Members who move into a new HERO certified home served by South River EMC are eligible to receive a \$200 rebate.

For details on the rebate and program requirements, visit sremc.com/hero-program or call 910.892.8071 x 2153.

Water Heating Thoughts Before Purchase

South River EMC offers rebates on two types of water heating, heat pump and solar.

These options can be two of the most efficient for homeowners and here's why:

Heat pump water heaters use electricity to move heat from one place to another instead of generating it directly, which means they can be 2-3 times more efficient than standard water heaters.

A heat pump water heater pulls heat from the surrounding air and transfers it, at a higher temperature, to heat water

in a storage tank. These units require installation in locations that remain in the 40-90-degree range year-round and provide at least 1,000 cubic feet of space around the water heater. You'll want to make sure your installer has worked with heat pump water heaters before.

Meanwhile, solar water heating can be used in any climate, and the fuel used, the sun, is free. There are several options for systems such as active or passive, direct or indirect, and more. You want to make sure you have a good solar resource, and that you use enough hot water to make an effective

purchase. You will want to ensure there are no building covenants, since solar collectors are typically located on the roof. And you're not free from electric water heating costs, it is recommended to have an electric water heater back-up, for those cloudy days. Check with installers to see what options they give you for your home if considering solar, and make sure they are not trying to oversell you on a system, compare pricing.

For details on water heater rebates visit sremc.com/ energy-efficient-water-heating or call 910.892.8071 x 2153



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