

Fall 2019



# Clinton High School Career Complex

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**Dr. Bill Hardin**

**Director**

In August, we welcomed four new faces to the Career Complex. Trey and Catherine Bruce are a husband-wife duo that came on board as two new instructors. Mr. Bruce oversees our Information Technology program and Chef Catherine is our new Culinary Arts instructor. Both of these people are doing an outstanding job delivering instruction and are quickly learning how to navigate the finer details of Career-Technical classes.

Meghan Davis was welcomed as our new CTE Counselor and Ali Comley now serves as our Student Services Coordinator. While this is only my third year as the CTE Director for our district, it is obvious how much we directors rely on people in these two positions. Both Ms. Davis and Ms. Comley are eager to learn and are great additions to our faculty and staff.

On behalf of our CTE faculty I would like to express our appreciation to our community and district leadership for their willingness to make Career-Technical programs a priority. With the passing of the bond issue last year and the progress of new construction underway at this time, we will soon transition into our new home at Clinton High School and take one step closer to making Career Academies a reality for students. The deeper dive into curriculum from the perspective of multiple disciplines will forge the process that prepares our students for careers beyond the high school experience.

We frequently welcome visitors at the Career Complex. Not long ago a CTE director from another district came to visit the Career Complex and had specific questions about our new Advanced Manufacturing program. Just last week Clinton High School hosted a regional meeting for CTE Directors from across the state and we shared information regarding current and future programs we want to offer. Many compliments were given to our district and it is easy to see how blessed we are compared to the needs in other parts of the state.

We invite interested business partners to come see first-hand what we see on a daily basis: students are engaged and excited to participate in work-based learning activities and are exposed to real-life work experiences. Through our CTE programs students are allowed to define and interpret their own passion for a specific career pathway. As they say in the marketing world, this really is a "priceless" opportunity!

It is a great day to be a Clinton Arrow! And it is a great day to be in Career-Technical education! Thank you, again, for your continued support.

Automotive Technology is a very active and highly acclaimed course at Clinton High School Career Complex. Both the first and second year students learn a great deal more about how cars work each day they work. The second year class prevalently works on the more complex projects while the first year is still focusing on the basics. It is always an exciting day when the students work on the challenging projects and complete them with success.

In the first year class, the students first learn all of the basics on the many different automotive systems, such as: brake systems, starting systems, charging systems, engine stroke system, a/c systems, and many more. They get a taste of actually working on these systems by being given minor jobs in the shop. The second year class usually works on the more challenging projects that take more concentration and more ingenuity to complete correctly. Some of these projects include rebuilding engine top ends, rebuilding transmissions, replacing complete brake systems, and diagnosing problems that were unable to be done by other shops.

Each student who enters the automotive technology class, does not leave without the know how to tackle a majority of the problems that come up, though this also relies on the will of the student. From years past and years to come, the automotive technology class at Clinton High School is a very influential and very important class that is a good addition to the bragging rights of the City of Clinton.





Career Pathways Experience students have had a busy semester! We started our year with helpful guest speakers from Get2College. They put my students on a timeline to college and told them what they should be doing each month to prepare for the application process for acceptance to school and scholarships.

Our first unit of study was Workplace Safety. Mr. Tim Shanks, former Deputy Chief with Clinton Fire Department, taught students about first aid/safety, how to use an Epi pen and tourniquet, and hands-on CPR techniques. Some students became CPR Certified. MS Dept. of Transportation brought in Impaired/Distracted Driving Simulators right before Labor Day; along with their "drunk" goggles and obstacle course. Students learned about the dangers of texting while driving and driving while impaired. Officer Blisset then came to our classroom and spoke of workplace dangers and how to avoid being a victim.

Since then, students have created scholarship resumes and completed the Job Acquisition unit. This intensive unit focuses on everything to do with obtaining a job: business resume, cover letters, various types of interviews (complete with a panel interview!), thank you letters/followup, and professional dress. We are now in our Business Etiquette unit and will conclude this with a field trip in December. Students will have the opportunity to meet with Governor and First Lady Bryant at the Governor's Mansion, tour the MS Museum of Art and practice their dining etiquette skills with a formal lunch provided by Chef Bruce Cain at The Old Capitol Inn.

In between all of this, students still found time to plan and facilitate an amazing service project for Brookdale Senior Living home in October! Monies raised from the fall fundraiser provided candy for 80 residents in a "reverse" trick or treat event. Students dressed in costume and visited with the residents, while passing out candy door to door. Plans are being made to provide 1940's musical entertainment at the January family night dinner.

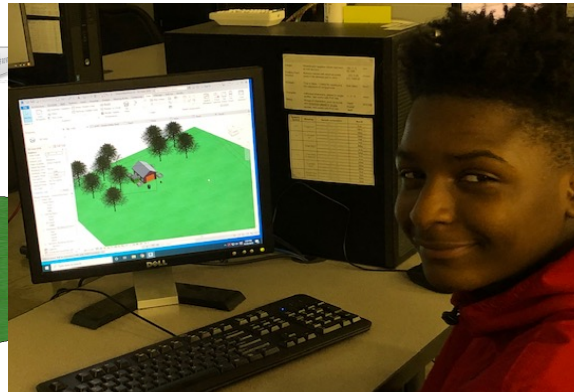


Civil Engineering and Architecture is a Project Lead the Way course in which students learn important aspects of building and site design and development. Students apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software.

Students spent the first nine weeks of school learning about the history of civil engineering and architecture along with the basic principles of each. Careers in each field were introduced, and students researched their desired career along with the educational path that will lead to finding success in the field of civil engineering or architecture. Students also studied different architectural styles and constructed a model of a chosen style. =

Students recently began working with 3D modeling software called AutoDesk Revit to create designs. They will use this software throughout the year to create and test residential and commercial designs. Areas we will focus on in our designs are building materials and systems, structural design, storm water management, site design, utilities services, cost estimation, energy efficiency, and building codes. Students will also gain field experience in operating land surveying equipment and performing soil tests.

The main focus of our upcoming lessons is to design a Habitat for Humanity home. Students will learn how to develop a sustainable design with building code restrictions while also meeting the need of the client.



Computer Science Principles (CSP) is offered through the Project Lead The Way curriculum and is the 4<sup>th</sup> class Clinton High School Career Complex offers students in the engineering pathway.

So far this school year we have worked with two types of block programming. Using Scratch, students developed a simple web-based game, and using MIT App Inventor students developed an Android app while going through an AGILE design process.

Currently we are focused on learning syntax and writing code in Python, increasing in complexity and difficulty almost every time we meet. We also spend time talking about efficiency of algorithms, comparing student work. We also spend time learning to troubleshoot errors that occur when the code is compiled or when we notice errors in the real time debugger.

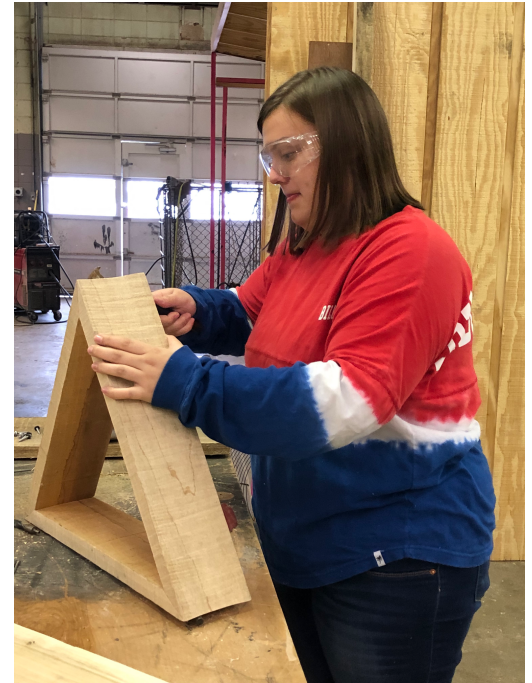
Coming up soon we will be using Python to investigate images, object-oriented libraries, GUIs, cyber security, data gathering and analysis, and intelligent design.



Students in Mr. Dyar's classes have been busy this year working on customized projects as well as preparing to take the NCCER national certification assessment in the Spring. When the sound of saws and planers are humming in the shop, you can always find students smiling and engaged, applying building trades principles to whatever their minds can create.

Students in the Construction class are first-year students and students in the Carpentry class are second year completers in their program. Advanced Manufacturing was also added as a new course this year. This new pathway is designed as a two-year program based on dual credit courses offered through the Industrial Maintenance program at Hinds Community College in Raymond. Elective credits may be earned by high school graduates and applied toward appropriate programs of study at Hinds Community College and selective four-year universities.

One additional feature of the Advanced Manufacturing class is the alignment of these courses to an apprenticeship model at Hinds Community College in partnership with the newly established Continental Tire company beginning production soon in the Clinton area. Should our two-year completers choose to apply, and, if accepted into the apprenticeship program, an early start to their career may be found with this promising industry. Students at Clinton High School are beginning to learn of this opportunity and it is our desire to have enough interested students to make this a stand-alone pathway at the Career Complex.





This year in Culinary Arts, we have 39 students producing delicious bites from our kitchen each week. 28 students are in the Culinary Arts 1 program, and so far this year we have covered Kitchen Safety, Sanitation, Equipment, Measuring & Culinary Math. Each of these units includes not only professional culinary instruction, but also teaches basic life skills that the students can use in any field. The 11 students in the Culinary Arts 2 program have covered Dairy, Salads, Garnishing, Meat, Seafood & Poultry. They are especially excited about the Dessert & Baking unit that we will dive into after Thanksgiving! Every Friday, the students prepare food & beverages for the Arrow Snack Shack, which we sell to other students in the Career Complex. This is a great way for them

to get first-hand experience at running a retail business. We are learning marketing, costing, profit margins, and sales skills. It has been an amazing year so far and we can't wait to see the students creativity and hard work come to life in the kitchen as the year progresses!





We have done a lot in Digital Media Technology. One of the many projects that Digital Media 1 students have designed is a logo for the Culinary Arts program. One of the many projects that Digital Media 2 students have created is a scary movie for Halloween. We have gone on several field trips this semester. We visited It's Vinyl Yall in September. In October we visited WLBT News Channel 3 and the MS Arts Museum. Earlier this month we visited Mississippi Public Broadcasting and Studio Chane.



Digital Media Technology 1 encompasses the foundation and skills necessary in the digital media industry. Content such as safety, ethical issues, photography, graphic design, print production, animation, and audio production is taught. Students learn to use Photoshop, Logic Pro X, Motion and Final Cut Pro. All content in the course emphasizes real-world, hands-on practices.

In Digital Media Technology 2, students utilize skills learned in Digital Media 1 to learn new software plus advance skills already learned. Digital Media II focuses on the process of video production and editing as well as career opportunities in audio and video technology.

We have learned and visited a lot of places this semester. I look forward to the rest of the year. This school year is going to be a very successful year.





First year Health Science Core students started the year off learning about careers in health care, safety and infection control. Students visited Clinton Fire Station 2 where fire chief, Chris White, taught students how to safely use a fire extinguisher. After a unit in infection control and sterile technique, students practiced correctly donning personal protective equipment, and practicing sterile technique. Students were also involved in a surgical lab where they practiced sterile surgical techniques during the annual PUMPKINECTOMY. Students will soon start units on Anatomy and Physiology and basic health care skills.

The Healthcare & Clinical Services (HC&CS) students have gotten off to a fabulous start this year. They are in the mist of learning about all the exciting areas of Emergency Medical Services that includes: Careers, CPR, First Aid and Vital Signs. Students started their Job Shadow Project with Merit Health Central at the end of October. Clinton's HC&CS students have worked really hard for this opportunity, and are excited to see the day-to-day activities of each professional they encounter in the "real world" of healthcare.

Forty-one Health Science students have joined Health Occupations Students of America (HOSA) this year. HOSA Club members have decided to dedicate their time and resources doing community service projects throughout the year. So far, HOSA Club members have organized and managed a Sock Drive called Socktober for the month of October. Students worked together getting their classmates and the community involved in donating new socks that will be given to local shelters to help keep the homeless warm this winter. Later this year our HOSA Club plans to participate with other clubs at Clinton High School to raise funds for Blair Batson Children's Hospital and to provide gifts for those in need at Christmas.



Everyone believes that kids these days already have an intuitive understanding of how computers and technology work. One of my goals this year is to stretch my students' understanding of how computers work beyond the basics of how to use an app. So far this semester, the first-year students are learning all about computers and hardware: the parts, the ports and the peripherals. They each have a workstation in the shop where they are working through all of the extra computers we have, in order to get them to a stable, functioning condition. This process allows them to exercise in the lab what they are learning in class, in order to troubleshoot each computer's issue so they can fix it, just as they would in a real-world scenario. As the year progresses, they will be introduced to other kinds of technologies such as digital cameras, 3-D printers, etc.

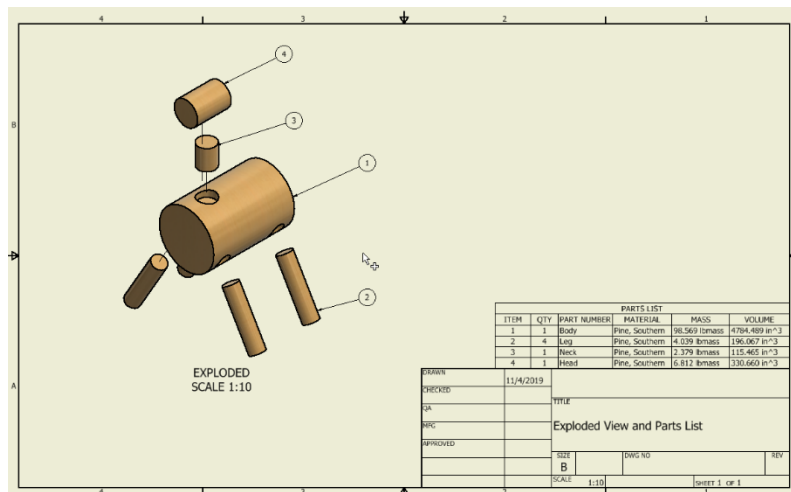
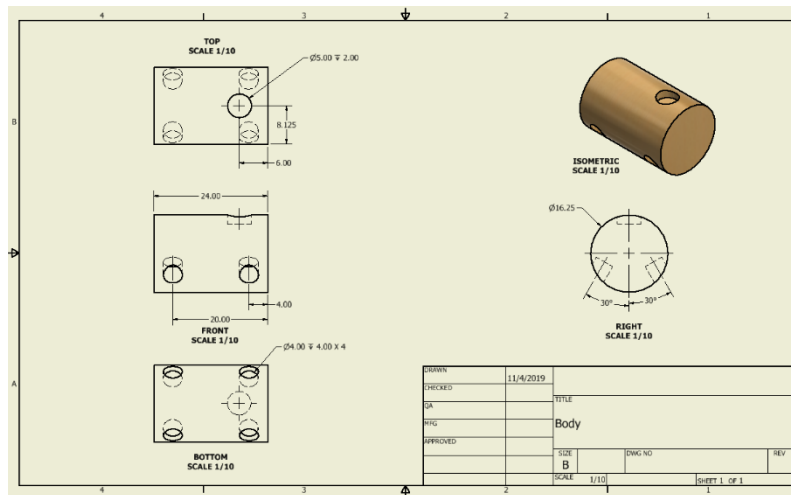
The second-year students are learning all about networking – from the bits on the wire to the different network topologies to the routing and switching to the server configuration. We have spent some time in the shop building a network, but I am also trying something different this year. I am trying to teach them how to use a virtual network configuration program, so that each student has the opportunity to type in all of the commands and configuration settings from the router to the server. Then we are going to implement all of that knowledge in the shop with real equipment. We just finished making our own network cables, which was a fun and interesting activity. (it's not as simple as it seems!) It has been a fun experience getting to know the students and try to get them interested in all aspects of information technology.



We are currently in the high school level foundational course Introduction to Engineering Design. Students have been introduced to the engineering profession and an engineering design process. Students have and will continue to use that process to progress from completing structured activities to solving open-ended projects and problems that require them to develop planning individually or in a group, documentation in their engineering notebooks, communication, and other professional skills.

So far, my students have and will continue to develop skill in technical representation (2D and 3D technical drawings) and documentation of design solutions according to accepted technical standards. They have and will continue to use current 3D design and modeling software (Autodesk Inventor) to represent and communicate solutions. We have learned computational methods that are commonly used in engineering problem solving, including statistical analysis in Microsoft Excel and mathematical modeling.

We just finished a design project in which students designed and concept modeled a piece of yard art from scrap logs, limbs, and plywood. Here a student shows their knowledge of dimensioning and technical drawings:







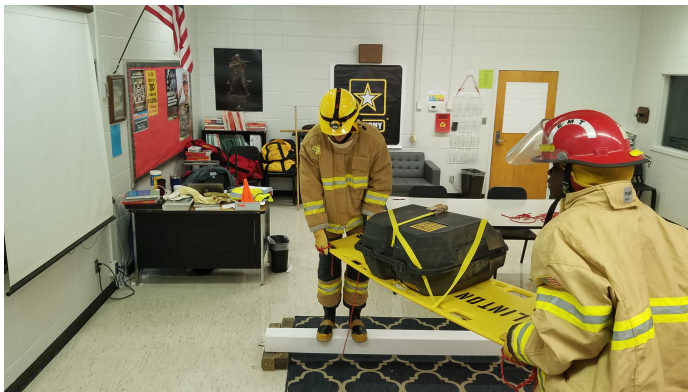
The 25 first year Law and Public Safety students have been very busy learning new skills involving all aspects of law and law enforcement so far this year. As an overview, this course is oriented toward a timeline that begins with a crime, the investigation of that crime, an arrest, and the judicial processes that will follow leading to conviction and incarceration. As such, this semester we began with a study of various misdemeanor

and felony crimes, leading into the investigative portion of the timeline, to include the rights of citizens under the Bill of Rights, crime scene processing, and suspect and witness interviews. Concurrently, we are studying DUI investigations with the help of two Clinton Police Department law enforcement officers. In addition to guest speakers, a major benefit of the Clinton Career Complex over typical academic disciplines is our ability to intersperse our curriculum with visits to relevant outside professionals and their organizations. Consequently, we have had field trips to the Mississippi Civil Rights Museum (Constitutional Law), Camp Shelby (Leadership), Mississippi Forensics Laboratory (Forensic Science and Crime Scenes) and the Central Mississippi Correction Facility (Corrections). We are looking forward to what the Spring semester will bring!



It has been an exciting year so far for the 20 second year students in Law and Public Safety. This year the students started out studying the Community Emergency Response Team (CERT) training and certification program. This program lays out a foundation of skills in leadership, Emergency Management, Emergency Medicine, Fire Services, and provides the students with the skills and knowledge to be safe before and during a disaster, and to help families and communities after a disaster.

Beyond the CERT program second year students have also studied Emergency Management and how the Incident Command System applies across all fields of Law and Public Safety. The students recently began the unit on the fire services and will be exposed to the skills and knowledge of a Firefighter I and Firefighter II.



A key part of the Law and Public Safety curriculum is exposing students to the professionals and facilities in the career field. Thus far, we have taken two field trips one to Camp Shelby to experience a military post, and one to the State Crime Lab to learn more about the forensic science of crime scene investigations. Later this semester we will be

going to the State Fire Academy on 4 December, and in January we are planning a trip to the AMR ambulance service dispatch center as we focus on Emergency Medicine.

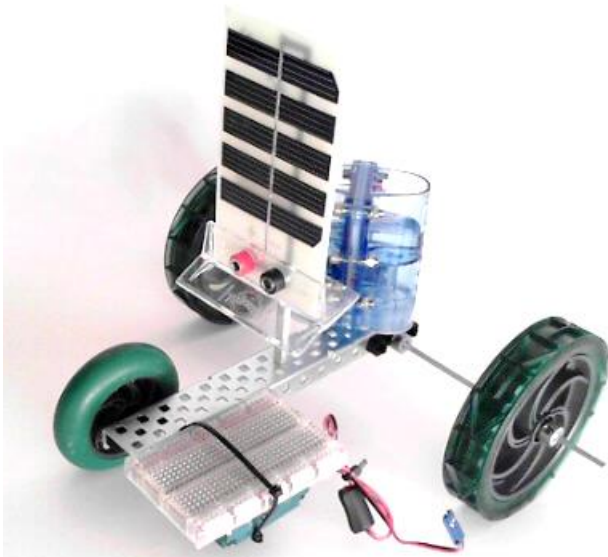
Next semester looks to be just as exciting; the students will be studying all the skills and knowledge associated with a certified Emergency Medical Responder. We will be continuing our study of the Fire Services, and we will also be looking at the Public and Private Security career field.





Principles of Engineering (POE) is a foundation course of the Project Lead The Way high school engineering pathway. This course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. This course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

Through problems that engage and challenge, my students have and will explore a broad range of engineering topics this semester, including mechanisms, the strength of materials and structures, automation, and kinematics. One of the first things we did this semester was gain enough knowledge of simple machines to eventually construct a compound machine that could perform a specified task. Students also built a hydrogen powered vehicle to explore alternative fuel sources. We are about to begin calculating bridge trusses which lead us into an exciting bridge building (and destroying) project. We will spend a large amount of time building, programming, and troubleshooting robots/automated machines.



We have learned a lot this semester through hands-on, project based learning and my students are very excited about what they get to do in my class. One of my biggest goals for my students this semester was to hone their problem solving skills/critical thinking and they have definitely risen to the occasion.

We have learned a lot so far this semester and are looking forward to the rest of the year!



Teacher Academy has had a great fall semester. Our program has 17 first year students and 10 second year students. First year students have been placed with teachers at Clinton Park. Second year students have been placed with teachers at Northside or Eastside. The students' favorite part of Teacher Academy is the time spent in the elementary classrooms. They have also enjoyed chaperoning some of the fall field trips.

In September, we had the opportunity to visit the Civil Rights Museum and Medgar Evers house in Jackson. This experience helped the students to better understand some of the history of education we had been studying in class.

We look forward to exciting learning experiences in the spring semester!



Hello from your Student Services Coordinator. I am new this year and excited to be here at the Career Complex! I have taught in the district for the past sixteen years, first at Clinton Junior High and then at Clinton High School. My first semester here at the Career Complex has been full of new experiences and people. I spent the beginning of the year getting to know the students that have IEP's, 504's, LEP's, and observing and working with students that are considered At-Risk and Nontraditional.

I have also spent time with each first year student giving the TABE (Test of Adult Basic Education) test. This quick online test helps identify problem areas with students that may require my attention. After getting the results, I return to the classroom to review results and spend time getting to know the students by doing activities like learning styles inventory and going over career clusters. These activities give students an idea of what careers are out there based on their learning styles and likes or dislikes.

My lab, which is located in Room 9 at the Career Complex, is used for many reasons. It may be used for testing, tutoring, services accommodations, or just to chat with students about issues or problems.

When I am not in my lab, I may be observing classes or on one of the numerous field trips that occur at the Career Complex. Already this year I have had the pleasure of accompanying our students to the Nissan Plant, Camp Shelby, Medgar Evers's house, the Mississippi Civil Rights Museum, and the Central Mississippi Correctional Facility!

Please know that I am here and available to help ensure our students succeed in all that they desire to do. I am looking forward to a great second semester at the Career Complex!





We are off to a great 2019-2020 school year at the Career Complex. I am very excited about being a part of this wonderful opportunity that CTE provides to the students. CTE classes provide students with academic, technical, and employability skills that will be vital to them in choosing a college major and career.

The Career Complex will be holding the annual Fall Advisory Board Luncheon on November 20<sup>th</sup> in which Chef Bruce and her students will be providing heavy hors'd'oeuvres. This will be a great opportunity for the members to see the great things that are happening in CTE. The Counselor's Advisory Board members include: Leslie Herrin and Dexter Wilcher—Clinton Junior High School, Heather Norton—Sumner Hill Junior High School, Katelon Adcock, Sarah Dill, Dana Wright—Clinton High School, Chandra Walker—MDE, Reggie Harris and Jolyn Stone—Hinds Community College, and Michael Wright—Mississippi College.

I have spent a good bit of the semester talking with both Year 1 and Year 2 Classes. Mrs. Comley, Student Services Coordinator, and myself have presented ACT Information, Learning Strategies Inventories, and Career Cluster Surveys to Year 1 classes. I have also visited most Year 2 classes and presented the presentation "College ABC's". This presentation provides students with a variety of information from college entrance requirements to financial aid information. We have also had the opportunity to have a visit from Hinds Community College Recruiter, Reggie Harris.

September and October have also been filled with activities that serve to address the personal and social needs of students. In September we addressed Suicide and Bully Prevention with providing the students with "Good Deeds" to take and share. During the month of October we asked the students to support "Unity Day" by wearing Orange and providing us with their ideas of how they can create a bully free school. The pictures below show these activities.

