As the COVID-19 pandemic affected the way of our lives, both educators and students have been facing myriads of challenges in teaching and learning environment leading to several adaptations and transformations. Students’ learning and safety have been the focus of conversations in all levels of education since the beginning of the pandemic. However, most WVU Tech classes were operating in-person settings, the pandemic has played an important consideration in the way WVU Tech faculty shape their classes, especially harder for engineering & science educators where demonstrations and experimentations drive students’ learning. The challenges we faced during this difficult time forced us explore ways to keep active learning environment alive in the classroom. We, as educators from three different departments of WVU Tech College of Engineering & Sciences utilized various teaching techniques and computer tools in order to keep engaging students in the classroom. Through this paper, we will share our experiences on the specifics of the challenges, successes and lessons learned while implementing the active learning during the pandemic time. In previous years’ WVAS annual meetings, we presented about positive aspects of implementing effective teaching techniques including “active learning,” “demonstration-based learning” and recently “Embedding career guidance” and “Developing career ready skills.” We hope to share and learn greatly from each other through this West Virginia community of educators- WVAS.