



AWARE AIMS TO TEACH SEVERE WEATHER AND STEM CAREER AWARENESS TO MIDDLE AND HIGH SCHOOL STUDENTS THROUGH AUTHENTIC TOOLS AND STORM SIMULATIONS.

AWARE (*Advanced Weather Awareness and Response Education*) uses realistic weather data and tools to simulate natural hazards and teach storm mitigation techniques. Complex weather systems and scenarios are simplified so students can gain a conceptual understanding of the topics.

In *AWARE*, each student takes on the role of an emergency manager for a fictional region. Tornadoes, hail, floods, and wildfires ravage the area. The player must interpret weather maps and simulations to determine the best course of action to reduce damage and injuries. Students can mitigate damage through a variety of choices, such as hiring STEM professionals, building certain structures, or researching new technologies.

AWARE spans different historical eras and includes a cast of colorful characters to provide a unique and engaging gameplay experience. As they play, students gain exposure to a wide variety of tools, technologies, and STEM professions, introducing them to knowledge that they can apply in the real world.

AWARE also emphasizes resource management, as students' actions within the game may have positive and negative impacts. The player must weigh the economic and safety repercussions of their decisions, balancing a limited budget to keep the region alive and flourishing. If the player is successful in preparing for disasters while offsetting the costs of storm damages, then their citizens' trust in them increases, and they progress to the next era.

Concepts within the game connect with instruction and extended learning activities. This helps students ground their understanding of STEM topics and apply them further. Students can gauge the effectiveness of their decisions in the game tutorial, through character feedback, or by reviewing their results at the end of each storm or era. By evaluating their decisions and applying the knowledge they have gained, students can replay the game and increase their chances of success. After playing *AWARE*, students gain a solid foundation of understanding to progress into more advanced STEM careers and concepts.

To access all K20 educational games at no cost to your school, go to k20.ou.edu/getgames

