Intro/Hook:
Good afternoon, everyone. Thank you for joining us today. My name is Tanisha, and I'm excited to present a groundbreaking initiative led by our computer science students—our Cloud Workspaces project. Imagine a world where every student, regardless of the device they own, can access powerful computing resources for their educational needs. This is the vision behind Cloud Workspaces.

Key Features:
Our project centers on creating cloud-based desktop environments accessible from any device. Here's a closer look at what we've achieved so far:

1. **Inclusivity and Accessibility:** With many students bringing their own laptops to school, we've designed a solution to ensure everyone has access to necessary computing resources, regardless of their device. Using AWS and Kasm Cloud Desktops, students can access robust virtual desktops from their district-issued Chromebooks.
2. **Cost-Effective and Sustainable:** Traditional on-premise desktops are costly and quickly become outdated. By moving to cloud-based workspaces, we can significantly reduce costs over a five-year cycle. Our preliminary analysis shows that our cloud solution could save the district approximately $5,000 annually by outsourcing aging and maintenance to the cloud provider.
3. **Usage Efficiency:** We've designed our system to be highly efficient. Each server supports up to 5 user logins, with 3 active sessions per machine. This setup allows for scalable usage while managing costs effectively by automating server uptime according to demand patterns.
4. **Automated Deployment:** Our team has developed an automated setup using Terraform and AWS CLI. This system deploys AWS EC2 instances with Ubuntu Linux images, provisioning them with Kasm workspaces. This automation ensures a seamless and consistent setup for all users, enhancing reliability and reducing manual configuration efforts.

Implications:
The implications of our Cloud Workspaces project are far-reaching:

- **Enhanced Learning Experience:** Students in our Computer Science Pathway can now work on coding projects from anywhere, at any time, fostering a more flexible and inclusive learning environment.
- **Cost Savings and Efficiency:** The district can reallocate funds previously used for maintaining on-premise hardware towards other educational resources, enhancing overall efficiency.
- **Scalability:** Our cloud-based solution can easily scale to accommodate more students and classes, ensuring long-term sustainability and growth.

Future Plans and Implementation:
Looking ahead, we have several exciting plans to further enhance our Cloud Workspaces project:

1. **Scaling Up:** We plan to scale our infrastructure to support more students and additional classes, ensuring that our resources meet growing demands.
2. **Enhanced Features:** We are exploring additional features such as automated scaling during peak usage times, and integrating more advanced development tools to support a broader range of computer science activities.
3. **Feedback and Iteration:** We will continuously gather feedback from students and teachers to refine our system, ensuring it meets the evolving needs of our educational community.
4. **Broader Implementation:** Our goal is to expand this solution beyond the computer science department, making cloud-based workspaces available for other subjects and disciplines across the district.

Thank you for your attention and support. We believe that Cloud Workspaces is not just a project, but a transformative step towards a more inclusive, efficient, and scalable educational infrastructure. We look forward to your feedback and to the possibility of making this vision a reality together.