10 TELE TAKEAWAYS

1. Each TELE provides for generative activities and cooperative learning situations for students to engage in authentic, real life problem solving opportunities that incorporate knowledge from cross curricular areas.
2. Student learning takes place within the context of a meaningful environment, rather than targeting learning within skill and knowledge development in isolation.
3. Jasper and GIS incorporate authenticity by presenting opportunities that mimic those encountered by experts in similar fields of work. Students engage with the same types of content and knowledge that experts apply.
4. Each TELE integrates cooperative learning within group settings that allow for collaboration as a function of communities of inquiry to discuss, explain, and learn through interaction with peers.
5. Learners deliberately develop their repertoire of views in collaboration with others. Learners invest intellectual energy in sorting out, linking, connecting, critiquing, reconsidering, prioritizing, selecting, and organizing their ideas.
6. TELEs support inquiry pedagogy where students design solutions to problems, generate predictions, use scientific evidence to support theories or conclusions, and reconcile differences between new and prior science ideas.
7. WISE and T-GEM emphasize the importance of making thinking visible for the purposes of assessment, visualization, simulations, and making models.
8. Students develop deep, interconnected content knowledge and inquiry skills through activities that incorporate authentic scientific inquiry. Each TELE is a design framework that aims to achieve both content and process learning.
9. TELEs challenge students to engage in argumentation and reflection as they access and apply their existing knowledge when confronted with alternate points of view.
10. T-GEM utilizes simulations to elicit student ideas about a scientific phenomenon and generate trends among variables and ascertain the scope of relationships, evaluate these relationships with the simulation serving specific functions in testing, and have students return to their original ideas to modify them repeatedly.