Discovery 360 learning - innovation in the classroom -from 3D printing to drones

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Transferring knowledge today uses creative problem solving and case-based reasoning techniques for different learners. Learn-by-doing

allows students to be constructivists and build their knowledge through community experiences and exploration. Community STEM

(Science Technology Engineering and Math) events provide the forum for feedback and the context for questions. Students want a place

to build ideas and observations at the centre of their learning experience through places called Makerspaces. They can do this in the air

 $with\ videography,\ flying\ instruments,\ thermal\ imaging,\ 360\ viewing,\ and\ magnetics.\ Ideation\ allows\ students\ to\ be\ responsible\ for\ their$

own learning with teachers guiding students into new discoveries with 3D printing and drones.

Student as constructivists allow them to build 3D models with 3D printing so they can explore and study how their prototypes can

impact society. This design process builds confidence and provides better problem solving skills to enhance their observations. Failed

experiences mean learner success — students can hypothesize new discussions, ideas, and practical applications for all disciplines. The

gathering of data and information, and applying them to senses like smelling, tasting, touching, hearing, and seeing. Our traditional ways

of teaching discourages the process on inquiry-based learning. Student learners have different perspectives of the outside world. Today,

they can 360 video experience and build portfolios for career development. Drones and 3D models give the students the freedom to

advance higher in their education.