	Anchored instruction	SKI	LfU	TGEM
Goal	Students to become independent thinkers and learners. Learn to ID and define issues and problems on their own	Aid in student understanding of complex phenomena, interconnection of ideas, and application of these concepts into new phenomena or problems	Foster deep and robust conceptual understanding that students can draw on to create explanations, make predictions and argue from evidence	Enrich students' mental models through teacher designed classroom inquiries
Theoretical concepts, framework, design	Based on generative learning - situating instruction in meaningful problem-solving contexts - cooperative learning setting - scaffolding - video based format - narrative with realistic problem - generative format - embedded data design - problem complexity - pairs of related adventures	- based on knowledge integration framework - make learning accessible - make thinking visible (inquiry maps, visualizations) - learn from others - promote autonomy	- based on Learning cycle with emphasis on application of knowledge - 3 step process: motivation, knowledge construction, refinement - Motivation → create demand, elicit curiosity - Construct → observe, communication - refine → reflect, apply - inquiry based pedagogy	- mental model theory - model based learning - generate, evaluate, modify -TPCK - Places importance on teacher student and student-student interactions
Role of teacher	- facilitator - provide guidance (scaffolding) and as students get used to this method, decrease degree of scaffolding	- facilitator - can focus on groups that are struggling	- Teacher is integral in every step of this process, particularly with providing explanations of relationships that were uncovered by students during inquiry	- Teacher designed classroom inquiry - Provides guidance in inquiry and background information
Role of technology	- presentation of information in a motivating way - easier to search for embedded data - helpful for poor readers	- adaptive scaffolding - visualizations of phenomena - visualizations of ideas to allow teacher to gauge student understanding	- creates motivation - elicits curiosity (interactive media, simulation) - construct knowledge with use of investigation /simulation/reference tools - refines knowledge through recording of student activities and ideas, collaboration and presentation tools and allows students to design or construct artifacts for application of knowledge	- computer simulation - data representation - data evaluation and modification