21st Century Skills & Skylar's Run

An Alignment Guide for Educators

Today's classrooms call for more than content knowledge. Students need to think critically, adapt to new challenges, persist through difficulty, and collaborate effectively. Skylar's Run is designed to build exactly those capabilities — not through worksheets, but through dynamic, evidence-based gameplay that trains the executive function skills at the root of 21st century readiness.

21st Century Skill	Research Basis	How it is Addressed in Skylar's Run
Critical Thinking	EF (executive function)— inhibition, cognitive flexibility, working memory — underlies the ability to evaluate information and reason through problems.	Missions require players to hold rules in working memory while filtering distractors and switching tasks — directly training the cognitive processes that underlie critical thinking.
Creative Problem Solving	Cognitive flexibility is linked to divergent thinking and the ability to generate novel solutions.	Task-switching mechanics (Missions 10–12) require players to abandon a prior strategy and adopt a new one, building the mental flexibility that supports creative approaches to novel problems.
Self-Direction & Persistence	Attention and impulse control predict self-regulated learning and persistence.	Students must sustain attention and self-correct in response to feedback as missions become progressively challenging — mirroring the demands of self-regulated learning.
Communication & Collaboration	EF skills — especially impulse control — are foundational to perspective-taking and effective communication.	Attention and impulse control built through gameplay provide the cognitive prerequisite for effective collaborative and communicative tasks.
Adaptability	Cognitive flexibility is the primary EF construct associated with adapting behavior in response to changing demands.	Task-switching mid-mission while managing competing game demands trains real-time adaptability in a dynamic, engaging environment.

Skylar's Run is validated through 8 studies with 300+ users. Every mission is grounded in peer-reviewed executive function research — so the skills students build in-game translate directly to the classroom.