## Atlantis Remixed: Advancing Research into Sustainable Designs

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## Design

*Atlantis Remixed* is a 3D multi-user education platform that immerses children, ages 9-16, in educational play. *Atlantis Remixed* is the result of over a decade of research with *Quest Atlantis*. It synthesizes the theory of transformational play (Barab, Gresalfi, & Ingram-Goble, 2010), lessons learned through years of implementation inside of hundreds of classrooms, and modern video game design standards to create an educational product that can offer a sustainable and transformative impact on education systems internationally.

Atlantis Remixed allows students to investigate fully realized virtual worlds where they participate in educational adventures and narratives. Within these worlds they can create unique personas, chat with other users, interview characters, observe and manipulate systems that respond to their choices, and even create entirely new adventures and worlds. The game invites students into worlds where they act as active protagonists in narratives that situate them to acquire and execute expertise in curricular subjects—knowledge that when combined with social awareness can be used to cause significant change in the virtual spaces. By doing so, students strengthen their awareness of the connection between their identity, the knowledge they learn, and the way in which that knowledge can be used to shape the world around them (Barab, Pettyjohn, Gresalfi, Volk, & Solomou, 2011).



## Implementation

Atlantis Remixed utilizes the Unity 3D game engine to allow the latest developments in the cognitive and learning sciences to be integrated into a video game that contains industry competitive production values. Professionals from the gaming industry were brought together to work with curriculum experts with the aim of creating an experience that is visually engrossing, mechanically fluid, and academically rigorous.

One example of the curricular experiences is a language arts unit that teaches persuasive writing skills. Students are positioned as investigating reporters who must write an argumentative essay for a newspaper that will determine the fate of a village. The students must interview townsfolk and analyze complex textual sources in order to accumulate evidence for their argument. The choices the students make with each interaction with a character is preserved and reflected in that character's willingness to give the student the information they seek. While out collecting evidence, the students continually experiment with the connections between their thesis, reasons, and supporting evidence.



In addition to developing curriculum units for mathematics, science, and language arts, development has focused on iterating the design tools with the aim of releasing a powerful but simple to use toolset for user-generated content. These tools scaffold narrative construction as a motivational foundation upon which logical structures and game programming can be built. Engagement with these construction tools has the potential to be an educationally rich experience (Games, 2009). Eventually, players will earn access to increasingly complex and rich tools that they can use to modify and create the kind of spaces and narratives they experienced in their classroom.



## References

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