

institute of play

Katie Salen DRAFT

Scenarios of uses of games and the kinds of pedagogies they suggest:

Games as “engines” or authoring platforms: AUTHORING SYSTEMS

In this scenario students use games to produce an artifact, be it a game (*Gamestar Mechanic*), a mod (*Starcraft*), a video (machinima in *WOW*, the *Sims*, *Second Life*, etc.), a visual text (*Sims Family Album*), an avatar (Miis), a written text (MiLK), or a body of code (Alice, Scratch). Rubrics for evaluation of these artifacts come not from the game, but from the design domain to which the artifact is related, as well as from the kinds of understandings the artifact was produced to express. Commercial off the shelf games/web-based games can be used, as well as software platforms or virtual worlds.

Games as content: CONTENT SYSTEMS

In this scenario commercial off the shelf or other games are used to deliver understanding about a particular subject or content area. For example, students play *Sim City* to learn about urban planning, or *Civilization IV* to learn about history. When games are used this way students must be provided with opportunities for reflection on and discussion of the content in spaces external to the game in order to allow students to see the game as part of a larger body of knowledge on that subject.

Games as simulations: MANIPULATING SYSTEMS

In this scenario games are valued as dynamic systems with which students can test theories about how systems work, as well as how certain principles of dynamic systems can be observed and played out. For example, students may play *Bridge Builder* to learn about bridges as systems of engineering, or use *Soda Play* as a way to test out physics-based theories. *Animal Crossing* could be played in order to have students work with elements of a capitalist economy and theatre games can be played to have students re-enact situations or scenarios as a way to see how the system can be affected by manipulating certain elements. Simulations often include their own internal assessment measures (data) that can be used to assess student understanding of both micro and macro elements. Commercial off the shelf games can be used, as well as web-based simulation tools or downloadable software.

Games as context: TRIGGER SYSTEMS

In this scenario games are used to create an experiential context for understanding around a topic, issue, or principle that a teacher can build on. For example, a math teacher might have students play *Mafia* as a way to have them experience an ethical dilemma, or *Pictionary* as a way to introduce ideas about forms of communication. When games are used this way students must be provided with opportunities for reflection on and discussion of the content in spaces external to the game in order to allow them to see the game as part of a larger body of knowledge on that subject. Depending on the amount of time available, commercial, casual, and non-digital games can be used. This approach can be paired with the use of games as engines—students can be asked to design a game as a way to immerse themselves in research around a topic. Later learning experiences can then build on what was learned in order to build a game.

Games as technology gateway: GATEWAY SYSTEMS

In this scenario games are used as a way to give students experience with technology, whether this is learning how to use a particular piece of software or platform (i.e. learning how to use a PC or browser) or kind of technology (mobile phones, wireless devices, writing, programming). Assessment models would be based on the effectiveness of a student with a system and their ability to use the system to do what they want it to.

Games as illustration: REFLECTIVE SYSTEMS

In this scenario games are used as contexts for student reflection. For example, a teacher might ask students to play a game and then discuss the choices they made: why did they choose that avatar skin over another one? Why did they choose to attack that country and not another one? What made them uncomfortable and what were they surprised at having chosen to do? Commercial off the shelf, web-based downloadable games can be used, as well as board games.

Games as exemplars of point of view: POV SYSTEMS

In this scenario games allow students to take on certain identities and associated points of view. Students might play an RPG where they have to choose to play both a "good" and "bad" character and compare differences in strategy, choice, and values held by those characters. A teacher might ask students to use a theatre game to re-enact a familiar scenario, but told from several points of view, with the goal of each character being to shift the outcome of the scenario on their favor.

Games as Code Worlds: CODE SYSTEMS

In this scenario students use writing as the primary mechanic of game play, whether they are playing text adventures or designing or playing text-based mobile games. The emphasis here is in the use of writing as a both a mode of action and expression. Because writing itself is produced as an artifact of the game play, this writing can be assessed to capture student understanding. There is an opportunity to connect this approach to games with the introduction of a programming curriculum that might use authoring platforms like Scratch or Alice, or virtual worlds that support object creation like SL.

Games as Documentary: DOCUMENTARY SYSTEMS

In this scenario the play of a game is used as documentary evidence of student ideas/understanding. For example, students may be asked to play the *Sims* in such a way as to recreate certain social scenarios that they are interested in. Machinima or storyboarding with screenshots can be used to capture the details of the situation, which then can be used as the basis for additional discussion or reflection. Commercial off the shelf, web-based downloadable games can be used.

Games as text: IDEOLOGICAL SYSTEMS

In this scenario games are "read" as texts that express certain underlying ideologies, values, beliefs, etc. In the same way that *Uncle Tom's Cabin* can be read as an expression of the antebellum South, *Animal Crossing* can be played and analyzed as an expression of late 20th century capitalism, *Chess* can be played and analyzed as a game about territorial conflict, or *Diplomacy* as a model of the intricacies of international diplomacy. When games are used this way students must be provided with opportunities for reflection on and discussion in spaces external to the game and ideally in relation to other media. Commercial off the shelf, web-based downloadable games can be used, as well as board games and other kinds of non-digital games.

Games as text: RESEARCH SYSTEMS

In this scenario students design games as a research activity that produces material to be used in later learning experiences. Because a designer must be knowledgeable about the system he or she is designing, using game design in this way requires students to think through how their players are learning and what they need to know about the subject of the game. In this way, students not only research material to be used but also edit this material and are introduced to issues around credibility and point of view. Different kinds of research methods can be introduced as part of the work, as well.

Games as assessment: EVALUATION SYSTEMS

In this scenario students design or play games as a way to assess understanding of specific concepts or content. While games used in this way can easily be categorized as "skill and drill," the use of simulation-style games can be compelling for students and effective as a means of assessing learning. Because of the data rich nature of many digital games they are uniquely designed to record player progress, choice, and overall performance. Players

routinely look at their “stats” as a way of assessing their how well (or badly) they are doing, suggesting that assessment frameworks intended to capture 21st century learning need take into account the way games embed evaluation into their own play.