#Innovative Instructor

What this is

The Innovative Instructor is an article series (https://ctei.jhu.edu/ii) and a blog (https://ii.library.jhu.edu) related to teaching excellence at Johns Hopkins

Article categories

Best Practice

How to use technologies and apply innovative instructional methods

Pedagogy

Hopkins professors share successful strategies for teaching excellence

Technology

Information about emerging technologies, who is using them, and why you should know

For information on how to contribute to The Innovative Instructor or to read archived articles please visit:

https://ctei.jhu.edu/ii or email:

ctei@jhu.edu

About the CTEI

The Center for Teaching Excellence and Innovation partners with faculty, postdocs, and graduate students to extend instructional impact by connecting innovative teaching strategies and instructional technologies

CENTER for TEACHING EXCELLENCE & INNOVATION



Pedagogy

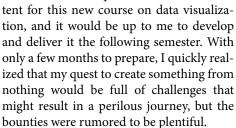
Vol. 23 | May 2023

Lessons from a Gamemaster

Reid Sczerba, Digitial Solutions Designer, CTEI, JHU

The issue

Once upon a time, just before the age of COVID-19, I was asked to teach a course for an undergraduate minor program through JHU's Center for Leadership Education. I began my journey to teaching my first course by meeting the program director for lunch. After the proposition, it became clear to me that there was sparse con-

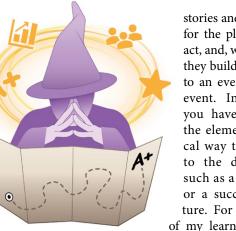




When I started to delve into the instructional design of my course including developing content, setting learning goals, and creating a syllabus, I was delighted by the discovery that there many parallels between designing a course and creating an adventure for Dungeons and Dragons (D&D). D&D is a type of role-playing game where players take on roles of fictional characters and attempt to complete a fantasy adventure designed and delivered by the Dungeon Master (I will use the term gamemaster for its broader applicability). In a D&D adventure, the gamemaster introduces the fantasy world to the players and presents challenges for them to overcome by performing actions as their characters. As a gamemaster, I realized that I had resources that would help me to structure the course, to plan activities, and to engage my students.

Learning Goals vs Plotline

One of the first parallels I found was that the learning goals provided a structure much like plot elements would provide a structure to a D&D adventure. The gamemaster tells



stories and sets the stage for the players to interact, and, with the stories, they build on each other to an eventual climatic event. In both cases, you have to sequence the elements in a logical way that builds up to the desired result such as a learning goal or a successful adventure. For instance, one of my learning goals was

to have students apply visual design principles to different types of presentations of data. I invested time up front on my course structure to ensure students knew a variety of data visualization types, could identify design principles that work for each, and had practice applying those design techniques. Ensuring your participants are adequately prepared for their true test is important, whether it be acing their final project or slaying an evil dragon.

Activities vs Encounters

Planning activities for each class felt closely related to the gamemaster's balancing act to create encounters for their players. In D&D, each player controls a character with specific abilities set by their current level. As a character gains experience, they unlock more abilities as they reach the next level. The gamemaster has to make sure that at each level, the challenge of each encounter is commensurate with the players' levels to keep them engaged. Because you don't just throw a Tarrasque at your level 1 characters. You just don't.

For many of the weeks in the course, I would highlight a topic that would span two class periods that bookended the weekend. Before the first day, there would be a reading to introduce the topic, followed by a lecture at the beginning of the first day to expand on the topic (**the background**). Then, the students would work on an activity in class, most times in groups, that utilized the concepts presented in the

introduction (an encounter). At the end of the activity, we would chat about the results from the activity and the related assignment that would be due the following week (rest and reflect). During that weekend, the students would have a short reading that was relevant to the topic and would complete their assignment (continued journey). On the second day for the topic, we would begin the class with a zero-stakes quiz that was based on the readings and mini lecture on the topic (another encounter). We then would discuss the assignment submissions in a class critique, offering feedback and best practices in a safe setting (the aftermath). The last portion of the class would expand on the topic with one last activity on the topic (gain experience).

Being a good host

Just like sitting down for a game of D&D, when teaching your class, you are welcoming students into your space. Now, it's not a space you own, but it is one in which you have control over the tone and the proceedings. As a good host, whether for a dinner party, a classroom activity, or a D&D adventure to clear out a cave of kobolds, you must be aware of how your guests are responding to the experience. In the case of D&D, that means being aware of how each player is interacting and is contributing to the

story you are building together. From the classroom perspective you should be similarly mindful of the students' engagement. You can do this not only by using summative assessments (the results from quizzes, assignments, etc.) but also formative assessments (classroom climate surveys). This can take the form of a mid-semester survey to help inform you of what the students were enjoying about the class, what could make it better, and any issues with the content that they were having trouble with.

Learning to be flexible

During a D&D adventure, your players can make decisions that you haven't planned for. This is generally a great thing because it reflects the interest of your players. There is no harm in pausing a D&D session to either quickly prepare for the new direction the players are going, or just end the session so that you can devote adequate time to preparing the details of, say, a meeting with the tyrant king. This can happen in the classroom as well (hopefully not with the tyrant king but possibly with tangential questions). Just like with a D&D adventure, one strategy that I have employed is to pause the conversation with the promise to return to it later. One of the ways that this came up in my class was through technical questions about the

software we are using. I have found that if I can't answer it in a few minutes, it is best to side-table the question in effort to stay on schedule with class time. It can also take the stress out of the moment to ensure that you're providing the best answer.

Side Quests

The concept of a Side Quest in gaming refers to an optional task to achieve a supplemental benefit for your character. I used this concept to offer extra-credit assignments that would allow the students to gain bonus points towards assignments, participation, or the final project. The Side Quests provided the opportunity for the students to reengage with the content, give them more data visualization practice, or reflect deeper on topics. The following are examples of a few of my favorite Side Quests assignments:

- "Find the Gestalt!": Students find a data visualization and describe what gestalt technics were used and where. This provided more practice identifying technics in the wild.
- "You be the Instructor!": Students
 develop up to five challenging quiz
 questions from the course content
 that had accurate answers. This
 allowed them to think deeper about
 a topic.
- "Journal of the Journey!": Students submit pages from their class notes/ sketchbook. This incentivized them to record tidbits from class that they found interesting, which gave me feedback on the parts of the course that resonated with the students.

Final thoughts

D&D helped me to pull from years of experience as a gamemaster. In the end, as long as you are thoughtfully guiding your participants/students/adventures to new heights through balanced challenges, they will all surely level up to be ready for their next adventure.

OUOTES:

"I am grateful for the way that you structured the course in a way that we would have a lot of opportunities to practice the new skills, in addition to learning about them"

"Honestly it sounds sort of silly but [my favorite part has been] how organized you were. So few professors take the time to do things like have the syllabus scheduled out with dates and maintaining individual days with what readings are due. It makes a huge difference when trying to stay on top of different classes."

"My favorite thing about this course was the activities we did in class. I felt like those allowed me to gauge the lecture materials better and allow me to comprehend the messages better by putting those concepts into practice."

Author's Background



Reid Sczerba, Digital Solutions Designer, Center for Teaching Excellence and Innovation, JHU

Reid Sczerba is the digital solutions designer at the Center for Teaching Excellence and Innovation. He provides training on a variety of educational applications, aids in educational resources development, and shares expertise on information and graphic design with faculty at the Homewood campus. He also taught for 3 semesters as a parttime instructor at WSE's Center for Leadership Education. Reid holds a BFA in Illustration and a MA in Digital Arts from Maryland Institute College of Art.