OPERAcraft: Intersections of Creative Narrative, Music, and Video Games

Katie Dredger, Ariana Wyatt, Tracy Cowden, Ivica Ico Bukvic, and Kelly Parkes

Community-sourced narrative writing performed through popular emerging technology in the form of the building video game *Minecraft* can demonstrate interdisciplinary art. OPERAcraft asks collaborators to balance the technical expertise of gaming while creatively imagining a story that appeals to children, adolescents, and young adults. Opera, gaming, theater, and composition collided in this collaborative effort that culminated with a public performance in a university theater featuring college voice majors singing an opera libretto written by high school students while *Minecraft* avatars were manipulated by the teens on a stage.

This chapter discusses the challenges and triumphs of interdisciplinary and community-sourced narrative writing using popular emerging technology in the form of the building video game *Minecraft* (Mojang, 2011). This project asked that the collaborators balance the technical expertise of an open-source game contributor while also seeing themselves as creative writers of a fantastical story that would appeal to children and young adults. Drawing from scholarship on creating opera, intersections of gaming and composition, multi-modality, mentor texts in the narrative composition process, dystopian young adult literature, and authentic audience, this project demonstrates an example of the ways that interdisciplinary work can be implemented in wide and varied ways.

English, Education, Computer Science, and Music faculty at Virginia Tech in Blacksburg, Virginia collaborated to create an opera sung by undergraduate voice majors and performed by video game avatars as puppets controlled by high school students. Adolescents in an extracurricular club created an original opera performed within *Minecraft*. Starting with Mozart’s music and five characters, OPERAcraft inspired students to create a plot, the libretto, the virtual set and the avatars. Students controlled the avatars while soloists sang the libretto (the dialogue to be sung by live musicians that told the narrative) for a live and virtual audience for a twenty-minute operatic performance.

Interdisciplinary work can be especially innovative when adolescents, college students, and faculty members collaborate to create an artistic performance for an authentic audience. In this project, high-school-aged adolescents collaborated to compose an opera libretto by writing the dialogue that would be sung.
by college voice majors. They then created the set and avatars in *Minecraft*, an interactive building game. The preparation for the live performance offered the authentic purpose for this interdisciplinary project. This chapter describes the creation of the libretto, the text for the story that was sung for the OPERAcraft performance. Two separate iterations of this project were performed, in 2013 and in 2015 (Crecente, 2014). The discussion of plot originates in the original OPERAcraft performance in 2013, *The Surface: A World Above* (OPERAcraft, 2014). Shared examples and images use the 2015 performance, *The Beacon of Mazen Mines*.

A reoccurring theme for the creation of the libretto was the recursive use of mentor texts. Mentor texts have been described as:

pieces of literature that you—both teacher and student—can return to and reread for many different purposes. They are texts to be studied and imitated. Mentor texts help students to take risks and be different writers tomorrow than they are today. It helps them to try out new strategies and formats. They should be basically books that students can relate to and can even read independently or with some support. And of course, a mentor text doesn’t have to be in the form of a book—a mentor text might be a poem, a newspaper article, song lyrics, comic strips, manuals, essays, almost anything. (Dorfmann, 2013)

The first mentor text that the student writers utilized came in the form of performed opera. After student writers viewed videotaped productions of operas, the faculty project team for OPERAcraft discussed with students the concept of a narrative as a story that has a beginning, middle and end, and that an opera specifically often tells a story that has a developed character who experiences a deeply emotional conflict that the audience can empathize with. Because the film *Les Miserables* (Bevan, Fellner, Hayward, Mackintosh, & Hooper, 2012) had recently been released, students differentiated between the musical and an opera. While this distinction is not neat, faculty simplified the concept of opera as different from musical theater to the students involved with the project. Operas were described as featuring singers with multi-octave ranges. Furthermore, operas are driven by the music. The music is complex, and emotive selections, called arias, evoke emotional response (Tommasini, 2011). Traditionally, operas tend to be lengthier than musicals when performed. The emotions of the characters are reflected in the sound and the sense of the words and music performed by the characters. Like written or performed poetry, the opera libretto affects the audience in their knowing the connotations of the words sung while responding viscerally to the visual and oral performance. Opera audience members do not have to even know the language of the opera to be affected by the emotions depicted
The faculty of the project group shared the qualities of several operas with excerpts from *The Magic Flute* (Mozart & Schikaneder, 1791; Opera Nerd, 2014); *Tosca* (Puccini et al., 1905); and *The Marriage of Figaro* (Mozart & Da Ponte, 1786) that included emotive elements and conflict that is resolved. The music reflected the emotions of the characters as they struggled to resolve a conflict. Students then understood the constraints of our particular performance, that it would have to be relatively short to fit time constraints. Within those restraints, however, students wanted to explore a range of emotions within their collaborative Minecraft Opera.

**Theoretical Framework**

This project draws from scholarship on creating opera, intersections of gaming and composition, multi-modality, mentor texts, authentic audience, and New Literacies Theory. When working in such interdisciplinary and intersecting spaces, it is more effective to be inclusive in theoretical perspectives because in the siloed nature of academia inclusivity can be a key to broadening our views of our fields in concert with varied disciplines. In the creation of opera, story and music combine like sound and substance of poetry in order to evoke emotion from an audience while simultaneously telling a story (Carter & Greenwald, 2014; Hensher, 1995; Leung & Leung, 2010; Orero & Matamala, 2007). Within the scholarship of gaming and composition, art and story are inextricably linked (Alexander, 2009; Lane, 2013; Sabatino, 2014). Sandbox games spearheaded by the unprecedented success of *Minecraft* (Duncan, 2011) offer unique opportunities in arts, education, and engineering. Users are often self-motivated to create their roleplaying environments, and even produce entire movies, an activity also known as machinima (Morris, Kelland, & Lloyd, 2005.). By engaging in OPERAcraft, students were given an opportunity to seamlessly traverse a transdisciplinary landscape while being driven and motivated by a single focal aspirational goal: the production of a virtual opera (Lane, 2013; Paper Bull Arts, 2012; Sherman, 2006). Multimodality, defined as words, pictures, movement, and/or sound makes for composition that meets the comfort levels of readers of today, especially adolescents versed in internet and screen compositions (Wright, 2004; Yancy, 2004). In order to support the move from consumer of these texts to producer, we wished to aid students in viewing these screen-based texts as...
models for emulation instead of just entertainment. As such, this project provided scaffolds to adolescent writers in varied ways using traditional opera, musical theater, and young adult literature as mentor texts to aid in the creation of an original story (Ehmann & Gayer, 2009; McWorter, 2006). This illustrates the ways that conflicts and tribulations of the human experience are universal, while allowing for young writers to shape a personal and timely narrative (Dorfmann, 2013; Gallagher, 2011; Kittle, 2008; Park, 2005). When students have choice and authenticity, writing matters, and in our case, the writing illustrated creative authenticity (Elbow, 1998, 2000; Gallagher, 2006; Harvey & Daniels, 2009). Finally, this project finds that intersections of music, computers, and composition embrace the dispositions of New Literacies Theory (Knobel & Lankshear, 2007; Szymanski, 2009). Students jumped into a participatory space where they can experiment and innovate, tinkering in collaboration with others as they value sharing of ideas over ownership and distributed over centralized expertise. These frameworks intersect in OPERAcraft.

Theme

In the composition process, the faculty project team began with the concept of theme. The discussion of theme surfaced in the viewing of the mentor texts. Members of the research team asked the student participants what the artists may have been wanting to share through their creation, and this discussion naturally evolved into a discussion of theme. The students initiated this discussion and suggested that opera was doing more than just telling a story. In order to elicit an emotional response to the universal plight of human existence, students agreed on some universal themes that could be explored. The theme of a literary work is often simplified to students as a lesson that the text teaches readers. Because we focused on mentor texts, established writings that are used as exemplars for student writers to model, we cited classic literature that students have read in school and current films that students may have seen, including Shakespeare’s *Romeo and Juliet* (2012). Students cited the theme of *Star Wars* (Kurtz & Lucas, 1977) as an example that good triumphs over evil. In order to move beyond simplistic themes, we prompted students to think of platitudes often quoted to youth that they questioned now that they were well into adolescence. These platitudes that students rejected are found in Table 5.1.

When teaching students to write a thoughtful libretto with an affecting theme, students wanted to challenge these platitudes. The students did not verbalize a connection to the school curricular writing activities, but they used skills that a writing teacher could hone, like finding nuance in a sophisticated essay writing activity. Instead of asking students to move into choosing a theme for their text, we simply
used this discussion of challenging simplified platitudes as a brainstorming start. We then talked about conflicts found in narrative.

The writing process in this project was fluid and recursive, especially when writing with a group of eight adolescents. While we wanted the libretto to be original, we wanted all students to have a stake in its creation. We often explained that this is just one way to write a narrative as a group. We also had to contend with time and scheduling constraints, so a decision to move from universal platitudes to conflicts and then to characters was an individual one made by the English Educator on the OPERAcraft team.

### Table 5.1. Simplistic platitudes rejected by students

<table>
<thead>
<tr>
<th>Platitudes offered to youth that student participants wanted to challenge.</th>
</tr>
</thead>
<tbody>
<tr>
<td>People are inherently good.</td>
</tr>
<tr>
<td>Only the good die young.</td>
</tr>
<tr>
<td>One person can change the world.</td>
</tr>
<tr>
<td>If nothing is worth dying for, nothing is worth living for.</td>
</tr>
</tbody>
</table>

**Coming to Consensus on Conflict**

After a mini-lecture on various themes found in literary works, students were most intrigued by the idea of Person vs. Society, Person vs. Person, or Person vs. Supernatural. For the Person vs. Society plot, we referred to Twain’s *Adventures of Huckleberry Finn* (1884) as a mentor text, because the participants had read this novel in school. Person vs. Person conflict was explained by referencing Katniss vs. other tributes in Collins’ *The Hunger Games* (2008). A great example of a Person vs. Supernatural mentor text that students referenced was *Terminator* (Cameron & Hurd, 1984). While they were motivated to create with *Minecraft*, they rejected any conflict having to do with machines, which was interesting given the dystopian setting and the tool of *Minecraft* that was used. Person vs. Nature and Self was also of little interest to the students involved. Consensus, as observed by the team members on the project, was surprisingly congenial. Students shared equally and showed genuine respect for other ideas and were particularly eager to take risks with ideas. When one idea was preferred over another, no one expressed any angst. Ultimately it seemed that animated passion won out; when one student shared that he had been thinking about his ideas during the week, in time outside of the scheduled after-school activities, the student members acquiesced to his idea of a main character fighting against an autocratic ruler while attempting to reach a better world. A key connection to fostering a creative space, in or outside of the classroom, may be in offering time for students to share with each other.
Plot

In order to develop the plot, the English Educator (faculty) presented first a tried and true plot that was quickly rejected by the group. This plot fits many movies and books preferred by mainstream society and was simplified in the following short statement, “Boy meets, loses, reunites with girl.” Those of us on the research team were relieved that this plot was so quickly rejected and were refreshed to know that the students on this project, knowing it was a short narrative, still wanted to challenge the expectations of the viewers. We continued to be encouraged and enlightened by the fresh thinking and insights that students brought to the discussion.

We then looked to Kylene Beers (2003), past president of National Council of Teachers of English (NCTE) and prolific author of great teaching ideas, and used her teaching strategy called “Somebody Wanted but So.” We challenged students to create a narrative with this template. Who will the audience care about? What will the main character(s) want? What will get in the way, creating the conflict? How will the conflict be resolved? Because the students had already explored and brainstormed ideas for a conflict, we recognized that an authority figure would be an antagonist in opposition to the protagonist, not yet determined.

Table 5.2. Original Proposed Plots by Student Participants

<table>
<thead>
<tr>
<th>Author</th>
<th>Somebody</th>
<th>Wanted</th>
<th>But</th>
<th>So</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Good guy (25 yrs old)</td>
<td>To fight evil</td>
<td>Bad guy is evil</td>
<td>He fights and wins (or not)</td>
</tr>
<tr>
<td>#2</td>
<td>Girl (17)</td>
<td>experience</td>
<td>Walled by constraints of society</td>
<td>She escapes (or not)</td>
</tr>
<tr>
<td>#3</td>
<td>Adult male</td>
<td>To join family after a split society</td>
<td>Father is assassinated</td>
<td>Wondering is worse than knowing</td>
</tr>
<tr>
<td>#4</td>
<td>Young male</td>
<td>to join family</td>
<td>Is prevented</td>
<td>carries out quest (no resolution to quest suggested)</td>
</tr>
<tr>
<td>#5</td>
<td>Young adult</td>
<td>to be good</td>
<td>Does bad to achieve good</td>
<td>Is left with a choice (unresolved)</td>
</tr>
<tr>
<td>#6</td>
<td>Young male</td>
<td>a better society</td>
<td>Government is not good</td>
<td>He struggles for power (unresolved)</td>
</tr>
</tbody>
</table>

During this composition process, where students sat in desks arranged in a large u-shape facing the English educator, the student libretto authors tossed out ideas that were cataloged on large poster paper. Any idea verbalized was written
down, and the students were reminded that the revision process is recursive, messy, and long, and that ideas can and would change until we moved into the publication stage of the revision process.

In this part of the writing process, we challenged each student libretto author to take a spiral notebook and quickly brainstorm a proposed plot. This gave opportunities to each member of the writing team to have quiet time to pursue their own thinking on paper, and allowed the faculty facilitators to assess involvement of all of the students in the creative process of libretto composition. Table 5.2 reflects each student participant’s thoughts early in the process of the narrative development. Of the eight participants, six were present for the work time that day. The parenthetical commentary found in the “so” column reflects the brainstormed idea but shows that the student author was not locked into any particular outcome of the narrative at that point in the composition process.

**Characters**

When it was time to choose characters a few weeks after we had discussed plot, project participants were reminded that time was a factor in their final opera, and that too many characters could complicate the way that the audience would comprehend the final performance. They agreed on five characters, the main characters and protagonist, who would be a late adolescent female, her brother, an early adolescent, The Evil Emperor and antagonist, and two evil cronies, a male and female. These are shown in Table 5.3.

**Table 5.3. Characters in the libretto**

| Characters’ Proposed Names (was final choice on name) |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Protagonist     | Brother         | Evil Emperor    | Crony Male      | Crony Female    |
| Evangeline      | Marcus          | Xavier          | Buzz            | Nyssa           |
| Maude           | Phillip         | Alias           | Steve           | Lilith          |
| Tatiana         | Finnick         |                 | Gregor          |                 |
| Piper           |                 |                 | Mortimer        | Regina          |

The “somebody” of our plot template was clearly inspired by the female heroine of dystopian books and film today, including Katniss of *The Hunger Games* (Collins, 2008) and Tris of *Divergent* (Roth, 2011). The character of Regina, the main character, was played by the student authors sitting in a semi-circle below the screen, shown in Figure 5.1.
Setting

Setting seemed to organically come up in our discussion of plot. The idea of an underworld and an “overworld” was planted by one of the students in the discussion of proposed plot and grew. These conversations went on from week to week, and the students came to the OPERAcraft project with background knowledge in *Minecraft* that they referenced when planning the setting for the opera within the *Minecraft* platform. As a favorite part of the composition process, students built the set in *Minecraft* (Figure 5.2).

Music

Music entered the conversation during this phase of the libretto composition. For practical reasons, the music educators needed to find appropriate operas to model for style based on the voices of the characters in the libretto. The students suggested that Regina be soprano; that Marcus and Xavier be tenors; and that Mortimer and Lilith be bass and alto, respectively. The voices of the performers, college voice majors, would depict the characterization work of the student authors. This was important for the movement of a short story told to children and tweens (Figure 5.3). In the next step of the composition process, the students decided that Regina, Mortimer, and Lilith would be in their twenties, Emperor Xavier would be in his mid fifties, and Marcus would be sixteen.
Figure 5.2. This depicts a scene from the live performance. Opera singers are at top right. The secondary students, authors of the libretto in the foreground, control characters on screen in real time. The screen displayed the set created from Minecraft (photo courtesy of Susan Bland).

Figure 5.3. College voice majors, pictures on the right, perform the libretto written by the high school students in the 2015 performance, The Beacon of Mazen Mines (photo courtesy of Susan Bland).
Group Composition

After a week where students were asked to reflect on the plot of the *Minecraft* Opera, students convened and openly shared ideas. Two students in particular had concrete ideas about how the plot could progress. After a mini-lecture on the pitfalls and realities of over-simplified plot diagrams often shared in secondary classrooms, one student participant shared his vision for the OPERAcraft libretto plot. Because of time constraints, the story needed to neatly end as a short story or television sitcom might.

Christopher (a pseudonym) narrated a loose story of a female protagonist and her younger brother who find themselves in a post-apocalyptic world without parents. They sense that their parents were taken from the world somehow but are still alive in another alternate place. They plead with the leader of their world, but are thwarted when they realize that the emperor is not benevolent but is actually a former enemy of their parents. They recognize that they have to reach a tower in a fabulous fight in order to escape their world and reunite with their parents.

The other student participants agree that this is a great first draft for their opera libretto. The agreed-upon conflicts would be Regina vs. her society and Regina vs. herself, as she would have to make a hard decision that could involve personal sacrifice as she struggles to fight the society, this underworld in which she finds herself orphaned. When the English Educator asked students about the setting, they agreed that it would be dark, run-down, and futuristic, indicative of a dismal place that needs to be escaped.

Plot Development

Because composition is a somewhat cyclical, sometimes messy process of brainstorming, revision, and negotiations, we returned at this time to moving the initial broad outline of the plot into more developed movement of sequences of events. Students broke into pairs in order to develop the plot after agreeing upon eight distinctive scenes. These scenes were summarized by the group as shown in Table 5.4.

<table>
<thead>
<tr>
<th>Scene</th>
<th>Early Draft Synopsis Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>Siblings enter and sing about longing be with parents in upperworld.</td>
</tr>
<tr>
<td>#2</td>
<td>Emperor makes speech to public but then in private reveals malevolent motives to cronies.</td>
</tr>
<tr>
<td>#3</td>
<td>Siblings approach emperor for help.</td>
</tr>
<tr>
<td>#4</td>
<td>Siblings express fear and doubt to each other.</td>
</tr>
<tr>
<td>#5</td>
<td>Regina shares internal conflict. Cronies overhear.</td>
</tr>
<tr>
<td>#6</td>
<td>Cronies reveal Regina’s motives to Emperor.</td>
</tr>
<tr>
<td>#7</td>
<td>Climax at Tower. Emperor dies? Sibling(s) fall?</td>
</tr>
<tr>
<td>#8</td>
<td>Regina sacrifices herself? Marcus dies? Marcus is saved and goes to light/hope of upper world?</td>
</tr>
</tbody>
</table>
The students agreed that scene five would include a classic operatic aria, and seemed to be confident with the plot until the final resolution. At this point, the music educators chose excerpts from existing Mozart operas, including solos, duets, and ensembles, that could potentially be manipulated to fit the atmosphere and emotive elements that the students wanted to create in each scene. The excerpts were presented to the students, often with multiple options for each scene, and a lively discussion ensued in which the students made the final decisions about which music suited each scene best. Students then broke into pairs to draft the dialogue of the libretto and then met with music and English Education faculty to revise diction and to match dialogue to syllabic and melodic pieces. The dialogue had to do more than offer characterization; it had to quickly move the plot in such a short performance. In order to support the audience, closed captioning was provided during the opera (Figure 5.4). Students were clearly not as interested in this part of the project, wanting to move back to the creation of the set in *Minecraft*, but they respectfully paired with faculty to match rests in the melody and different voices to the existing Mozart opera excerpts. In order to mediate these competing desires and needs, we started and ended each work session with a short review of the vision of the final product; that seemed to keep the students working on their least favorite parts of the project, even if only in short increments of about thirty minutes.

![Figure 5.4. Closed captioning of the libretto text depicted within the Minecraft game at the live performance (photo courtesy of Susan Bland).](image-url)
After a summer away from the project, OPERAcraft members reconvened to do final edits of the libretto before publication and performance. Within the performance, the authors of the libretto narrative were the characters in the sense that they sat behind the computers and moved their characters’ avatars. Student singers sang the libretto while a music faculty member played piano in accompaniment in real time, as the authors manipulated their characters within the Minecraft set. Audience members watched the screen but could also see the authors as they sat at their computers, as well as the singers and accompanist. The small performance venue was full and the twenty-minute performance was warmly received. After the performance, the creators of this art form answered audience questions in the live blackbox. In these performances, OPERAcraft became a way for multiple generations in one community to show the intersections of composition, music, computing, educating, entertaining, and connecting.

Implications

This project drew on out-of-school literacies and a contemporary passion of adolescents (Minecraft) and became a bridge to a traditional art form: opera. This combining of communities culminated in a well-received performance to the public. The faculty and student collaborators balanced technical, musical and educational expertise to create a fantastical story that appealed to children and young adults. In the implementation of a project such as this, the foundation was built upon the passion of the adolescents in a contemporary interest of theirs, one that they knew better than the adults on the project. The adolescents drove the product in their commitment and engagement in each stage of the process. The multi-age audience was also a motivating factor, as project participants could see their past and future selves finding value in the work, but also in the ability to invite their peers and family members to enjoy the culminating performance.

Like other interdisciplinary arts projects, the product allowed for remixing and reinvention modeling mentor texts of artistic merit for a modern audience. The youth were empowered to be the authors, and the areas of expertise of the supportive adults were tapped in the inventive creation. Expertise was truly distributed, as no one on the project was expert in every area of the project, so the work became a true exercise in collaborative creation with varied models being accessed by the creators. The collaboration became a synthesis of varied disciplines, mentor text models, and platforms, and something new was presented to an eager audience. In weaving scholarship on creating opera, connecting intersections of gaming and composition, exploring multi-modality and providing mentor texts in the narrative composition process, we engaged an authentic audience—demonstrating successful interdisciplinary work in the twenty-first century.
References


