This project developed an authoring tool for young people to use to make computer games based on Macbeth. It was a collaboration between the DARE research centre at the Institute of Education, University of London, Shakespeare’s Globe, Immersive Education Ltd, and Coleridge Community College in Cambridge, a campus of Parkside Federation Academies.

English teachers may immediately want to ask: why make computer games of Shakespeare plays? We suggest three reasons. Firstly, like any production of the plays in theatre or film, it raises questions of interpretation: how to visualise the play, how to use the dramatic text, how to dramatise the actions and events. We routinely use film adaptations of Shakespeare plays, and of many other literary texts, considering such questions of interpretation. However, oddly, there are very few game adaptations of canonical literature – though there is now a game of Beowulf, based on the animated film. However, in this case we are proposing that students make their own games, rather than study a commercial production. In this sense, the project is more similar to developing a class drama based on Macbeth; or making a class film or animation based on the play. The same questions apply: how to interpret the text, given the audiovisual resources and cultural forms of the new medium; but the students make their own choices rather than analysing those made by a professional director or designer.

Secondly, although game adaptations can be compared with film adaptations, the medium poses its own particular questions about text, drama and narrative. Games challenge our conventional thinking about narrative function and structure: games ask questions, offer choices, pose puzzles, set challenges, rather than simply making narrative ‘statements’. The grammar is different: the dynamic of the player’s progress through the text is different from that of a theatre-goer, film-viewer or reader. And, importantly, games are ‘interactive’: the students are designing opportunities for players to take on the role of Macbeth or Lady Macbeth. In this sense, it does resemble the logic of educational drama, in which students might improvise aspects of the play, exploring motivation, emotional charge, and dramatic aspects of language and physical action.

Thirdly, it’s worth saying that games are an art form and entertainment medium familiar to young people, offering a bridge between their cultural worlds and that of the Shakespearean canon. There is room here to think about how our society establishes cultural value: how Shakespeare has become such a dominant high cultural phenomenon, and why games are often perceived as popular culture, and what that means.

WHAT WE DID
The project involved creating new features for Immersive Education’s successful Missionmaker game-authoring software. Seven Year 9 students from Coleridge Community College made four levels of a game leading up to the murder of Duncan.

The games were demonstrated by the young people at a seminar at the Globe, attended by researchers, Globe education staff, and the project’s advisory panel.

The collaboration with The Globe, planned as part of the project, allowed for expert advice on the content of the game: how it would adapt the play, and what elements would need to be incorporated, such as the script, key imagery, and psychological features of the characters.

The collaboration with Immersive Education built on an earlier ESRC project in which the original software was developed. In that project, the aim was to make a software with which young people could learn how to make computer games, and gain a critical understanding of their structures. Here, the aim was different: to understand how a canonical literary text could be adapted as a game. The benefits of this were not only a deeper understanding of the play, but a new kind of understanding: one which used the ludic elements of games (puzzles, challenges, obstacles and rewards, win-lose states, rules and economies) to cast a new light on the plays.
The collaboration with Coleridge Community College also built on a successful earlier relationship. This is a longstanding partnership of research and classroom practice, evolving a complex and sustained development on innovative work in the related fields of media, English and drama education. This project explored a new dimension of that work, in demonstrating how classical literary texts can be newly-understood through games.

In practical terms, we added characters from Macbeth, daggers, blood, ‘dying’ animations, and the text of a selection of scenes to the software, to enable the students to make games specifically based on Macbeth. In the original proposal, The Tempest was envisaged as the chosen text: however, the project’s advisory group felt that Macbeth would be more suitable, and contained many ‘game-like’ elements which could be built on.

![A screen grab from the “Sewers of Lady Macbeth’s Mind” level](image)

**Figure 2: a screen grab from the “Sewers of Lady Macbeth’s Mind” level**

In developing their game levels, the students created missions (get past the guards, kill the king, leave the daggers); but also used the game to explore the psychology of the play. They created ‘economies’: quantified representations of qualities such as ambition, conscience, fear, greed and guilt; and one level used green corridors to represent ‘the sewers of Lady Macbeth’s mind’.

**WHAT WE FOUND**

The project demonstrated, then, that games are good at creating action-based narratives; but also that they can represent metaphor, emotion and motive. They also reveal that Shakespeare’s plays contain more game-like structures than we might suppose.

We found, as we expected, that the medium of computer games did something to subvert the ‘fossilizing’ effects of the literary canon, and especially the Shakespearean canon, liberating the study of the play in the classroom from an overemphasis on linguistic and literary structures, and from the negative effects of cultural distance and the weight of heritage.

We also found, again as we had expected, that games offered a performative medium with many analogies to drama. The avatar-based narrative developed affective qualities such as suspense, fear and shock. The game economies, which the students were able to freely label and manipulate, represented the character’s motivations (greed, ambition, guilt, conscience, bloodthirstiness). The options for incorporating the text of the play (to select pre-recorded speech spoken by professional actors, or to record their own voices), produced effective vocal representations of the characters, including Macbeth, Lady Macbeth, the guards, Duncan and
the witches. Finally, the first-person nature of the player-character allowed the play experience to be focused on different characters, so that the player ‘became’ Lady Macbeth in one level, Macbeth in the next.

Figure 3: One of the students explaining his work at the Globe seminar

In general, then, the project produced, as we expected and hoped, a sense of how computer games might offer innovative ways to approach a corpus of work weighed down by the history of cultural heritage. However, it also produced some surprises, both about how young people use game-authoring creatively and about what games could do with qualities such as emotion and psychology. In short, we were surprised that the teenagers used the technology of game development to produce emotion and metaphor, and play with narrative temporality. These are hopeful developments in terms of how games might offer new ways to think about, transform and recreate the literary canon.

The project also demonstrated how researchers, developers and cultural institutions can work together effectively with schools, to create something which is a new technology, a cultural intervention, and an innovative pedagogy. This offers new ways for heritage institutions such as The Globe to engage with young people’s cultural worlds, for educational software developers to sustain their viability in a difficult and competitive market, and for schools to use new media to connect with literary culture.

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