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D4.7 Theatre in Schools Trial Evaluation Results

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Abstract

This document describes the evaluation of a multi-screen *Theatre in Schools* experience designed to be watched as part of a school lesson. The content assets used to create the experience were provided by the Donmar Warehouse and are used under license by the project.

The experience was evaluated by teachers and students in three schools in the UK, using a small dedicated computer to access a cloud based service based on a constellation of micro-services.

Twenty-one student responses and four teacher responses have been assessed through quantitative assessment of the experience accompanied by qualitative responses elicited through a questionnaire procedure. Further responses were attained from an additional thirty students, one teacher and one workshop leader through structured interviews and discussion group.

Target audience

Anyone interested in building or learning about new multi-screen experiences.

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Executive Summary

This document describes the evaluation of a multi-screen *Theatre in Schools* experience designed to be used within a regular lesson in formal education.

The prototype is based on two learning modules, Story Builder and Script Detective. The content assets used to create the experience were provided by the Donmar Warehouse theatre company and are used under license by the project.

The prototype service uses the same base micro services infrastructure used to deliver previous 2-IMMERSE prototypes, namely *Theatre at Home, MotoGP and FootBall at Home* and the *Football FanZone*. *Theatre in Schools* delivers an experience to one large connected shared screen in the classroom, a relatively large number of connected additional screens (tablets) through which students can access the learning modules, and a teacher's tablet which orchestrates and curates the experience on the students' tablets and shared screen.

The prototype *Theatre in Schools* service became available in October 2018, and the evaluations took place in October and November 2018. The evaluations were carried out in three schools in the UK.

Overall, we received assessments of the experience from 51 students, five teachers, and one workshop leader from the Donmar Warehouse.

Evaluations were based on observations of the use of *Theatre in Schools* in two Drama lessons and one English lesson, and questionnaires and qualitative semi-structured interviews with participants.

The findings covered lower level aspects such as specific design choices and feature sets, and then higher-level themes.

The results vindicate the strongly design-led development process. Students and teachers enjoyed and advocated the multiple-screen experience above a single screen regular class.

A Watch / Make / Share framework (developed from regular education practice) was at the heart of the *Theatre in Schools* modules, reflecting the types of activity being undertaken; this worked well for students and teachers.

The two modules (Story Builder and Script Detective), in which the plot-points and literary devices of a filmed version of a production of *Julius Caesar* were explored, achieved the learning objectives for the students.

Theatre in Schools scored highly on enjoyment, and was considered interesting, a fun way to learn, and better than an ordinary lesson. The technology allowed interactions in an unconventional way, applied to a subject considered difficult, breaking it down and presenting it in different forms to suit students' abilities and requirements.

All teachers agreed that the *Theatre in Schools* connected multiscreen experience better achieved their learning objectives than a single screen experience, because it nurtured independent self-learning amongst peers afforded by use of tablets.

Looking ahead, all teachers wanted a *Theatre in Schools* experience that they could adapt for students with different levels of experience, and one that would be available on a range of different devices (phones, tablets, PCs). At the same time, they expressed concern over lack of funding for basic hardware in schools.



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1 Introduction

This deliverable describes the evaluation of trials of the *Theatre in Schools* experience, and this Introduction outlines the structure of the document.

Section 2, "Context", provides a brief description of the context within which this work took place. There is a specific focus on how this work is positioned with respect to the wider 2-IMMERSE project. This includes a consideration of what previous trials have achieved and what we have learned from them.

The goals for this work are described in section 3 in which a number of evaluation objectives are listed.

Section 4 explains in outline of the nature of the experience that is being evaluated, and the features to be found on the shared large-screen, the students' tablets and the teacher tablet. A significantly more complete description of experience is provided in D3.5.

Section 5 describes the QA testing procedure and the due diligence conducted before deploying the platform in schools

Section 6 describes the form the trial took, and provides a rationale for that trial design, explaining why we felt this trial design was a good method to achieve the objectives laid out in sections 2 and 3.

Section 7 presents the findings from the trials, including feedback on low level features and higher level themes.

The Donmar Warehouse feedback on their experience from the trial sessions and working on the 2-IMMERSE *Theatre in Schools* project is detailed in section 8.

Section 9 offers some conclusions.



2 Context

As a reminder, the 2-IMMERSE project has developed four service prototypes. This deliverable, D4.7, describes the evaluation of the *Theatre in Schools* service prototype, which is the fourth use case to be realised using the 2-IMMERSE platform.

2.1 Description of the *Theatre in Schools* Experience

Figure 1 provides the original short description of the *Theatre in Schools* service prototype. The fundamentals of this concept have changed little throughout the 3 years of the 2-IMMERSE project, though the specific details of the experience have become better defined.



Watching Theatre in Schools

This service innovation is called **Theatre in Schools**. This service enables pupils in schools



across the country to watch a filmed performance of a play in a production by the Donmar Warehouse. Pupils are able to augment the main filmed presentation of a play with access to related supporting content and experiences to help them deepen their understanding of the play. This related content may include a synchronised transcript of the play, character

summaries, short films featuring the talent in the play and even live communication session with the actors and other creative talent associated with the production.

Owner: John Wyver (Illuminations) Rights Originator: Donmar Warehouse

Figure 1 Original proposal for the *Theatre in Schools* service prototype.

The story of how the *Theatre in Schools* use case was developed is reported in deliverable D3.5, '*User Experience Results: Interactions for Theatre in Schools*'.

The *Theatre in Schools* experience is a multi-screen service based on watching excerpts of a filmed theatre production, produced by the Donmar and Illuminations, and complementary materials created by the Donmar education team.

Theatre in Schools was the final service prototype to be evaluated during the project lifetime, as can be seen from Figure 2.

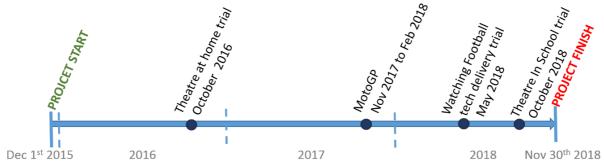


Figure 2 Timeline for the execution of the trials of the service prototypes being developed in 2-IMMERSE

In general terms 2-IMMERSE sought to define and demonstrate a scalable robust extensible and deployable micro-service platform that will support multi-screen entertainment experiences. The platform is based on a constellation of cloud based micro-services and seeks to use available standards and specifications.



The first use case (*Theatre At Home*) enabled us to define a set of core micro services that constitute the 2-IMMERSE platform and to define APIs that allow them to work together. These core APIs and micro service components were re-used, and improved in the *MotoGP*, *Football*, and *Theatre in Schools* use cases.

Findings from the *Theatre At Home* experience trial influenced the design of subsequent service prototypes and trials. The evaluation report yielded challenges that were addressed within the trials that followed, and were documented in deliverables D4.2 'Theatre trial evaluation results', D4.5 'MotoGP Trial Evaluation Results', D4.6 'Football Trial Evaluation Results'.



3 Purpose of the Evaluation

The *Theatre in Schools* service prototype trial has been designed to provide the 2-IMMERSE project with an understanding of how audience engagement is impacted by the provision of on-demand multiscreen educational activities within a school environment.

3.1 Aims

A consensus of project aims was required between the 2-IMMERSE project team and our project partner and content provider, the Donmar Warehouse to ensure the requirements of each organisation were acknowledged and aims achieved. This is detailed in D3.5, as part of the 'requirements gathering' phase for the *Theatre in Schools* service trial. Below is an extract from D3.5 as an overview for the reader:

- Aim for features grounded in an extended viewing of the film
- Build on the approach of using the recording and related materials to stimulate and inform a range of activities
- Offer support for the 'holistic approach' for cross-curriculum subjects (Drama, English, PSHE) for students' growth and development
- Showcase a range of set-ups and scenarios
- Intend that, through the *Theatre in Schools* experience, the film and the digital assets provided could give a young person a way of 'seeing' which could only be done through a production (live or DVD) and workshop with the Donmar Warehouse; this would permit equal provision for schools who cannot have an educational practitioner or artist in the room.
- Enhance the experience by allowing access to assets and support not possible through the production (live or *via* DVD) and a workshop alone, so giving a young person a way of 'seeing' that which could not have been done before.

3.2 Key objectives

Four key sets of objectives were agreed for the prototype. These were developed by grouping the requirements listed above. They objectives are related to the requirements of different stakeholders:

- 1. Technology Provider (2-IMMERSE)
 - a. Synchronise media objects in multi-screen presentations
 - b. Personalise views to different skills and roles
- 2. Producer (Donmar Warehouse)
 - a. Extend the reach of learning materials to more schools
 - b. Provide support and tools when the educational facilitator or artist is not present
- 3. Education Provider (the Teacher) Flexible framework
 - a. Adaptive for variables in time, experience and technology
 - b. Support teachers with mentoring and co-ordination
- 4. Learner (the Student)
 - a. Support measurable learner outcomes
 - b. Engage young learners and involve them in the process

These high level objectives need to be rooted in lower level measurable evaluation objectives, so an evaluation method can be designed. During the *Theatre in Schools* service trial we sought an understanding of the following points which will function as low level measurable evaluation objectives:

- 1. Users' (teachers and students) responses to the overall experience
- 2. Perceptions of the following features:
 - a. The joining experience



- b. The robustness of the system
- c. The overall design aesthetic of the experience
- d. The ability to personalise the experience
- e. The utility of the watch/make/share framework
- f. The utility of the reviewing and progress tracking features
- g. The ability to provide, meet and support teachers and student's requirements against curriculum objectives
- 3. Provide confidence to educators and industry with regard to return on investment for future object-based content offerings, i.e. understand the impact on user engagement which could be translated to value in the form of enhancing a standard lesson, provision of learning materials, providing scalable learning support, increasing reach to underserved users.



4 The Experience

The *Theatre in Schools* prototype service allows a teacher and students within a class to share the experience of watching elements of a filmed theatre production together, and then provides and supports a series of activities based on the production.

4.1 Experience Overview

This overview of the *Theatre in Schools* experience highlights some of the key the key technical elements required to deliver this experience. Figure 3 illustrates the key technical elements for a typical configuration of the *Theatre in Schools* experience. The figure illustrates that the class is divided into multiple groups containing between two and five students, each of which share a tablet as a companion screen device. More than four groups can be supported if required, and indeed one of the trials was based on six groups of five students. The classroom is arranged such that each group and the teacher can see a connected TV, whiteboard or projector. The teacher also uses a tablet to curate and orchestrate the experience.

For the 2-IMMERSE trials, in addition to the tablet devices, a small form-factor computer (an Intel NUC device without keyboard or mouse) was provided and connected to the shared TV/Whiteboard/Projector using an HDMI cable. In a typical configuration, this computer was connected to the Internet using a wired Ethernet connection via a local Ethernet switch. A local WiFi access point was also provided and connected to the same switch, with the tablets being preconfigured to connect to it. During the trials, each tablet and the small computer connected to the 2-IMMERSE platform via this Internet connection. Alternative Internet connected to a wireless network provided by the school, removing the need for a dedicated WiFi Access Point and Ethernet switch. In each case, a reasonably fast Internet connection (20Mbps or greater) was required to enable simultaneous playback of video feeds on all devices.

The shared TV/Whiteboard/Projector was set up to play audio associated with the experience, and the students and teacher could also hear audio playback on each of their tablet devices when appropriate. During part of the experience, there was also provision for groups of students to move to the front of the classroom (one at a time) and use their tablet to orchestrate the presentation of their own work.

The experience lasted a little over 60 minutes in total, with an additional 30mins for evaluation.

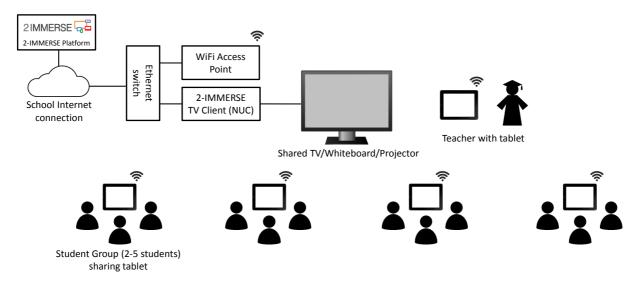


Figure 3 Schematic showing key technical elements of the *Theatre in Schools* experience.



4.2 The User Experience design

The deliverable D3.5 describes the development of the user experience for the *Theatre in Schools* experience in detail. Here, we provide revised extracts from D3.5 as an overview for the reader to understand the experience.

The reader may also which to refer to a short video which shows the experience in operation. This can be found on the 2-IMMERSE web site under Videos and on the 2-IMMERSE YouTube channel².

4.2.1 Screen Configuration

There are some common features of the *Theatre in Schools* experience including the screen configuration, and persistent tablet interface features. The prototype used three types of screen:

- 1. Shared Display
 - a. A TV, smart display or projector and speakers
 - b. Controlled by the teacher in Watch and Make
 - c. Supervised control by the students in Share
 - d. Displays synchronised video, data overlays and digital media
- 2. Teacher Tablet Screen
 - a. A tablet (Samsung s2, Google Pixel)
 - b. Teacher uses the tablet to manage the lesson
 - c. Manages activities, displays and digital media
- 3. Student Tablet Screens
 - a. Tablets (Samsung s2, Google Pixel) one tablet per group of 3 students
 - b. Students watch synchronised content
 - c. Take part in activities and share outcomes when directed

4.2.2 The connected shared large-screen display (a TV/Whiteboard/Projector)

The content available on the shared screen is designed to drive the experience, to introduce the activity, inform students during the activity, and share work across the class.

4.2.3 Tablet screen features and layout for students and teachers.

The content available on the companion (tablet) screens is designed to complement that shown on the shared screen, and provide materials for the activities. Teacher and Students have the same interface layout but the content within the main panel is role specific and changes in response to the activity context. The key areas of the tablet layout, and the content displayed in those areas can be seen in Figure 4, and are as follows:

- 1. Status Bar
 - a. At the top of the screen
 - b. User logon details (e.g., teacher)
 - c. Synchronised module timer (top right)
- 2. Left Menu
 - a. Donmar Logo
 - b. (3x) Icons for selection of different reference material
 - c. Lesson Timeline icon (stopwatch icon) to select watch/make/share modes
- 3. Main Panel
 - a. A prompt bar for synchronised prompts (white bar along top of main panel)
 - b. Central panel for main content and contextual menus and interactions
 - c. Mode bar which indicates play title, module and mode status (along bottom of screen)

-

¹ 2-IMMERSE videos on the 2-IMMERRE web site <u>www.2immerse.eu/videos</u>

² 2-IMMERSE YouTube channel https://www.youtube.com/channel/UCpGa5NU1Bbj8Nkz0vZi7IwA



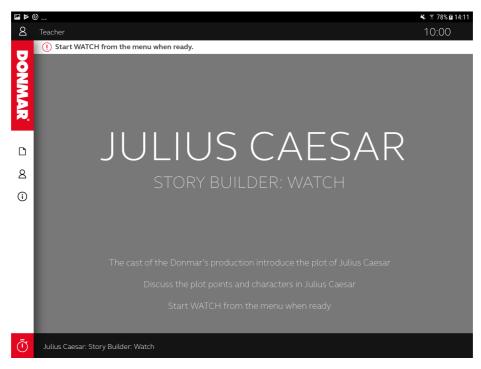


Figure 4 Tablet interface -generic features for students and teachers

The student's companion screen becomes a control surface for creating materials as part of the activities, by invoking different content objects for presentation and manipulation on the individual tablet. During the 'share' phase, it becomes a control surface which is able to effect changes to the presentation on the shared screen, at the teacher's discretion (who can override the student's control).

4.2.4 Teachers tablet control interface (Timeline) and layout

The companion screen content is designed to complement that shown on the shared screen.

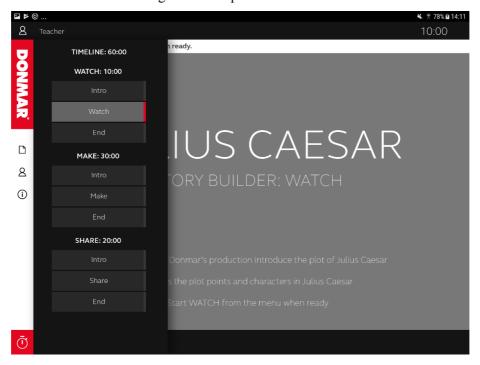


Figure 5 The Timeline menu for teachers - to control elements of the (Watch / Make / Share) lesson



The teacher's companion screen becomes a control surface which is able to effect changes to the presentation on the shared screen, and the students' companion screens, by invoking different content objects for presentation via the Timeline.

The teacher initiates different parts of the module using the Lesson Timeline Icon (clock) at the bottom of the left panel, seen in Figure 5. The menu uses radio buttons, so only one selection can be made. Students can access the same timeline menu, but in display mode only. The panel is closed by clicking anywhere else on the screen or clicking the icon.

- 1. The teacher can select the Watch / Make / Share options to start each task immediately
 - a. Start Watch
 - b. Start Make
 - c. Start Share
- 2. The teacher can share introduction and end screens between modes
 - a. Intro displays contextual text about the objectives for the activity
 - b. End displays contextual text summarising the activity.



5 Technology platform evaluation

Deliverable D2.5 (Distributed Media Application Platform and Multi-Screen Experience Components: Description of Final Release) provides details of the high-level technical requirements and development milestones which were identified for the *Theatre in Schools* service prototype, as well more detailed information about the platform infrastructure and the DMApp implementations which were assembled for the Story Builder and Script Detective lessons.

In this section we provide a brief explanation of how the platform infrastructure and DMApp implementations were tested and evaluated before and during the *Theatre in Schools* trials.

5.1 QA and testing

During development of the Story Builder and Script Detective DMApps, regular Quality Assurance (QA) reviews were scheduled in order to test new features, sign off development milestones and identify bugs, user experience issues and missing functionality. In addition to the software developers and user experience designer, these sessions were attended by the technical delivery manager and executive producer for all of the 2-IMMERSE trials.

This provided a range of different perspectives and served as an internal technical evaluation which ensured that all of the features of the applications were working properly and ready for trial. A final review was then held with Donmar Warehouse Education Department to allow their user experience feedback to be taken into account before the trials took place.

5.2 On-site evaluations

In advance of the three trials held at schools in London and Suffolk in the UK, at least one visit was made to each of the schools to test the Story Builder and Script Detective DMApps with the client devices connecting to the 2-IMMERSE platform via the school's network infrastructure. In addition to connectivity, performance of the shared TV/Whiteboard/Projector and audio system had to be confirmed.

Each location presented different challenges which enabled us to evaluate the flexibility of the platform, and in particular how the client devices could be connected in different ways. For example, while one of the schools provided a high-speed wired Internet connection without access restrictions such as authentication and proxy servers, the other two schools could only offer a wireless Internet connection. With respect to the shared display, it was necessary in two schools to either choose a different room or change the configuration of the whiteboard or projector in order to achieve acceptable picture and sound quality.

In addition to reducing the risk of experiencing technical problems during a 'live' trial run, these onsite visits helped us to evaluate the effectiveness of our technology platform in a real-life school environment. Our key findings were as follows:

- Our cloud-based 2-IMMERSE platform was generally robust. However, an issue with security certificates hampered one trial run, which highlighted the challenge of supporting a relatively complex prototype platform, in which one time-sensitive process was overlooked.
- The *Theatre in Schools* DMApps periodically demanded significant downstream bandwidth in order to play synchronised video across the TV and tablet devices. However, the DMApps' orchestration features enabled the teacher to prevent this from happening if it was expected to be an issue. A local caching solution could also be implemented to prevent such demand issues.
- All three schools were able to provide the necessary infrastructure (classroom, TV/Whiteboard/Projector, audio system, Internet access) for the *Theatre in Schools* DMApps. The flexibility built into the 2-IMMERSE platform and client software/firmware was used to accommodate different school environments.



6 User experience evaluation: Method

Through the design and build process, the prototype was constantly evaluated and modified by the 2-IMMERSE project team and the Donmar Warehouse. Details of that journey are described in D3.5.

In this section we give a brief description of the method used to evaluate the *Theatre in Schools* experience during the trial.

6.1 School user evaluation

We evaluated the experience in the environment in which a proper service would run, i.e. in a school classroom. We wanted the users (teachers and students) to have the best possible opportunity to relax into the experience in a familiar environment, and not to approach it as a technology trial.

Insights were sought through

- Observations during the experience –captured as notes, photographs and video.
- A post-trial paper-based individual questionnaire –a teacher version and a student version.
- A post-trial discussion -including the whole class, led by the teacher or workshop leader.
- Post-trial interviews –in small groups of 1-3 students and teachers, recorded to camera.

The trial had two phases:

The first phase evaluated the 'Story Builder' activity. It was carried out in two schools, in London UK, which were asked to work with the 2-IMMERSE project by the Donmar Warehouse Education Department. Drama Students were invited to attend the trial session, which was held after school on consecutive nights. On the first night students watched the 'Julius Caesar' production by the Donmar Warehouse. On the second night, students returned to take part in the *Theatre at School* experience and evaluation. Two teachers were present during the experience, but the session was led by a workshop leader from the Donmar Warehouse, who was familiar with the subject matter and the *Theatre in Schools* interface. A total of 21 students took part, and 4 teachers. Students worked in groups of 2 or 3, sharing a tablet companion device.



Figure 6 Theatre in Schools tablet, alongside printed pages of Shakespeare's script

The second phase sought to evaluate the 'Script Detective' activity, during an English lesson at a school in Ipswich, UK. The school was recruited via a member of the 2-IMMERSE project team. Students had seen part of the Domar's 'Julius Caesar' production as part of a previous lesson, and had been encouraged to watch the whole production in their own time ahead of the trial. A total of 30 students took part in the evaluation, and 1 teacher. No workshop leader was present. Students worked



in groups of 3-5, sharing a tablet companion device. The lessons were led by the teacher, with occasional support from the *Theatre in Schools* UX-designer.

In all three schools, the learning objectives included within the *Theatre in Schools* experience activities had been attended to as part of their curriculum during preceding lessons, prior to the trial. Teachers had prepared supporting materials for these learning objectives, which were supplementary to the trial, which could be used if needed. For example, in the Ipswich school, the teacher brought pages of script from another Shakespeare play which students had been studying (Figure 6).

We sought 20-30 evaluation responses from students for each activity (Story Builder and Script Detective), and evaluation responses from the 5 teachers and 1 workshop leader.

The 2-IMMERSE team worked with the school's IT-support teams ahead of the trials to ensure the network, set-up and support of the *Theatre in Schools* experience was in place and sufficient.

Participant agreement forms (consent forms) were sent out to the students' parents/guardians ahead of the trials. The agreement sought consent for the students' participation, the collection of anonymised data, and for the use of the anonymised data in project related publications and presentations. Forms were collected before the trial began. Students without signed consent forms were not allowed to take part in the trials. (See annex 1 for the participant agreement).

Students were aged between 14-16 years old, and were studying either English or Drama. The activities and content within the *Theatre in Schools* experience supported objectives aligned to the students' learning objectives.

6.2 Post-trial questionnaire

In the questionnaire that was completed by individual participants (teachers and students) after the experience the following themes were probed:

- Users' (students and teachers) responses to the overall experience. Reflections on the use of the *Theatre in Schools* experience in a real-world setting; reactions to using synchronised multiscreen technology in an educational context.
- Responses to the features set (such as the format -watch/make/share), evaluated for utility, ease of use; and the completeness.
- The use of multiple-screen orchestration (e.g., users' thoughts about how their attention was directed and manipulated between the screens), and support for the different 'roles' users have during the experience (i.e., curator, maker, viewer).
- The value that users ascribed to the fact that the experience was shared.
- The curation and placement of content: users' opinions about the deployment and display of the different components of the experience, particularly the inclusion of the content generated by students during the experience.
- The generation of generic insights that will be included in the corpus of knowledge generated by the 2-IMMERSE project, valuable as reference material for subsequent work beyond the project.



The questions addressed included those posed by the Donmar Warehouse Education Department as well as the 2-IMMERSE project. The complete set of questions used is included in Annex B, and forms the basic narrative of Chapter 6, but an overview is:

- 1. Technology Provider (2-IMMERSE)
 - a. Have we supported multi-screen synchronisation?
 - b. How have we supported different roles?
 - c. Do the facilities translate to other experiences?
- 2. Producer (Donmar Warehouse)
 - a. Have we combined media in engaging and useful ways?
 - b. Can more modules be created and delivered?
 - c. Is this scalable?
- 3. Education Provider (the Teacher) Flexible framework
 - a. How adaptable are the features we have created?
 - b. Which features do teachers find useful/enjoyable?
 - c. How would they want to personalise it/change it?
- 4. Learner (the Student)
 - a. Are we supporting learning goals?
 - b. Which features do students find useful/enjoyable?
 - c. Which features would they like to add/change?

6.3 Analysis of qualitative data

The thematic analysis methodology of Braun and Clark ³ was used for the analysis of the qualitative data collected during the study.

The overall aim of the analysis was to capture, as a collection of 'themes', an understanding of what is really going on in the mass of qualitative-data captured in the open responses of the questionnaire, and the comments made in the interviews and discussion groups.

The coding scheme was inductively defined and refined as the coding proceeded, very much in the spirit of Grounded Theory's constant comparative method (Glaser)⁴.

A starting point for the analytic process was a set of themes identified to group questions (referred to as the Established Themes). For example, ease of use, utility, individual features, etc.

Items of the paper-based questionnaire and interview data were considered in turn, and compared to the emerging coding scheme, to find existing codes that apply, to refine the definition of previously generated codes, or to produce new codes as appropriate.

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³ Virginia Braun and Victoria Clarke. 2006. Using thematic analysis in psychology. Qualitative Research in Psychology 3, 2 (jan 2006), 77–101. DOI: http://dx.doi.org/10.1191/1478088706qp063oa

⁴ Barney G. Glaser. 1965. The Constant Comparative Method of Qualitative Analysis. Social Problems 12, 4 (apr 1965), 436–445. DOI: http://dx.doi.org/10.2307/798843



7 User experience evaluation: Findings

The findings are presented in sections, covering first lower level aspects such specific design choices and feature sets, followed by consideration of higher-level themes. In each section responses are given from the teacher's and the students' perspectives. Responses are also given by the Workshop Leader⁵ who aided the delivery of the *Theatre in Schools* experience in two of the schools.

Twenty-one students, at two London schools, worked in groups of two or three, sharing a tablet. The workshop leader led the sessions, with teachers shadowing. Four teachers (two in each school) shadowed the workshop leader, and supported students during the Watch / Make / Share phases.





Figure 7 Students using Theatre in Schools Story Builder

In this section, the teacher's comments are referenced as 'ET and HT', while student responses are 'EG and HG'. The workshop leader's comments are referenced as 'WL'.

7.1 Framework: Watch / Make / Share

The *Theatre in Schools* modules followed a Watch / Make / Share approach. This approach is established in regular education practise as a process for learning (to reflect the types of activity the students were undertaking as the lesson progresses), and is used in the Donmar's workshop activities in schools. (This is covered in more detail in D3.5.)

Watch / Make / Share is the common structure of all *Theatre in School* modules, within which only certain activities can take place. The Watch/ Make /Share menu is shown in the left column of Figure 5, and the activities that happen within each phase are:

1. Watch:

- a. The teacher shares video interviews with the cast to introduce themes and provide insights into the play.
- b. The teacher can also run an interactive vote.

2. Make:

a. Students work in small groups on an exercise which uses the script and video clips from the production.

b. Students are able to add their annotations which will be displayed in share.

3. Share:

a. The teacher brings the students back together to share their work and discuss the process, outcomes and themes.

b. The teacher can offer screen controls to the students.

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⁵ The workshop leader, on behalf of the Donmar, co-designed the 2-IMMERSE modules which were based on workshop activities developed for the Shakespeare Trilogy films (produced by the Donmar and Illuminations). The Workshop Leader regularly delivered these activities in schools as part of the Donmar education program.



All participants agreed that structuring the modules on a three step, Watch / Make / Share framework was productive. As a translation from a regular educational approach, this worked well.

Students liked the Watch / Make / Share framework (Av-6.2; Med-6). For them, it offered the structure of a well organised lesson, and it broke the task down into different sections. It also allowed them space to think and reflect, and to know what was expected of them at each stage.

Only one teacher suggested a change to the structure, requesting the addition of a 'create' phase where students could physically explore a subject.

I would add a 'create' where students physically explore. HT2

The project team had recognised as part of the original design process the aspiration for physical explorations in the Make and Share phases in addition to desk-based. As created, however, the Story Builder and Script Detective modules as developed for the trial were desk-based.

7.2 Story Builder module overview

Using the Story Builder module, teachers explored the plot-points of *Julius Caesar* with their class (which was described in detail in D3.5).

In Story Builder:

- a. The cast introduce the plot points in Julius Caesar
- b. Students create a story playlist from plot points, production clips and add their own script annotations
- c. The class share their stories as a group and discuss

For this module the learning objective is

a. To support a deeper understanding of the plot of Julius Caesar

The key learning points are:

- b. Understanding the plot of Julius Caesar
- c. Deeper understanding of the characters in Julius Caesar
- d. Supporting each other as a team to tell the story

All teachers said that the Story Builder module had worked to achieve their learning objectives for the class.

7.3 Story Builder: Watch

In the Watch phase the cast introduce the plot points in *Julius Caesar* as shown in Figure 8 (in which all three screen types are showing the same thing) and in Figure 9 shows how as an alternative still images can be shown on the students screen. There is in fact a third option a kind of blank screen that is designed to encourage pupils to look up at the main screen. Plot points are referenced along the bottom of the screen in a timeline feature as shown in Figure 8 and Figure 9. As the video progresses, the plot points being referenced are highlighted visually. The teacher can play the whole video in a linear fashion, or jump between plot points.



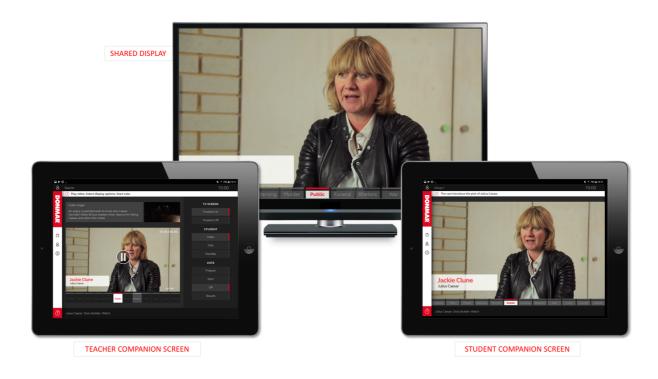


Figure 8 Story Builder Watch interface -Plot Video

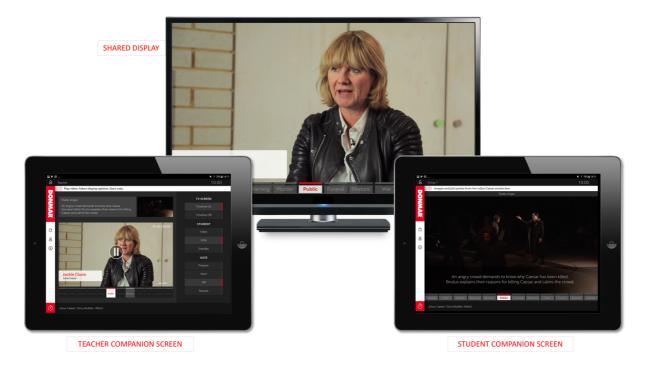


Figure 9 Story Builder Watch interface - synchronised video and stills options
All of the teachers said that they felt the Watch phase of the Story Builder activity 'worked well'.

Yes, it set up the task by giving clarity to the plot points. HT2

Yes, A quick and easy introduction to the equipment and overall theme. HT1



Students and teachers were asked to feedback on each feature of the Watch phase, giving each feature a score for **usefulness** (on a 7 point scale) and explaining their reasoning.

7.3.1 The Cast Interview Videos - explaining the plot points

The students said the Cast Interview videos were useful, (Av-5.9; Med-6.0). It gave them insights into the actors' perspectives on the key plots points, and it did this from the actors' understanding of their characters and their knowledge of the play.

Because if you watch the videos it helps rather than reading. EG2B

Yes, because we got to hear it from the people who had spent a long time studying it. HG3A

They were quite useful, but wasn't too useful because it explained it more from their point of views as actors/characters and not too simple, like just stating the plot for example. HG1A

The teachers also thought the Cast Videos were very useful (Av-6.75; Med-7), to access the text in a different way, and from different viewpoints. They were also felt to aid discussion and make links between characters and plot.

Put discussions and stories into context. ET1

Helped students access the text more and explained key moments. HT1

Good, helped them understand the relationship between characters. HT2

A key aim of the 2-IMMERSE project was to bring the creatives into the classroom, and the workshop leader drew on this point in her response.

If we are looking at this, not just in terms of lessons, but the ability to bring theatre into the classroom, to be able to have those additional videos, not only from the theatre itself but the creative team too, into that classroom that then becomes really exciting. WL

7.3.2 The Still images from the production

The students also thought the Still images from the production, which were available on their tablets during the Watch phase, were useful (Av-5.5; Med-6.0). The images gave them a visual reminder from the play, to support the text and the narration from the cast videos.

They were more useful to keep my attention span rather than the plot itself. It was good to have photos to illustrate each point. HG1B

They reminded you of the part of the play where it happened and without it, it might have taken longer to remember. HG1A

The teachers considered the still-images to be useful for the same reasons, and also pointed out how a visual reminder of the actor's expressions and body-language during the performance might aid student's comprehension.

Acted a visual reminder. ET1

Enabled the students to look at the expressions/body language etc. HT2

7.3.3 The Timeline feature (along bottom of screen) listing the plot-points

The timeline used keywords to illustrate the plot points along the bottom of the screen, and as each cast video played out, the words were 'highlighted' in turn. Students found this immensely useful (Av-6.4; Me-7.0) because it gave them an overview across the whole play, and a brief summary of the key moments.

It was because it summed up that in one word, and you could build ideas off of that. EG1C

Yes, because they gave you a one-word summary of each plot. EG3B



It shows you what order everything happened in, which helps you remember. HG3B

The teachers thought the Timeline was the most useful feature in the Watch phase (Av-7; Med-7). As a visual reminder of the plot, they recognised that it helped students keep track of the play, and that the ability to review plot-points individually was a useful tool.

Helped the students understanding by having a visual chronological breakdown. HT2

Loved this! Visual aid to help the story. ET2

I think the timeline was useful, good for jumping back into moments that maybe they reflected on a particular point, and you are able to jump back and watch that little section. So, it's helpful. Workshop Leader

One teacher, however, had a reservation about the timeline not being challenging enough.

...although, it gave them the answers rather than them working it out. HT1

7.3.4 The Voting feature

The Voting feature (shown in Figure 10) drew mixed responses from both teachers and students. The teachers gave the Voting feature high scores (Av-6.3; Med-7), suggesting that it was a useful feature that got students talking.

Loved this - great for Assessment For Learning. ET1

Got the students talking, and thinking. ET2



Figure 10 StoryBuilder Watch interface -Voting Display Results

None of the teachers added questions, however, leaving one or two default questions written by the workshop leader to be used during the sessions. 'Lack of time' was given as a reason for the teachers not submitting questions. Despite this, all four teachers said they would use a voting feature now, having seen how easy the process was.

No, but I would. I would check understanding, let them decide how they feel about the characters. ET1

No, not this time - but could easily have added a question. HT1



Students gave the Voting feature slightly lower scores, for usefulness (Av-5.5; Med-6.0) and fun (Av-5.0; Med-6.0). In part this lower score can be accounted for because of the lack of questions. Despite this they spoke about ways in which the voting feature had been useful for them to stimulate debate, and to expose them to new ideas.

It was useful, and I can see how, with other questions, it could start a conversation with opposing opinions. But we didn't get to use it often. HG1B

Because you can hear people's ideas, and change your mind. HG1A

I think it was more fun than useful, however it did engage me into the learning. HG4A

A couple of students questioned the need for the voting feature.

You could have just asked the class because there is only twelve people. EG3A

Students thought the voting feature was fun (Av-5.0; Med-6.0) because it prompted people to think and allowed them to get their view across.

It was fun because we had time to think and not to focus on just saying yes and no. HG3A

Yes, because you got your point across. HG2B

It's fun to see what other people think. AS15

Some students offered questions they would like to include in the voting feature:

Questions about the characters or character development. Whether the play was good or not. HG1B

Do you think they were right in killing Caesar? EG2B

The workshop leader explained how the voting feature acted as a supporting tool for the development of a discussion in the classroom, during which a teacher could enter questions on which the students could vote as the conversation progressed.

What's exciting for me is how you can use the technology to build on existing ways you might teach in the classroom. So, if a discussion is happening, and one young person asks something, we often would then throw that question out to the rest of the group, so this feature allowed us to do that in an exciting way. WL

Some students requested the ability to vote individually, rather than as part of a small group. This could have benefits and disadvantages. As individuals they can all express their opinion, and the voting numbers will be in larger with a more refined measure of opinion. On the other hand, having one vote per small group prompts discussion within the group and leads to compromises, developing skills that the students need to practise.

One vote per group or individual votes — there's a benefit in both. So, if they were able to vote individually that would be exciting, but I think there is a benefit to being able to put more emphasis on what that discussion is when you are voting together. And say OK, you have to pitch why it is. It's building their voice of argument with persuasion, which are all techniques which they have to develop. So, thinking how do you persuade someone to go with this idea or that idea. I think it's exciting for them to have to do that. Also, because the rest of the session is about working in groups, I wonder how it would change a lot suddenly, when it became individual. I'm not sure. There's definitely a benefit to doing it in groups. WL



7.4 Story Builder: Make

In the Make phase of Story Builder, see Figure 11 and Figure 12, students create a playlist of six plot-points based on a theme set by the teacher. A scrollable list of plot-points appears on the right of the student's screen (see the right-most image of Figure 11). As they select a plot-point from the list it drops into the six available spaces on the left of the screen.

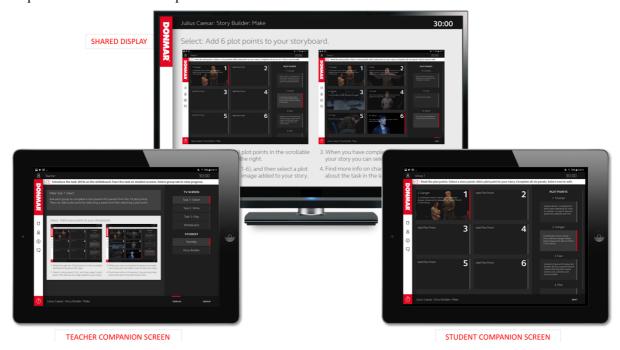


Figure 11 Story Builder Make interface -teacher 'task view' - student 'story select'

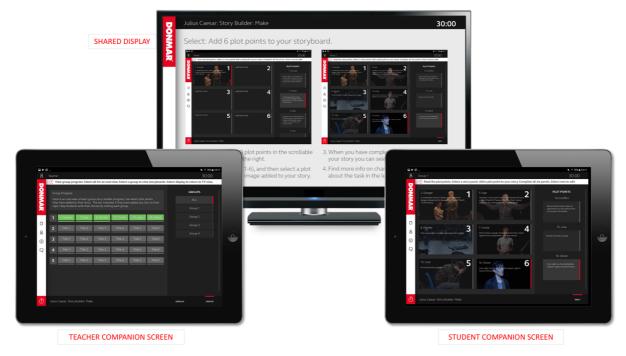


Figure 12 Story Builder Make interface - teacher 'group view' - student 'story select'

Students were asked to rate the Make phase of the Story Builder module, on a scale of 1-7, with 7 being most positive.



They considered the Make activity to be an enjoyable experience (Av-5.9; Med-6.0), in which they felt in control of their learning. They had the opportunity to express to their peers which parts of the story they considered important and relevant.

Yes, I enjoyed making the playlist because you get to watch what you / other people think are the main points. EG3B

It showed us the type of story we believed it was and helped us understand. HG2A

Yes, it helped me understand the plot more deeply and made me feel as though I was in charge of my learning. EG4C

Yes, because I got to summarise the play in my own way. HG4C

It helps you decide yourself on what parts are the most important / more significant than others. EG2C

We got to make our own, customised playlist based on what message/idea we were trying to represent. HG1B

A couple of students were not as encouraged, and were looking for more challenges once they had completed the activity.

It was quite enjoyable, but it wasn't too fun - it was just selecting plot points. HG1A

Once we were done there was nothing else to do and I got quite bored. HG4B

Dealing with scenarios in which students complete a task at different rates is common in a learning environment when students have mixed abilities. Looking ahead, an adaptable object-based experience could go some way to alleviating such occurrences by providing a variety of learning materials to support all students, or the teacher could pose a variety of challenges for different groups of students. For example, asking for play-lists based on a variety of themes could be developed, with some more difficult to complete than others.

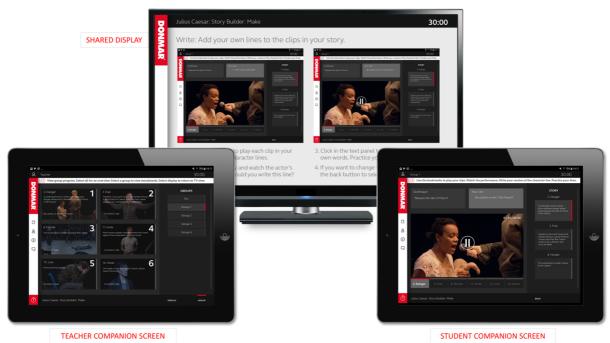


Figure 13 Story Builder Make interface - teacher 'group view' - student 'edit'

In the second part of the Make phase, students are asked to insert their own lines to their playlist plot-points, see Figure 13. Student select one of their six plot-points. Details of the plot-point appear on their screen, comprising of a video window and two text windows (along the top of the screen). The



text window on the left contains Shakespeare's text. The students add their own text to the text window on the right, using a pop-up onscreen keyboard.

The students found this an enjoyable part of the activity (Av-6.2; Med-6.5), because it was challenging, it made them think, and gave them a better understanding of Shakespeare's text in a modern, more personal, context.

It made you think about the line and made you put it into your own perspective. EG5C

Because I liked having my own interpretation. EG2C

Translating it into modern English really helped me understand some of the language I wouldn't have otherwise understood. EG2A

Thinking of how to word my phrase and shaping it with my partner was very engaging. HG1B

I enjoyed it because it made me think about the meanings and gave me a better understanding. HG1A

The teachers and workshop leader were asked how useful the Make phase of *Theatre in Schools* was for their students' learning. Overall, they considered the activity very useful for learning (Av-6.25; Med-6.5), because it broke the story down into chunks, it allowed the students to be involved in the creation of something, and to be in control of their learning. However, the task relied on the teacher to apply the focus of the task (e.g., identify plot points from the main arc of the story, or plot points that illustrate a particular character's journey, or points that hold a common theme), and there was some concern that the task needed to provide more depth. (This final point is not a consideration for the technical aims of the 2-IMMERSE project, it falls within the editorial and content aims, outside the scope of the 2-IMMERSE project.)

The activity gave room for the students to choose their own focus on the play. HT2

It involved the students. They have listened, now they are making, so it's involving. ET2

The playlist worked really well. The option is quite open at this point [to make a playlist] which is good but it relies on the teacher to differentiate in the sense that they may want to reduce it to six key points that — so show me six points about this scene, or showing the character arc of this journey. WL

The workshop leader suggested using the white information bar along the top of the interface to provide a text prompt about the aim of the task-in-hand.

I suppose what fought against that was the information line at the top. Which is set to say 'this is the task' – if you were able to edit that little i-bar at the top then could relate it more to what you were asking your students to do. Which means you could then apply this technology to more classes. For that range of ability within the school or year group. WL

Another suggestion from the workshop leader concerned the labelling of the plot-points video images. Initially the images are labelled with key words describing the point, which is maintained throughout the task. Once students type in their own lines the keyword might not be appropriate (or might be misleading), and the student should be able to edit this to something that better reflects their work.

This is where, in making their images, they could then rename the title of that image. There should have been a function to rename what those titles are, because once they came to making their own storyboard, perhaps the title that we'd given [the section] and the context of their new version of the story didn't quite always fit. So that function to rename the title once you are in the Make mode would be useful. It gives them a chance to reason why they chose that title. Sometimes they didn't correlate exactly, as to why they had chosen that image. Especially as they were remaking the story in their own way. So, it didn't always fit. It would make it more specific to their doing. WL



7.4.1 Ease-of-Use: Make

All participants were asked to rate the ease-of-use of the *Theatre in Schools* experience, on a scale of 1-7. Students said it was very easy to select their playlist plot-points (Av-6.3; Med-7.0), and they thought the screen layout, buttons, and navigation were clear and understandable (Av-6.3; Med-7.0). They knew what to do, and how to do it.

I found it easy to use and [it] could be used in primary schools as well. HG3C

Once you had used it once, it was very simplistic. EG2C

They recognised the use of a simple and uncluttered interface, and they also referenced the familiarity that younger people have with technology.

It wasn't too full of different tools and it was a simple layout. EG2A

Teens are very familiar with technology making it easier for us to navigate. Also, it was laid out clearly. EG3B

It was easy to use, mainly because we use technology the most out of any other age group. HG1B

For the second part of the Make phase, students added their own lines to their playlist plot-points, (typing in their lines using the onscreen keyboard), and they found this very easy to do (Av-6.5; Med-6.0). They also found it easy to make changes and edit their lines (Av-6.0; Med-7.0).

No bugs/errors, easy interface. HG1B

I think it was easy to make changes because it was in a way you understand. EG4A

Somewhat easy but there was a lot of thinking involved with it. EG2A

Very easy -you just tapped on it to change it. HG1A



Figure 14 Story Builder Make interface - teacher 'all group progress tracker'



The teachers were asked to give feedback on the ease-of-use of the *Theatre in Schools* interface that the students were using. They considered the screen layout, buttons and navigation to be clear (Av-5.75; Med-6.0).

As an adult, this looked harder than the students found it! ET2

There are quite a lot of stages to remember, and having to close tabs before opening others, etc. HT?

There is a lot to look at, once you are familiar its really good. HT1

Teachers also had the ability, via their tablet, to review the progress of the groups during the Make phase, this is shown in Figure 14 and Figure 15, and they found this a very useful feature.

The teachers were also asked to give feedback on the ease-of-use of their 'reviewing progress' interface. They considered the screen layout, buttons and navigation to be clear (Av-7.0; Med-7.0), but it took a little longer for them to be comfortable with it, compared to the students. The teachers 'review' interface is more complex than the student's interface, and there are more features and interactions required as part of its functionality.

Really useful - as groups got through the tasks quickly. HT1

It's good to see progress, and choices, you can use this information to encourage groups to discuss their choices and pin point struggling groups. HT2

This was great and allows me to support those that need it and encourage the class. ET1

Very useful, as you could see who was working. ET2

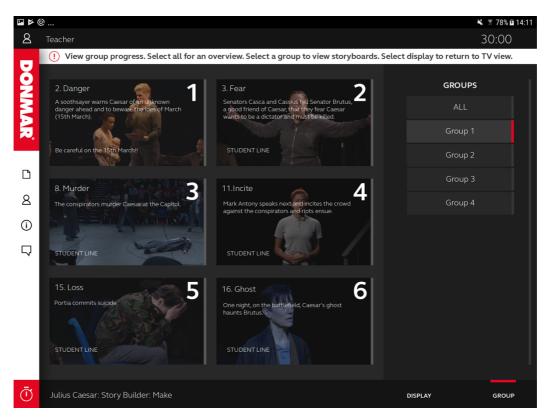


Figure 15 Story Builder Make interface -Teacher 'individual group progress tracker'



7.5 Story Builder: Share

In the Share phase of Story Builder, see Figure 16 and Figure 17 and Figure 18, students share their group's playlist with other students in the class, using the large shared screen. Students control the large shared screen via their tablet. The shared screen displays the video playlist, referencing the students' chosen plot-points along the bottom of the screen. As the plot-points play out, they are highlighted visually, and the students' text appears as an overlaid subtitle at the bottom of the video window. Students can stop and start the presentation in a linear fashion, or by selecting individual plot-points.



Figure 16 Story Builder Share interface - teacher tablet in 'preview' - other displays on 'standby'

Students thought this was a good way to present their work to their peers (Av-6.2; Med-6.0), because they could see and hear each other's ideas, which aided those who were less confident at presenting. Having the work 'on-view' made students think more about their own work, and that of others. The technology was straightforward and allowed the students a degree of control over the presentation.

It was easy to get up and present, rather than struggling to show as a class. EG4A

It made us less nervous. HG4C

Yes, because you then showed your peers your views and they could have gained something from it. HG2A

Yes, because it made me think more deeply about my understanding of the plot and my reasoning for the sections I had chosen. EG1B

It was a good way because everyone can see as well as hear your work, giving them more ideas. EG3C

It was a good way to present the work, but some people may not feel comfortable presenting in front of everyone. HG1A



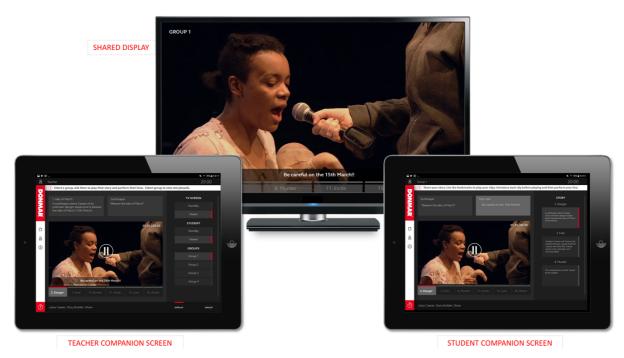


Figure 17 Story Builder Share interface -Teacher 'selected Group 1' - Student 'Group 1 player'

Due to time restrictions, not all student groups were able to share their work, and they were disappointed about this.

Although students thought it was very useful to have their lines displayed as subtitles against the production videos in their playlist (Av-6.0; Med-7.0) during the Share phase, their comments suggested they were not as necessary as originally implied because the lines were read out anyway. On the other hand, having the line visible allowed peers to review the line for a prolonged time while it was being explained by those presenting.

They weren't as necessary, as the people read it out aloud anyway. HG1B

It could help other people understand the line more if they already haven't. EG1B

They weren't as necessary, as the people read it out aloud anyway. EG3C

You could read it off the screen instead of listening. HG4B

The student presentations were aided by their ability to control the large shared screen via their tablets. They could 'play and pause' the plot-point playlist as they presented, and they found this very useful (Av-5.9; Med-6.0) because it gave them control over the timing of their presentations.

It was very useful because you could stop it when you wanted to talk/explain something. HG1A

Yeah, it gave us control and gave us time to present. EG3C

It made sure we could communicate the point to the group. HG1C

Teachers thought it was very useful for the students to present their work on the big shared screen (Av-6.5; Med-6.5), because it moved the students away from the tablet screens and put them in front of the class, taking pride in sharing their creations with their peers,

It enables students to verbally communicate and come away from being behind the tablet. Sharing ideas. HT2

Have to share work! Children love to share their work. ET2



That was exciting for them to present their work back, and see it up there. That was the moment, when we talk about 'ownership' of the lesson and the work, and they demonstrate how they had done that, which was good. WL

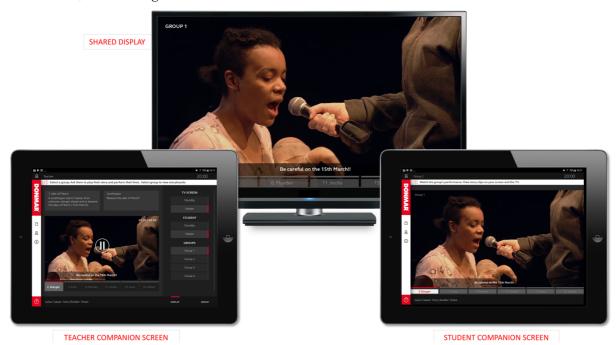


Figure 18 Story Builder Share interface -Teacher 'select Group1' - Student 'Group 2 viewer'

It helped the audience understand the scene and how we interpreted it. HG2A

The ability to 'play and pause' the plot-point sequence during the presentation was useful feature (Av-6.0; Med-6.5) as it gave students control over the pace of their delivery.

It gave room for specific analysis of each clip. HT2

Allows you to check understanding and get feedback. ET1

Enables students to stop and think about the work. ET2

The ability to display the student's lines as subtitles within the plot-points was considered useful to support the individual's understanding of their own work, as well as the understanding of their peers' work (Av-6.25; Med-6.5)

Helpful to see how they translated it. HT1

YES, to provide the rest of the class with a translation. HT2

YES, as it is their work, they can't hide. ET2

The workshop leader explored ways in which the students' work could be delivered, for example by building on the shared screen and subtitles approach by using it as a prompt to present a physical tableau of their plot-point.

Maybe this comes within the delivery – if it's just on the board (shared screen) how do you get them to embody it? Is it a prompt for them to show us their own image, is it more live, or animated, - its more than we got to in the trials. It is useful to show all of their work back. WL

As with any presentation in front of peers, some students needed more support than others. The *Theatre in Schools* tool gave the students a reference point to support their presentation at a basic level, but participants (students and teachers) drew attention to the framing and support they would need from the teacher in the room, especially when there is a requirement for delivery that is more than reading out their line.



The workshop leader reflected on the dialogue between students and their peers during the Share phase, and suggested this might be an opportunity to utilize the Voting feature again.to deepen understanding and learning across the class.

I wonder if there's a voting system that comes in to that element of it, 'what's the dialogue at that point between those students who are sharing their work and the young people who are watching it'. Is there a feature in which the young people who were watching it can type in a question, to ask the team who have done it or type in some reflective comment. A big thing in teaching is peer marking, so how can that be a feature of that element of Share? Look at it as being a dialogue between presenters and audience/students. WL

7.5.1 Ease-of-Use: Share

All participants were asked to rate the ease-of-use of the *Theatre in Schools* Share phase, on a scale of 1-7. Teachers said it was easy to use after an explanation of its functionality (Av-6.25; Med-6.0), and they thought the screen layout, buttons, and navigation were clear and understandable. Similarly, the students found the interface clear and easy to use (Av-6.7; Med-7.0).

Yes, I think once you know it well its straightforward to find what you need. HT1

After brief explanation I understood and what I didn't know was easy to figure it out. HG3A

7.6 Script Detective module overview

The second module in the *Theatre in Schools* experience, is Script Detective (which is described in detail in D3.5).

In Script Detective:

- a. The cast introduce Mark Antony's funeral speech
- b. Students review script segments and production clips and annotate these with keywords and emotions
- c. The class see the complete funeral speech with their annotations

The learning objective and key learning points of this module are:

- 1. Learning objective
 - a. To support a deeper understanding of the 'Friends, Romans, countrymen' clip
 - b. To analyse the language in speech 'Friends, Romans, Countrymen' (Act 3, Scene 2)
- 2. Key learning points
 - a. Understand the effects of literary devices and language on the crowd
 - b. Think about the change in the crowd throughout the scene

Script Detective was evaluated in a UK school outside London, see Figure 19. A class of thirty English students worked with the module as part of an English lesson. Students worked in groups of three to five, sharing a tablet. The teacher led the session, with the *Theatre in Schools* user experience-designer on-hand during the lesson to aid the teacher in the use of the experience when required. The teacher supported and chatted to students during the Make activity.

The students and teacher were observed during the lesson, and when the lesson had ended the teacher led a class-wide discussion group based on discussion points the 2-IMMERSE team had provided. After the lesson, the teacher provided her own in-depth feedback against a sub-set of evaluation questions, previously used in the Story Builder session as reported above. (See Appendix 2 for a list of the questions.)





Figure 19 Students using Theatre in Schools Script Detective

In this section, the teacher's comments are referenced as AT1, while student responses are AS1-3.

The teacher started by exploring the purpose of the 2-IMMERSE *Theatre in School* experience, and this echoed discussions by the 2-IMMERSE team during the design and development process, in which value of using technology had to be clearly defined and against traditional 'pen and paper' approaches, and those unique qualities identified as a strength that was un-replicable elsewhere and in any other form.

Some of the kids said, 'It's nice but couldn't we just do it with a bit of paper?' AT1

Kids are using technology all the time, for everything, so there's an element of novelty value there, and they engage with it really, really quickly. AT1

If you try things with technology, does the technology come first, and then the learning about the literature becomes the secondary thing? You know, it's got to be the supporting tool, rather than the technology first. AT1

7.7 Script Detective: Watch

In the Watch phase the cast introduce the funeral speech from Shakespeare's *Julius Caesar*, see Figure 20 in which all screens are showing the video and Figure 21 which shows the student tablets showing synchronised stills. Along the bottom of the video window key moments of the speech appear in a timeline, which highlights particular points as the cast's explanation plays out. These can be viewed in a linear order, or can be selected individually.





Figure 20 Script Detective Watch interface -'Friends, Romans, Countrymen' Insight video

Students liked the format of the Watch phase. Breaking the text down into small chunks allowed them to focus on the detail.

I think it was, it could be really good and I think it's useful how you can separate the lines and view them individually. Like, I was really struggling to understand what was going on, but when you take them apart and you say, 'Well, what is the crowd feeling?' what it technically means, and you just do a little bit of, sort of, analysis on each line, I think that's good, it makes it clearer. AS1

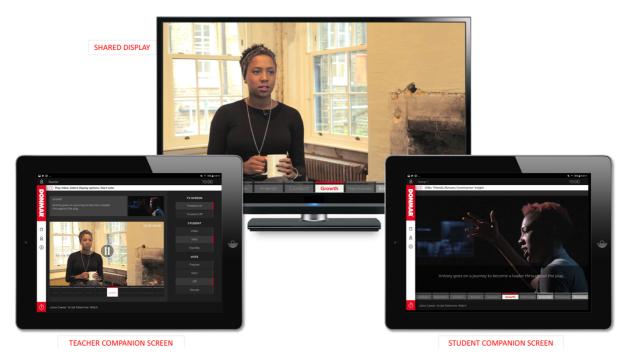


Figure 21 Script Detective Watch interface -synchronised video and stills



Although the teacher saw the benefits of the Script Detective Watch activity, having access to segments of the script and working with the details, she also expressed a need for an overview of the whole speech.

I can see definite potential in that, just being able to have more opportunity for them to add more in of their own ideas, a bit more text to explore, but also somehow having access to the thing as a whole. A student made really perceptive points about that, because it's a speech, you can look at fragments but then you need to see it as a whole, which I'm sort of getting to at the end, with that building up. AT1

7.8 Script Detective: Make

In the Make phase students annotate points within the funeral speech. As each plot point appears in detail as a video window on the left of the screen, students select a literary device and emotion from those available on the right of the screen, see Figure 22 to **Error! Reference source not found.**, and add their keywords into the right-hand text window via the onscreen pop-up keyboard (not shown in the images).

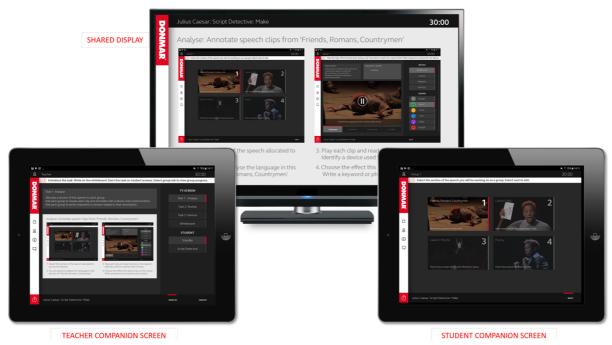


Figure 22 Script Detective Make interface - Student speech selection

Students liked the format of the Make phase; it was felt to be engaging and different, and it allowed co-operation with peers.

It's a more interactive way of doing it, because I guess it's boring just writing it down. It's not exactly ideal, but it's more engaging, I think, because you also get to confer with more people more easily, and then you can write down key words and phrases, and you can write from there, just put a little bit of explanation or stuff like that. AS7





Figure 23 Script Detective Make interface - Student speech edit

Some wanted further wanted adaptations in the Make phase, to allow them to express more individual opinions, and not limit their thinking.

On the bit where it says where you can click what technique it is, it should be that you can click more than one, because sometimes it was more than one technique in one bit, and you could only click one of them. AS5

I felt like it was like a multiple-choice question. So, when we're looking for the techniques, we only looked at those four that were on the side, rather than all the other ones that we saw. If we found something else, we couldn't fit it in and it's, sort of limiting what we could think in a way. AS3

You can change how it is by who's in the room, because it relies on everyone having the same level of analysis on the thing and thinking the same way, and using the technology in exactly the same way. Like, what you write in the boxes and which emotions you're using, because I might not agree, and then when we watch it back, and that's when we get the best idea of what we all think, "I don't know where that idea has come from!" AS2

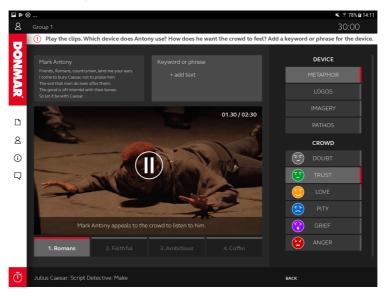




Figure 24 Script Detective Make – students' playlist editor (to choose a device & an emotion)

Participants in the Script Detective experience discussed their requirement to annotate in more detail, beyond that offered in the experience. The teacher gave examples of how this was done, and offered it as an idea for future development, particularly for English students using *Theatre in Schools*.

When we annotate literary texts, we will often do that, and do big circles, lassoing, we call it, you know, lasso those two words together, 'Why are those two words connected?' just to see the physical distance. There's something in being able to see that whole-, the bigger picture, as well as being able to get into the micro detail. AT1

I thought it would be nice to have a collective part at the end, that's a really great idea, but I think it would just be useful if you were able to personalise it a bit more. So, maybe to add in our own techniques. For instance, to be able to say, 'Oh, that was, like, XX or something. It would be great if you could just add in something that they hadn't maybe included. AS10

I felt like it almost did the work for you, because it gave you the options, a limited amount and it was doing it more for you. Like, I didn't feel like you had the option to write down your own opinion. AS11

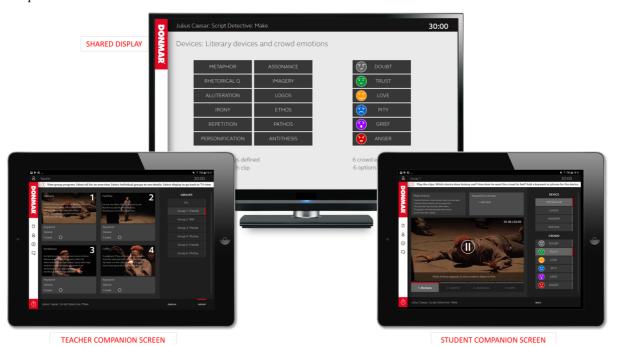


Figure 25 Script Detective Make interface - Teacher single group -student edit

7.9 Script Detective: Share

In the Share phase students present their work on the shared large-screen, which they control via their tablet. As the students playlist plays out their chosen literary devices and emotions appear on the right side of the screen, while the timeline along the bottom highlights their location in the speech. The teacher has the option to display individual group work, or a combined view of the work from all the groups, as shown in Figure 26 to Figure 28.



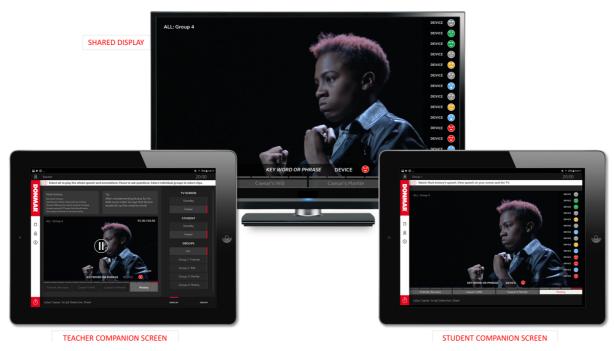


Figure 26 Script Detective Share -teacher 'select all' - for an aggregated annotation display

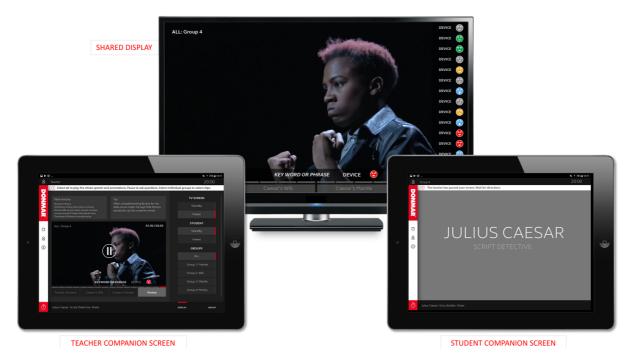


Figure 27 Script Detective Share - teacher 'select all' -and student 'standby'

Students were told but seemed to not recall the public nature of the Share phase, and were shocked to see their work on screen for their peers to see. There was nervous laughter from one group who had not tried very hard during the activity, they had used emoticons to summarise the feelings and emotions they associated with the video clips being shown rather than using full text.



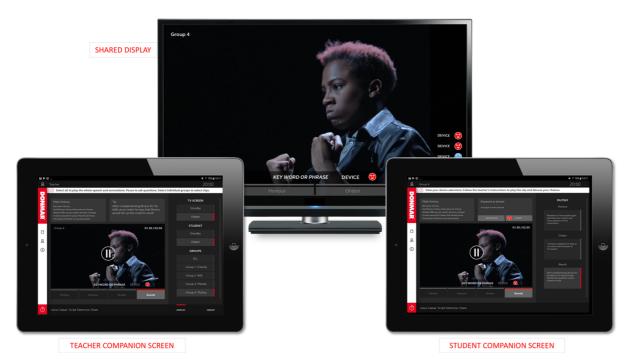


Figure 28 Script detective Share - teacher has selected Group4 - and student in Group 4 player

This response is discussed in more detail in a later section, in which the teacher discusses the merits of the 'progress tracker' as a way to identify un-checked work before sharing see Figure 31.

7.9.1 Theatre in Schools as one tool, used alongside other learning tools

For the English students who explored the Script Detective experience, their learning requirements went beyond the *Theatre in Schools* remit. The experience was good as an introduction to the speech and the techniques used within it, and as a revision aid, but complementary activities were required alongside the tool, and the opportunity to view the whole script (Figure 6).

For English, at the end of the day, you're going to have to hand-write an essay. So, this should only really be aimed towards that. If you just learn on this, then when you actually go to write something, it's going to be a big change. AS19

Start writing answers to it, because, on this, we've got all the techniques and stuff, but that's just it. It's all we've got so far. AS24

Focusing on small sections of the script does not convey the power of the language within the context of the whole play.

You asked...'What would I want you to do back in the classroom?' Talk about the entire thing, as a whole, as in 'on paper', because there's loads of repetition in it. To get the real understanding of the intricacies of all the call-backs to earlier in the speech, you would need the entire thing. You do get some of the repetition here but in short sections. We didn't really get how powerful they were, or how much they were repeated. AS23



7.10 REFERENCE MATERIALS

Theatre in Schools included supporting Reference Materials across the two modules, which were available throughout using the menu on the on the left-hand side of the screen, see Figure 29 and Figure 30.

The left menu provides access to reference material for the module. There are four types of reference material available.

- 1. Material always available across Watch / Make / Share phases:
 - a. Document icon visual storyboard to remind students of key points
 - b. Person icon visual character family tree with photographs of the cast
 - c. Info icon A visual three step guide to the module and the objectives
- 2. Only available in Make
 - a. Speech Icon A visual three step guide to the Make task with instructions.

The Character Family Tree in Story Builder (accessed via the Person Icon), was considered useful by all participants (students Av-6.3, Med-7.0; teachers Av-6.75, Med-7.0) to reference names, and put the characters and their relationships in context.

Very useful, especially with a Shakespeare text -able to refer back to it. HT1

Allows students to put individual characters into context. ET1

Students loved this. ET2

I understood the film more and the links involved. HG2C

Because if someone didn't know who was related to who they would then understand. EG2A

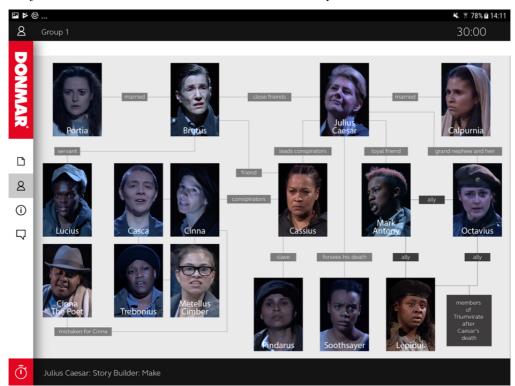


Figure 29 Reference Material - Character Family Tree

The Outline of the Story plot-points (Document Icon) offered a breakdown of the story in 19 points, and this caused some confusion as the StoryBuilder activity described the story in 12 plot-points.



The outline of the story had a problem, it was lots of versions of the story. There were 19 plot points in the activity, outline had 12, we asked them to make 6. Needs more refining and the presentation of the story comes in a different way. Should we use the 'watch' video again instead? It didn't hurt, but refining it so there aren't different version of the story. Just slightly different versions of the story would be better. WL

Despite this, teachers considered it to be useful (Av-6.75; Med-7.0) because it gave the students a basic outline of the story for reference, and for the students (Av-6.5; Med-7.0) it broke the complex story line into basic chunks in easy terms.

Sped-up what would take a very long time in a drama lesson. HT1

It reminded the students of the plot in a concise way. HT2

The story was broken down into basic, easy plot points. HG1B

I found it useful so that I could get a full understanding of the plot and remember points I may have forgotten. EG4B

The overview of the task, into the Watch, Make, Share activities, was useful for the students (Av-6.3; Med-7.0). For the teacher, the ability to input into the prompt panel is essential in to support different groups carrying out the activities.

And the task panel, again for the teacher can input into its essential if we are looking to shape it for different classes – so being able to type different prompts for different groups is going to be key. WL

In the Script Detective Make phase (Speech Icon), participants could reference Literary Devices and Definitions from the reference materials menu (Fig. 30).

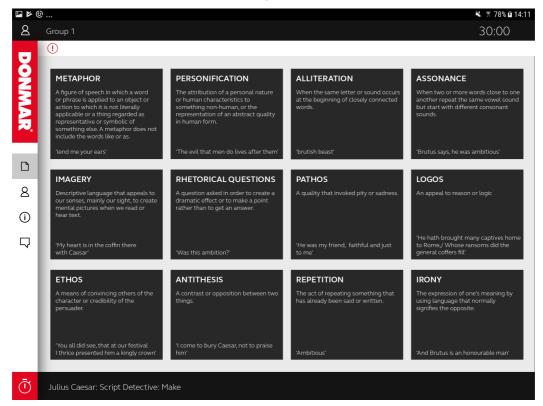


Figure 30 Reference Material -Literary Devices and Definitions (Script Detective)



7.11 Learning

Students all felt that, having undertaken the Theatre in Schools activities, they had a good understanding of the plot-points in *Julius Caesar*, and the literary devices, having done the *Theatre in Schools* activities. 19 of the 21 students who took part in the experience thought it was '*Better than other ways*' of learning, (with three stating it was 'the same' as other ways). 'Other ways of learning Shakespeare' were via video (YouTube 11 responses); books (12 responses); and websites/apps (Bitesize 8 responses).

Students enjoyed this way of learning Shakespeare's *Julius Caesar* (Av-6.5; Med-7.0), and said they would describe the *Theatre in Schools* experience to friends as:

Better than ordinary lessons. HG1B

Very useful and helpful for understanding work. EG3B

It was stunning and it was a more fun way to learn than normal. EG1B

Fun, interesting and more practical and effective to make you have a firm perspective. EG3B

Students were asked what they did not like about the experience, and very few answered. Reasons given, by those that did, concerned an interest in experiencing the lesson individually rather than as a group, and periods of waiting for those who completed the activity ahead of peers.

It was a bit boring between sections/transitions. HG1A

Maybe I would like to experience it individually. HG3A

Both of these reasons (working as groups vs individual work and learning content adapted to ability), are discussed further in other sections of this chapter.

Enjoyment was rooted in the engagement they felt using technology in this interactive unconventional way, applied to a subject some considered difficult. Breaking down Shakespeare's text, and presenting it in different forms to students who are 'in control of their learning', was revered as fun, cool, and a smart way to learn.

It was really interactive and you were always doing something. It was cool that technology was incorporated into something boring and confusing like Shakespeare. HG1A

I found it much more efficient and effective in teaching and breaking down the play. EG4B

Because learning the iPad to learn about Julius Caesar was very fun and smart way to learn without teachers handing you a lot of sheets. EG2A

The fact that the entire lesson was done with technology helped me to stay engaged, more so than in an ordinary lesson. HG2B

It was really interactive and you were always doing something. It was cool that technology was incorporated into something boring and confusing like Shakespeare. HG2C

I gave this experience a 7/7 because it was way better and easier than writing but the same lesson. EG3B

I enjoyed learning about Julius Caesar this way because I had control over my work and got a chance to learn at my own pace, as well as having fun at the same time. EG3A

Yes, because it's easier, more understandable and I could learn more myself and I would remember easier. HG3C

Because we were able to see the story line. It also helped working in groups because we could bounce our ideas off each other. EG5B



It seemed cool and less daunting to learn like this. However, it seemed almost as if it was a bit too much focused on group work / partner work and didn't have as many opportunities in memorising. EG5A

I enjoyed it and found that it's more enjoyable to learn in small chunks. HG3A

Teachers agreed that all the students were engaged in the *Theatre in Schools* experience (Av-6.6; Med-7.0), and discussed how much of this engagement was evoked by the tablet and how much by the learning process. Teachers were asked to give examples of how the *Theatre in Schools* approach supported measurable learner outcomes, and how they saw this occurring:

The students made progress in their understanding and analytical skills of the play. HT2

Students felt much more confident with the story. ET1

Presentation, and verbal feedback. ET2

It engaged them loads. They were all really enthusiastic about it, they seemed involved. Some of the teachers reflected on their lower ability students or students who are less confident, spoke up more in the session that we led. WL

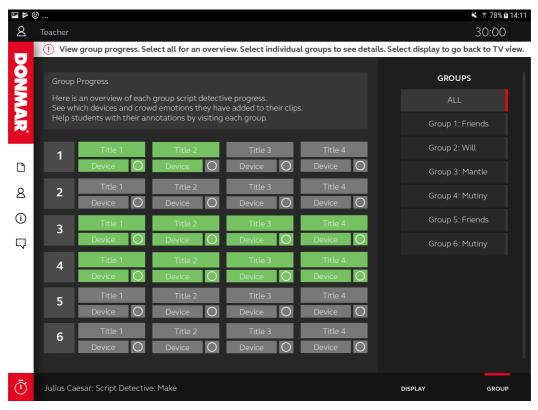


Figure 31 Make -Teacher screen - group progress tracker

Teachers were asked how the *Theatre in Schools* approach was the same, or different from, other regular methods of supporting the measurement of student learning. The group progress charts (see Figure 31 and also Figure 14) were considered the key tool to track the progress of students before they presented their work to their peers. Although this can be achieved using traditional approaches, such as circulating around the room while the work is being undertaken and checking on each group in turn, the progress chart made the activity across the groups explicit and visible, alerting the teacher to any groups that might be struggling (Fig. 31 and Fig. 14). In a traditional approach, unless students alert the teachers to problems up front, the students might wait for the teacher to circulate, which may leave too little time for the students to make adjustments before presenting.



The group progress tracker helped monitor their decisions and ability. HT2

The progress charts. ET1

The idea of what you could track from the students. If they are just presenting on the big screen how they've rewritten the quote might not be that correct, and how do you monitor that and when they are showing back you are able to support them by showing the best level of their work, otherwise you couldn't see that until they have gone to their shared stage. So, pushing that back is really effective. You can now see the progress of the student, I can see what they are doing, 'ok group 3 aren't getting the idea of translating the lines, so I'm going to go and work with them a little bit more 'rather than just think —oh they've done it, then it goes up on the screen. You can take them back to do the edits again, to go back into 'make' mode again. WL

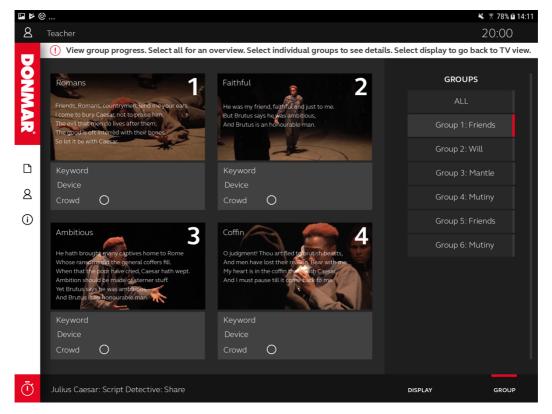


Figure 32 Make -Teacher screen - Individual group progress tracker (for Script Detective)

The teacher leading the Script Detective experience reiterated the importance of maintaining traditional methods of monitoring students' progress alongside the *Theatre in Schools* progress tracker. In particular, if she had made better use of the tracker, it may have alerted her to some groups of students who completed the activity too quickly, by using emoticons rather than text in their responses.

More-so than me just being able to walk round the classroom? I don't think so, because I can see when that group is finished. So [the tracker] is useful to be able to see if they've finished at the end, when you want to draw them together. I think if I'd used it more perhaps, then I would see that some of those groups, where they'd put in the little bits of type, that were just emoticons. AT1

The teacher needs to learn how to use the tracker to expose unchecked work, and at the same time raise awareness amongst the students of the extent and explicit nature of the sharing of their work at the end of the activity.

It was quite good for them actually, to see that it came up, because I could see a few faces, 'Oh no,' you know, but that's good because anything, technology, where you're going to then expose what some other students have written is open to-, well, how then did they use that time? They just



thought, "Oh, I'll just put that." AT1

Beyond tracking the progress of a group, teachers spoke about the importance of measuring the learning of individuals, by adding complementary and additional activities such as writing tasks for homework, to consolidate what they learnt during the *Theatre in Schools* experience.

Because it was entirely group work, how much are we aware of individual contributions within that? That doesn't matter for one individual session, but then as a teacher you'd be looking to do something in addition to this—so what would be the response task to that, that would be an individual assessment for learning? So, what's the written task that they would go away and do that would be their version of consolidating what they learnt in that activity individually. WL

Additional, **complementary activities** were also discussed within the context of the lesson, how various subjects would require additional tasks to aid learning, and how the *Theatre in Schools* tool would support this. For example, drama students may wish to present their lines back to the class as a performance, rather than reading out the lines from the shared big-screen.

The workshop leader speculated on how teachers needed push the use of the *Theatre in Schools* technology in the classroom in the future, such as responding to and supporting different learning styles. For a kinaesthetic learner, you learn by doing more, and some of this comes through the technology [i.e., by taking control] but there is also a level of embodied work, adding other options to the 'make' session.

It's still a 'behind the desk' way of learning. So, how can we push the desks away and do something that is more embodied. For English, it's great to be able to see how they might translate it into their own words, maybe the option for that bit of text to mean something different to different classes. In terms of a theatre context, at this point is there a version that, rather than typing it in, they can get on their feet doing something, such as 'what does that look like in that session' rather than typing the text that you would say in modern day. Is there a way that you could perform that and record that, so that rather than the clip from the film playing, it's your clip that is recorded [and shared]. That's the next step. I'm thinking of this technology and how we could use it to encourage English teachers to use more drama techniques within the classroom. WL

With the Script Detective being evaluated by students in an English class, there was speculation on how the technology supports particular sorts of activity, including for peers who have a different learning-styles.

Shakespeare is really annoyingly difficult and when you see it in a video and it actually breaks it down visually, I think it's a lot easier to see. Yes, you need to do other things with it. It's Shakespeare, we're meant to see it happen. AS8

I'm quite a visual, hands-on person, so I found it quite useful to have everything laid out as it was, and watching it through helps me understand it, because I don't understand things as much when I read them as when I watch and listen to them. AS9

7.11.1 Co-operative learning

The co-operation between the students, within their groups and across the class, was explored with all participants (students and teachers).

From the teacher's perspective, the group working set-up aided reflection and discussion activities at group and class level, supporting and extending regular discussion activities undertaken in a standard lesson. This discussion was self-led and provoked by the *Theatre in Schools* technology.

Teachers:



It gave students something visual to feedback on. HT2

I liked the self-led discussions. I really enjoyed watching that, to see how they were battling over a discussion. There's a skeleton of the discussion, sometimes it relies on us going around and checking the questions on top of that, so mini-provocations within the technology. Donmar Production Team

Students were asked how they worked as a team within their groups. Did one person take charge if the tablet? Did they discuss things first and then make a group decision? Students all shared the tablet and discussed ideas, taking turns and making sure everyone within the group was involved some way. They recognised that they built and used team-working, listening and negotiating skills.

We made sure we all spoke, so no one got left out, and we shared ideas. HG4C

We discussed things first and weren't too fussy over who held the tablet. We were more focussed on what we are doing. EG3A

We first discussed how we were going to present it then we gave each person a role then we practised. EG1A

I think, because we're in smaller groups, I expressed my ideas a bit more, because, if you say something wrong, less people are going to know that you've done it wrong. I said more about what I thought in this group than I think I would have done if we did it in class. AS28

With Script Detective, students were working in larger groups of five, rather than the smaller groups of two or three in the Story Builder. Larger group sizes, beyond three people sharing one tablet, brought up some issues, despite the students adopting the same techniques of sharing and turn-taking.

I think you probably need more tablets, or bigger ones, or smaller groups, because it's quite difficult for us all to see the thing and, obviously, only one person can type at a time. So you, sort of, have to split ourselves up into, like, into little groups anyway. AS6

They want the group dynamic to be there, and to leave it quite open, free, because you get generation of good ideas, and yes, you do, but you also, by doing that, you leave it free for kids to opt out. There were some kids in that group who didn't really do anything for the whole 100 minutes. That group work dynamics are incredibly difficult to manage. When you have a tablet that requires one person to put the input, you immediately exclude four other people, if you've got a group of five. AT1

These groups were much larger than the ones before, and with a smaller group, they came up with a strategy about who would do what and when. They swapped it between them, because it was more manageable. It's interesting seeing where that break point is. 2-IMMERSE Designer, Theatre in Schools

The group dynamic brings the generation of good ideas, but beyond a group size of three students the dynamic becomes difficult to manage. If the students themselves do not self-manage the situation, they might be inclined to 'opt out'.

7.12 Multiscreen experiences supporting learning objectives

All teachers agreed that the *Theatre in Schools* connected multiscreen experience better achieved their learning objectives than a single screen experience, because it nurtured independent self-learning amongst peers afforded by use of tablets.

Yes, it promotes the independence of students and supports differentiation. ET1

That's what the young people reflected on when I was speaking to them. Being in control, using their own device, made the session more exciting, made it more engaging than that done previously when they are passively watching a screen. They've got something else in front of them, and



occasionally that device is controlling what's on the big screen for everybody else to see. So, I think that they felt more engaged, than their regular level of engagement. WL

I like working on smaller screens, because it is closer, and it's more practical. AS18

I think having the tablets there in a group, it makes you think more in-depth-, when you're by yourself, and trying to do it, sometimes you can get confused and just end up doing nothing. In a group, you bounce ideas across. AS26

7.13 Control: orchestration and curation of the *Theatre in Schools* experience

The workshop leader reflected on the design of the activities and how they were structured, to allow for self-led learning, in which the students were able to lead a lot of the work independently, controlling the lesson on their tablets themselves.

The technology enabled the content to be purposely visual, and the lesson 'active', bringing the 'creative' presence of the actors, and the production, into the room.

Interactive and focussed approach to introducing a text. HT2

I would say it's an approach that encourages students to have control over their learning. It's fun. It's active. ET1

Fantastic interactive engaging lesson. ET2

The *Theatre in Schools* technology allowed control (or curation) to be passed from teacher to student, and for content to be orchestrated across the different devices, shared and individual. Teachers considered the ability to choose which content is displayed on the big shared screen and the students' tablets very useful to maintain the students' attention (Av-7.0; Med-7.0)

It was useful to gain the focus of the students. HT2

Enables you, as the teacher, to control and guide learning. Loved the screen saver idea -an absolute god send for teachers when students are working in groups. ET2

It can become a distraction otherwise. When you switched their screens off they knew that you needed their attention. It's the equivalent of being in a workshop and saying 'when I put my hand up you've got to stop'. WL

Another feature allows the teacher to shift the role of curator to the student, when presenting their work to the class, and they found this a very useful and easy thing to do (Av7.0; Med-7.0), especially as it built student's confidence through handing over control.

Students found using the tech really easy, and so it wasn't an issue. HT1

Students are able to take control and build confidence. ET1

7.14 A flexible framework

The 2-IMMERSE technology and the approach used in the *Theatre in Schools* experience allowed a degree of flexibility within which the teacher could work.

This adaptable framework allowed the time allotted to the three phases (Watch / Make / Share) to be extended or reduced, and all teachers appreciated this feature. They also considered the framework flexible enough to start incorporating the mixed abilities of the students in the class, but feel it could go further.



Yes, but I think having more opportunity to differentiate would be good. The clips are pitched at the same level. HT2

It's really interesting to see what depth people want to go into, and being able to adapt things, I think that's really important. 2-IMMERSE Designer, Theatre in Schools

When the student said about individual thinking, and I thought, 'Ooh,' but that's a really perceptive observation actually, because she said that when I went around [the groups]. 'What am I doing? Where am I in this?' There was a huge amount of thinking going on, with lots of different things, but such an interesting observation from this individual. ATI

The teachers agreed that this approach supported their mentoring and co-ordination of the class.

Yes, students can be given focuses in their group. Having control of the tablet gives an opportunity for co-ordination. HT2

Yes, you can see and assess everyone's understanding. ET1

In terms of mentoring, it's the key things of being able to document that work in some way, and take it back. WL

7.15 Future recommendations

Looking ahead, all the teachers wanted a *Theatre in Schools* experience that they could adapt for students with different levels of experience, which enabled them to change instructions, prompts and guides, and crucially so that they could 'differentiate' for different classes.

The ability to create and provide their own set of modules, with different content and exercises which can be adapted to lesson requirements was considered useful, and suggestions were made such as:

Focus on particular characters and their journeys or moments. ET1

Other Shakespeare, linked to GCSE style questions; use for PSHE/citizenships, but technology scares most teachers! ET2

It's just finding ways of making the technology itself really work, that the teacher can make it really specific to the class she is working with, and what they want to achieve with that particular lesson at those particular students, and there aren't ways around the technology yet to be able to do that. In the future you could have it so you're doing your lesson plan within the tech, so you are able to change the length of time that things are allowed to run for. WL

Students were asked what types of experiences they would like to see developed in the future, if the 2-IMMERSE technology was available in their school.

I would do maths and I wouldn't change a thing because everything had its own point. HG3A

Revision lessons. EG2A

I would like for it to be used in History or English lessons, to understand key points easier. Also, at home to study. EG1B

I think more literary subjects, like history or geography. It could be used for those types of subjects. In history, for example, you could use dates instead of different [literary] techniques, and in geography you could use different key terms. I think it might work, but English seems to be the best way for this to work. AS15

7.15.1 Additional features: a revision tool

Beyond improvements to the adaptability of the current framework, the workshop leader and some students had explored the idea of including a 'revision' feature, thereby extending the functionality of *Theatre in Schools* beyond the school walls, where students can review the work they had done in class that day (such as the playlist they had created in Story Builder), and consolidate their learning.



Further, this feature could incorporate tasks for the individual, which would include the creation and recording of user generated content (such as a writing task), and thus support the measurement of individual learning.

I wonder about how this could be used as a revision tool. We spoke originally about BBC Bitesize, and a lot of their work focuses around revision tools. It's a challenge for teachers about how people can engage in effective revision, and how we could use that idea of 'student led' is really important because you want their learning and understanding to be at the forefront of their revision sessions.

It could be led in independent groups, away from school. Five friends meet up for a revision session, and they look at it on their mobiles. The potential for that to exist, as an app that is accessible on whatever devices are available—then that can become really exciting. WL

For Script Detective, the English students reviewing the *Theatre in Schools* experience discussed the value of creating 'take-away' artefacts, to consolidate learning, aid revision, and aid further work.

For an actual lesson, we've done this before where your group gets a section and annotates it themselves, and when you do it on paper you have your notes and your analysis that you keep, but when you do it on here, it's just a good exercise for the class, but then after the class, it might not stick in your mind as much as if you're actually writing it down and then look back at it. AS6

7.15.2 Additional features: annotation and access to a full script

In Script Detective all participants and the teacher spoke about the benefits of including an annotation feature, a particularly useful tool for English students who regularly annotate paper copies of the script as part of a regular lesson.

I thought it would be nice, because everyone's saying how they like to annotate it on paper, you could always link in to annotate it, have the text in front of you, maybe added text boxes or something you can just put on the side and link it to certain parts of the speech. So, then, you can have a look. You're annotating it yourself, like you are on paper, but you've still got all the other helpful visual sides to it as well. AS4

Participants also spoke about the benefits of including the full-script, so lines could be placed within a wider context, and its presence would aid understanding of difficult phrases.

I feel like, for Shakespeare especially, there's a lot of words I don't understand, it would probably be useful to have quite a bit of contextual information about the words, maybe a dictionary with some key words, or that you could work it out using the rest of the text. So, if there was some function that allowed you to see the rest of text. AS2

It's also really nice to be able to connect ideas, and especially in a speech where it's all a collective idea going forward. It would be nice to see the entire text and reference it and talk about the progression within it, and also, then understand. AS2

7.15.3 Technology in Schools

The teachers wanted an adaptable experience which would be available on a range of different devices, phones, tablets, PCs.

Although 2-IMMERSE technology, and the concept for *Theatre in Schools*, is to be available on a range of devices, teachers were hesitant about its use in schools due to lack of funding and equipment.

I have a few concerns about over-reliance on technology. Schools lack funding to keep up to date on their technology. BUT the students really enjoyed the technology. HT2

No, school tablets are old and slow. The set-up is quite long. ET1



Then the only other question is about what technology is available in schools. Realistically, at the moment, there are too few schools able to support this in their classroom. WL

Later in the evaluation, when teachers were asked about potential pitfalls of using Theatre in Schools, in school, their responses again referenced the lack of access to technology and funding, and they suggested the technology should be available on standard PCs.

If it was made for PC yes! HT2 Just the technology. ET1

7.16 Providing equal access to the best materials and resources

Teacher's overall responses to using *Theatre in Schools* was positive, as it formed a 'good introduction' to Shakespeare's text, balancing discussion and activity in the classroom, and IT encompassed self-led learning in an engaging way.

It's a good way to introduce a play. It is interactive and can be balanced with discussion and direction to achieve learning outcomes. HT2

Young people found it engaging and exciting. It really gave them ownership over the lesson. It was visually stimulating and exciting which was good. WL

Often, schools struggle to provide equal levels of access to materials and resources, due to restraints from budgets and geographical locations. For example, we discussed the extent to which the location of a school might affect learning opportunities.

If this is about bringing theatre into the classroom, then lots of London schools are blessed by location and opportunities offered to them. Schools further away from the theatres have the cost of getting the students onto a bus to get them to the theatre, pricing them out of these opportunities. To be able to bring that into these schools by this technology is a good thing. WL

Teachers were asked if the *Theatre in Schools* technology and approach offered a way for more equal provision in schools, and access to the best materials and resources. Two of the teachers who responded said that it did not, because schools did not have access to up-to-date technology (as discussed in previous sections). The other two teachers and the workshop leader looked beyond this problem, and saw the potential of 2-IMMERSE technology as a means to provide equal access to learning materials and resources, and more specifically bringing the artists and a Donmar workshop leader into the classroom.

YES, definitely. This levels the playing field, and access to world class production. ET1

If we are looking at this, not just in terms of lessons, but the ability to bring theatre into the classroom, to be able to have those additional videos, not only from the theatre itself but the creative team too, into that classroom that then becomes really exciting. WL

We do exploit the opportunities of things like the NT Live and those things. Actually, to have it available on a technology that you could use in school, I think that would be good, to have the opportunity to see things that they wouldn't. AT1

Theatre in Schools brought together Shakespeare's text, the Donmar production, learning activities, additional media resources (i.e, cast interviews, production stills, reference materials), and user annotation as an integral part of the experience (i.e., the students plot-point scripts and ideas on literary devices), and teachers considered this to be a good way to engage students (Av-6.6; Med-7.0)

Yes, Shakespeare should be fun -you should be able to adapt it and make it meaningful to you. ET1

The thing we say about Shakespeare as a text, is it's not always easy for it to be studied. It's not always useful when holding it up as a special thing, you need to break it down and this is where



technology like this is useful, because you are using film in a different way. They see a play in a different way from a production, and that does have value. Donmar production team

So, I think just having access to a production is probably the thing of biggest value. Then, I think having the little explanations and the interviews are really useful too. As a teacher, the ideal is that the resources are such good quality that I can pick it up and I can make it my own, and do it in the class. AT1

7.17 Summary

To summarise, at the end of the evaluation students were asked for their overall view on the *Theatre in Schools* experience, and their responses can be grouped around key themes, all of which had been referenced numerous times throughout the evaluation sessions.

They liked *Theatre in Schools* because it was good and cool to use technology for learning, the activity was interesting and engaging with clear aims, and it was easy to navigate. The activity of 'making a play-list' was fun ('putting olden-day phrases into phrases people would understand') because it was creating an artefact, and it made the subject easily digestible. The group work set-up, and conversations with peers, helped them understand the plot, and they enjoyed sharing their ideas. The technology presented Shakespeare's play in new, multiple formats (video, images and text) which helped those who struggled with text alone, and presented the story in small manageable chunks, to help them understand the plot points. They enjoyed the independence and control of learning by themselves rather than simply being taught.

The partner work. Our conversations helped us understand the plot better. HG1B

I liked being able to learn myself rather than being taught. HG2A

I gave this score because you put olden day phrases and change them to sentences more people would understand. HG4B

I liked it because I got to share my point of view with other people, and then develop my idea based on their views and explanations. EG4A

I liked watching videos especially made for the lesson, so it was very easy to understand. When we were making it we were trying by ourselves and I liked that way of learning. HG3B

Good because it was very fun. It was a new way of working and getting the knowledge across. HG3A

It was very good because I knew what to do at all time. EG2A

I thought it was boring at first because the film [from the DVD] was confusing and long.

Good as I learned in a more modern way, using technology. As I use technology a lot it helps. HG1C



8 Donmar feedback

At the end of the Story Builder and Script Detective sessions in schools, the Donmar education department discussed their thoughts about *Theatre in Schools* and 2-IMMERSE technology in response to the following questions:

- Do you feel that a technological approach like this can extend the reach of learning materials to more schools?
- Do you feel it provides a decent level of support and tools for when the artist is not present?
- Have we combined media in engaging and useful ways?
- Can you envisage more modules be created and delivered in this way?
- Is this scalable?

The Donmar Education team are referenced here as 'DET1' and the workshop leader as 'WL'.

'A benefit in the room, but no evidence of consolidating the learning'

The teacher at one of the schools talked about the benefit that she saw in the room, but the question is 'How do you cement the learning?' and that's a question that the Donmar has too. DET1

I think artistically we are so used to people playing through their bodies and speaking it, in a room, How much of the students' experience, and the teachers' observations of the students experience, is simply because it's a new thing in the room, and how do you measure that? DET1

Process to design the Story Builder and Script Detective modules

We were translating an exercise and experience that we'd already tested with young people, did with teachers, that we then wrote into this digital resource, that then we were finding another way to share that activity. WL

It's our product that is then being re-shaped, It relied on people like our directors and partners, who are these incredible artists and facilitators, to then distil those things for the other person to pass on. It's a lot of passing the baton on. DET1

Do approaches like this extend the reach of learning materials to more schools?

Yes, it's a no-brainer, of course it can get us further. We've only got 250 seats and a max of 20 schools per production. This can go to lots of places, It's the reason we put the Trilogy films in schools, so yes, 100%. DET1

Do you feel it provides a decent level of support, and tools, for when the artist is not present?

Yes, but it relies heavily on the teacher to be able to have the time to get their head around it. If I was a teacher, working in a school planning a lesson, it would take me longer to plan a lesson with this technology, at least for the first few times while I worked out how it works and all the functions and where I could use it. If you are looking to build it as a regular classroom technique, then obviously that would become quicker. But in terms of having that artist present and the theatre presence in there, 'yes' it does do that. Through those video interviews and the clips. WL



Have we combined media in engaging and useful ways?

Looking at the still images, and then being able to click onto the character map that we made as a reference, and to have that all in one place is useful.

I think it's really exciting, I do think the students got a lot from it. And there are some small tweaks in terms of takeaways, and consolidation learning. I can see ways of building it into a curriculum. WL

Future steps and research

I was interested in one of the schools which brought in three different groups of young people to monitor learning over different learners and styles, and that's something in the future that would be interesting – what type of young person could have the most benefits from it? DET1



9 Conclusions

Using a design-led process and content developed by the Donmar Warehouse, we developed and evaluated an on-demand multi-screen learning experience for schools.

The one-hour experience was evaluated by teachers and students in their schools, using a small dedicated computer that accessed a cloud-based service hosting a constellation of micro-services.

Schools, teachers and students were recruited using targets for year group (year 10-11) and subject matter (Drama or English), via established working relationships with the Donmar and a member of the 2-IMMERSE project team. Twenty-one individual student responses, five individual teacher responses, one workshop leader response, and responses gleaned from a group discussion of thirty additional students, have been assessed through subjective quantitative and qualitative assessment of the experience, elicited through questionnaires and guided interview procedures.

Theatre in Schools scored highly on enjoyment, and was considered interesting, a fun way to learn, and better than an ordinary lesson. The technology allowed interactions in an unconventional way, applied to a subject considered difficult, breaking it down and presenting it in different forms to suit students' abilities and requirements.

Students all felt they had a good understanding of *Julius Caesar*, having done the *Theatre in Schools* activities, they thought it was '*Better than other ways*' of learning.

Teachers agreed that all the students were engaged in the *Theatre in Schools* experience, evoked by the technology/tablet and the learning process, and they gave examples of measurable learner outcomes.

The results vindicated the strongly design-led development process. Students and teachers enjoyed and advocated the multiple-screen experience above a single screen regular class.

Overall, students liked *Theatre in Schools* because they felt that the activities were interesting and engaging with clear aims, and were easy to navigate. The activities were fun ('putting olden-day phrases into phrases people would understand') because it was creating an artefact, and it made the subject easily digestible. The group work set-up, and conversations with peers, helped them understand the plot, and they enjoyed sharing their ideas. The technology presented Shakespeare's text in new, multiple formats which helped those who struggled with text alone, and presented the story in small manageable chunks, assisting the understanding of plot and literary devices. They enjoyed the independence and control of learning by themselves rather than being taught.

All teachers agreed that the *Theatre in Schools* connected multiscreen experience better achieved their learning objectives than a single screen experience, because it nurtured independent self-learning amongst peers afforded by use of tablets.

Analysis of the annotated responses suggest that the new features enabled in this multi-screen experience are consistent with the goal of the project team, educators and industry, to create services that allow users, both teachers and students, to allow equal provision across education, with access to educational materials and opportunity currently not afforded by schools outside privileged and well-funded areas of the UK, or outside the geographical reach of major cities.

We conclude that the multi-screen experience developed here would be utilised and recommended by a significant majority of our target audience, both teachers and students.



Annex A Consent Form / Participant Agreement

All participants in the **Theatre in Schools** trials were asked to complete a participant agreement. As students were under 16years of age, their parents/guardians consent was sought.





Dear Parent /Guardian,

2-IMMERSE: Theatre in Schools

As you may know, your child's class are working with the Donmar Warehouse Theatre in October on the 2*Immserse: Theatre in Schools* study.

The 2-IMMERSE study relates to the development of a new multi-screen media technology, and is a collaborative project conducted by the 2-IMMERSE project team, consisting of BBC R&D, BT R&D, and Illuminations. The purpose of the study is to understand people's use of *Theatre in Schools*, a new experience currently being developed by the 2-IMMERSE team.

Your child's involvement in this study will require your child to spend some time using the *Theatre in Schools* software/hardware, while we observe their activities.

The study sessions will involve:

- A screening of Julius Ceasar & a video introducting Julius Ceasar
- An introduction to the Theatre in Schools concept.
- The use of the *Theatre in Schools* experience, and its related software/hardware.
- The completion of a post-trial paper-based questionnaire.
- A short interview to camera, using the same questions used in the questionnaire, with a 2-IMMERSE study facilitator.

Please understand that this is a study of our *Theatre in Schools* concept – not your child.

All information supplied during the study will be suitable for children. The 2-IMMERSE project team reserves the right to make minor changes to the conduct of the study.

We would be most grateful if you would read the following statements about the study, and then sign the slip below to give your permission for your child to take part. Please return the slip to your class teacher.

Consent Form

I understand that this research is being conducted by the 2-IMMERSE project consortium, and the conducted research is part of the European research project 2-IMMERSE.

I understand that my child's participation in this research is voluntary.

If my child chooses not to participate, I may withdraw my consent at any time.

I voluntarily agree for my child to use the provided software and hardware relating to the *Theatre in Schools* experience, to participate in a post-study paper-based questionnaire, and to discuss their experience in a short informal interview to camera.



I understand that my child's participation in the study will be recorded, and I give my consent for:

- Annonymised data to be recorded by the software during the Theatre in Schools experience, and
- Video recordings to be made during the experience, and in an informal interview at the end.

I agree to the 2-IMMERSE project team using the data, contributions and information collected during the study.

I understand that any video recordings and written feedback will be used for statistical/summary and research purposes only. The 2-IMMERSE project team will ensure that my child's personal details will not be associated with any contribution made in any recording.

I understand that the 2-IMMERSE project team may make the results of this study publicly available, but no personal data relating to my child nor any video or written material involving my child will be made publicly available.

I understand that the 2-IMMERSE project team will not use my child's personal details for any purpose other than this study, nor will the 2-IMMERSE project team pass any personal details to any third party.

I agree that any information relating to this study is confidential and that all information collected by the 2-IMMERSE project team concerning my child's participation in this study is confidential and will be held securely in password protected files/folders in a secure location, in accordance with GDRP legislation.

I have read the description of the study and agree that my child will participate on the terms set out above.

Thank you in advance, and if you have any questions please feel free to contact me at Maxine.glancy@bbc.co.uk or by phone on 0XXXXX.

With best regards,

BBC Research & Development & 2-IMMERSE

More information on the 2-IMMERSE project can be found here: https://2-IMMERSE.eu

Name of 0	Child			
School / C	College			
Please tic	k the appropriate box:			
l do		I do not		
•	permission for my child to take ion with the Donmar Warehous	•	RSE: Theatre in Sci	nools study in
	arent/Guardian: aged 18 or over, vou may sigr			



Annex B Post-trial Questionnaires for students and teachers

TEACHERS QUESTIONNAIRE

2-IMMERSE: Evaluation of Theatre in Schools

TEACHERS: Story Builder

OVERALL

What is your <u>initial response</u> to this approach, for teaching Theatre in Schools?

STORY-BUILDER ACTIVITIES

You explored the plot-points with the class.

Did the Story-Builder activity meet the learning objectives? .. and why?

Did NOT meet objectives	1	2	3	4	5	6	7	DID meet objectives
			i '					

Was this Story-Builder experience the same, or different, from a standard class covering the same topic and learning objectives? ..and why?

The SAME	1	2	3	4	5	6	7	Very DIFFERENT
----------	---	---	---	---	---	---	---	----------------

Was this Story-Builder experience worse, or better, than a standard class covering the same topic and learning objectives? ..and why?

WORSE than usual approach	1	2	3	4	5	6	7	BETTER than usual approach
---------------------------	---	---	---	---	---	---	---	----------------------------

WATCH

Now we will look at the WATCH phase.

Please circle a number on the scale and try to explain why you gave this score.

How useful were the **cast interviews** /video clips?

	This was NOT Useful	1	2	3	4	5	6	7	This was VERY Useful
--	---------------------	---	---	---	---	---	---	---	----------------------

How useful were the **still images** and plot text from the performance?

Not Useful	1	2	3	4	5	6	7	Very Useful
------------	---	---	---	---	---	---	---	-------------

How useful was the **Timeline** along bottom of the screen?

Not Useful	1	2	3	4	5	6	7	Very Useful
------------	---	---	---	---	---	---	---	-------------

How useful was the Voting feature?

Not Useful	1	2	3	4	5	6	7	Very Useful

Did you add your own questions to the Voting feature? YES / NO

Overall, do you feel this 'WATCH' activity in Story-Builder 'worked' well? YES / NO

MAKE



Now we will look at the MAKE phase.

Please circle a number on the scale and try to explain why you gave this score.

Do you feel this 'Make your own story' activity worked well?

(i.e.selecting playlist plot points)

Did NOT work well	1	2	3	4	5	6	7	Worked VERY well
-------------------	---	---	---	---	---	---	---	------------------

What aspects of the 'Make your own story' activity worked well? ...and why?

Was it useful to review the progress of the groups on your tablet?

NOT useful	1	2	3	4	5	6	7	VERY Useful		
CHADE										

SHAKE

Now we will look at the SHARE phase.

Please circle a number on the scale and try to explain why you gave this score.

Was it useful to present the group's plot-point sequences on big-screen for the whole class to see?

NOT Useful	1	2	3	4	5	6	7	VERY Useful
------------	---	---	---	---	---	---	---	-------------

Was it useful to display the lines the students had written as subtitles on the plot-point sequences?

NOT Useful	1	2	3	4	5	6	7	VERY Useful

GENERAL

Now we will look at GENERAL features.

Was it useful to be able to choose which content is displayed on big-screen and the student's tablets?

NOT Useful	1	2	3	4	5	6	7	VERY Useful
------------	---	---	---	---	---	---	---	-------------

Was it easy and useful to hand control to the different groups, during the Share activity?

NOT Easy to Use	1	2	3	4	5	6	7	VERY Easy to Use

Supporting Reference Materials –on the left-hand side of the screen

Was the Character family tree useful?

	NOT Useful	1	2	3	4	5	6	7	VERY Useful
--	------------	---	---	---	---	---	---	---	-------------

Was the outline of the Story useful?

NOT Useful	1	2	3	4	5	6	7	VERY Useful

Was the Task info panel select/write/play useful?

NOT Useful	1	2	3	4	5	6	7	VERY Useful

What features of the Story-Builder activity were confusing?

A FLEXIBLE FRAMEWORK

Is the approach adaptable enough for you, in terms of:



- Time allowances for the 3 phases (watch/make/share) YES / NO
- Student's abilities YES / NO
- Availability of technology to use within the school
 YES / NO
- Does this approach support your mentoring and co-ordination of the group? YES / NO

SUPPORTING LEARNING

Now we will look at the students learning process.

Please circle a number on the scale and try to explain why you gave this score.

Is this approach the same or different from other methods, which support the measurement of student learning?

The SAME	1	2	3	4	5	6	7	VERY different
----------	---	---	---	---	---	---	---	----------------

To what extent did this approach support your measurement of student learning?

Did NOT support measurement	1	2	3	4	5	6	7	DID support measurement
-----------------------------	---	---	---	---	---	---	---	-------------------------

Which features of the experience aided measurement? (e.g., the group progress charts; the 'share' phase.)

To what extent did this approach engage and involve students?

Did NOT engage	1	2	3	4	5	6	7	Engaged A LOT
----------------	---	---	---	---	---	---	---	---------------

CO-OPERATIVE LEARNING

This section is about how students worked together, sharing and discussing the themes, as a small group and as a class.

You use class wide reflection and discussion as part of a standard lesson.

Did this approach change or enhance reflection and discussion activities?

IN THE FUTURE

In the future, you could:

- 1. Adapt the system for students with different levels of experience.
- 2. Have a 'set-up' interface, which enabled you to change instructions, prompts and guides –so you could 'differentiate' for different classes.
- 3. Have a system available on a range of different devices, phones, tablets, PCs.
- 4. Be provided with a set of modules, with different content and exercises, which can be adapted to lesson requirements.

If you could only have one of these, which would it be and why?

2-IMMERSE: Evaluation of Theatre in Schools

TEACHERS: Script Detective

OVERALL

(Just brief statement required here, we will delve into details later!)

What is your initial response to this approach, for teaching Theatre in Schools?



SCRIPT DETECTIVE ACTIVITIES

You explored the script with the class.

Did the Script-Detective activity meet the learning objectives? ..and why?

Did NOT meet objectives	1	2	3	4	5	6	7	DID meet objectives
-------------------------	---	---	---	---	---	---	---	---------------------

Was this Script-Detective experience the same or different from a standard class covering the same topic and learning objectives? ..and why?

 The SAME
 1
 2
 3
 4
 5
 6
 7
 VERY Different

Was this Script-Detective experience worse, or better, than a standard class covering the same topic and learning objectives? ..and why?

WORSE than usual approach 1 2 3 4 5 6 7 BETTER than usual approach

WATCH

Now we will look at the WATCH phase.

Please circle a number on the scale and try to explain why you gave this score.

How useful were the **cast insights** /video-clips explaining the Literary Devices?

This was NOT Useful 1 2 3 4 5 6 7 This was VERY Useful

How useful was the bookmarked timeline along bottom of the screen?

 Not Useful
 1
 2
 3
 4
 5
 6
 7
 Very Useful

How useful were the **still images** and plot text from the performance?

 Not Useful
 1
 2
 3
 4
 5
 6
 7
 Very Useful

If you used the **Voting** feature today, how useful was it?

Not Useful 1 2 3 4 5 6 7 Very Useful

If you used the Voting feature today, did you add your own questions? YES / NO

Overall, do you feel this 'WATCH' activity on Literary Devices 'worked' well? YES / NO

MAKE

Now we will look at the MAKE phase.

Please circle a number on the scale and try to explain why you gave this score.

Do you feel the 'assigning devices & impacts' activity worked well?

(i.e.selecting devices and their impact on...)

Did NOT work well 1 2 3 4 5 6 7 Did work VERY well

What aspects of the 'assigning devices & impacts' activity worked well ... and why?

SHARE

Now we will look at the SHARE phase.



Please circle a number on the scale and try to explain why you gave this score.

Was it useful to present the **devices & impacts** on big-screen for the whole class to see?

Not Useful	1	2	3	4	5	6	7	Very Useful
------------	---	---	---	---	---	---	---	-------------

Was it useful to display the devices & impacts for individual groups, and then the whole class?

Not Useful	1	2	3	4	5	6	7	Very Useful

...how did this work?

GENERAL

Supporting Reference Materials –on the left-hand side of the screen

Was the Device definition & impact screen useful?

	Not Useful	1	2	3	4	5	6	7	Very Useful
p	anel useful?								

Was the Task info panel useful?

1 2 3 4 3 6 / very oscial	Not Useful 1	2	3	4	5	6	7	Very Useful
---------------------------	--------------	---	---	---	---	---	---	-------------

What features of the Script-Detective activity were confusing?

SUPPORTING LEARNING

Now we will look at the students learning process.

Please circle a number on the scale and try to explain why you gave this score.

Is this approach the same or different from other methods, which support the measurement of student learning?

NOT different	1	2	3	4	5	6	7	VERY different

To what extent did this approach support your measurement of student learning?

Did	NOT	support			3	4	5	6	7	YES,	it	DID	support
measurer	nent		1	2		-			,	measuren	nent		

Which features of the experience aided measurement? (e.g., the group progress charts; the 'share' phase.)

To what extent did this approach engage and involve students?

Did NOT engage	1	2	3	4	5	6	7	Engaged A LOT
----------------	---	---	---	---	---	---	---	---------------

CO-OPERATIVE LEARNING

This section is about how students worked together, sharing and discussing the themes, as a small group and as a class.

Over the past two days, have students 'played' with features of the Story-Builder and Script-Detective in a ways you didn't expect?

How would you describe this approach to colleagues or others involved in education?



IN THE FUTURE

You could create your own teaching modules to suit other learning objectives, maybe other subjects.

• What would they be?

SUMMARY

Defining what the project has demonstrated.

To what extent does the location of your school limit/effect learning opportunities?...why?

Do you think this technology might change this position?...why?

Is a connected multiscreen experience better at achieving the learning goals/objectives than a single screen experience?...and Why?

FINALLY

We have brought together Shakespeare's text, the production, learning activities, resources, and user annotation.

Is this approach, using the production and student annotation, a good way to engage students?

Not a way to engage	1	2	3	4	5	6	7	Definitely a way to engaged
---------------------	---	---	---	---	---	---	---	-----------------------------

Is there anything we haven't covered that you want to feedback on?

STUDENTS QUESTIONNAIRE

2-IMMERSE: Theatre in Schools

STUDENTS: StoryBuilder

Which group were you in?

OVERALL

(Just brief statement required here, we will delve into details later!)

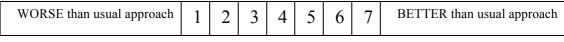
Did you enjoy this way of learning about Shakespeare's Julius Caesar?

Did NOT enjoy	1	2	3	4	5	6	7	ENJOYED very much
---------------	---	---	---	---	---	---	---	-------------------

Was this **Story-Builder experience** the same or different from a standard class covering a similar subject? ..and why?

The SAME	1	2	3	4	5	6	7	Very DIFFERENT
----------	---	---	---	---	---	---	---	----------------

Was this **Story-Builder experience** worse or better than a standard class covering a similar subject? ..and why?



WATCH

The cast introduced the plot points in Julius Caesar.

Were the **cast interview videos**, explaining the plot points, useful?



	NOT Useful	1	2	3	4	5	6	7	VERY Useful
Were the still-imag	ges from the per	forn	ıance	e usej	ful?				
	NOT Useful	1	2	3	4	5	6	7	VERY Useful
Was the Timeline	along bottom oj	fscre	en, s	howi	ing th	he pl	ot-po	ints,	useful?
	NOT Useful	1	2	3	4	5	6	7	VERY Useful
Was the Voting fe	ature USEFUL:	?							
	NOT Useful	1	2	3	4	5	6	7	VERY Useful
Was the Voting fe	ature FUN?								
	NOT Fu	ın	1	2	3	4	5	6	7 FUN
What questions wo	ould you like to	ask i	n the	Voti	ng ac	ctivit	v?		
				M	[A]	KE	·		
First, you created	your own playli	st, m	ade ı	ıp of	plot	poin	ts fro	m th	e story.
Then you added yo	our own lines to	you	r pla	ylist j	plot p	oint	S.		
Did you enjoy mak	king your playli	ist an	id ad	ding	your	own	line	s ?	
	NOT Enjoyable	9]	1 2	2 3	3 2	1 5	5 6	5 7	7 VERY Enjoyable
What parts of this	activity did you	enjo	y and	d why	v?				
How easy was it to	select your pla	ıylist	plot	poin	ts?				
	NOT Easy to Us	se	1	2	3	4	5	6	7 VERY Easy to Use
How easy was it t keyboard.)	to ADD your or	wn l	ines	to pl	ot po	oints	? (i.e	.Тург	ing in your line using the onscree
	NOT Easy to Use	9 1	1 2	2 3	3 2	1 5	5 6	5 7	7 VERY Easy to Use
How easy was it to	make changes	to y	our l	ines	on e	ich p	olot p	oint?	
	NOT Easy to Use	: 1	1 2	2 3	3 4	1 5	5 6	5 7	7 VERY Easy to Use
				SF	ΪA	R F	<u>-</u>		
You shared your p	lavlist with othe	er stu	ıdent					the la	arge screen.
Was this a good w	•						•		
NOT a good	l way to present	1	2	3	4	5	6	7	VERY good way to present
Was it useful to di	isplay the lines	you 1		e as s	ubtit	les o		plot-	-point sequences?why?
-	NOT Useful	1	2	3	4	5	6	7	VERY Useful
	RFF	FI	S E	NC	F	M	<u></u> Д Т	FF	RIAL
	1/1/1	L		7 1 C	سدر	TAT		1	



Down the left-hand side of the tablets were some small icons, for reference materials. Did you find the **character family tree** useful? NOT Useful VERY Useful 7 3 5 4 6 Did you find the **overview of the Task** useful? NOT Useful VERY Useful 5 7 2 3 4 6 Did you find the **STORY overview** useful? NOT Useful VERY Useful 5 7 2 3 4 6 What features in the **Story-Builder activity** were confusing? **LEARNING** Do you feel you have a good understanding of the plot points of Julius Caesar having done this What plot-point have you learned about today...and why was it interesting? Is this **as good as other ways** to learn Shakespeare? BETTER THAN OTHER WAYS / THE SAME / NOT BETTER What other ways do you usually use to learn Shakespeare? Video/YouTube: YES / NO Books: YES / NO Websites or Apps: YES / NO If so, which websites or Apps: Other things not mentioned in the list above: **SUMMARY** How would you describe this experience to your friends? 2-IMMERSE: Theatre in Schools **STUDENTS: Script Detective** OVERALL (Just brief statement required here, we will delve into details later!) Did you enjoy this way of learning about Shakespeare's Julius Caesar? Did NOT enjoy Enjoyed VERY MUCH 5 6 Was this Script-Detective experience the same or different from a standard class covering a similar

subject? ..and why?

The SAME	1	2	3	4	5	6	7	Very DIFFERENT
----------	---	---	---	---	---	---	---	----------------

Was this **Script-Detective experience** worse or better than a standard class covering a similar subject? ..and why?



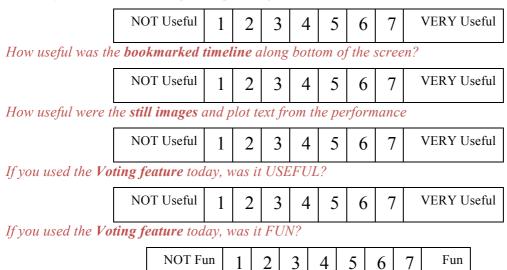
WORSE than usual approach	1	2	3	4	5	6	7	BETTER than usual approach
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Now we will look at the details.

WATCH

The cast introduced literary devices and their effect on the crowd in Mark Antony's 'Friends, Romans, Countrymen' speech.

How useful were the cast insights, explaining the literary devices?



What questions would you like to ask in the Voting activity?

MAKE

You identified literary devices and their effect on the crowd.

You also identified keywords from the speech that created that effect.

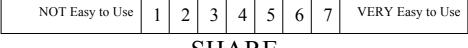
Did you enjoy finding the script devices and identifying their effect?

NOT Enjoyable	1	2	3	4	5	6	7	VERY Enjoyable
---------------	---	---	---	---	---	---	---	----------------

What parts of this 'making' activity did you enjoy and why?

How easy was it to select the Literary Device and effect?

How easy was it to **ADD** your own lines to the devices? (i.e. Typing in your line using the onscreen keyboard.)



SHARE

You shared your script devices, their effect and your lines with other students in the class using the large screen.

Was this a good way to present your work to your peers? ...and why?



NOT a good way to present		1	2	3	4	5	6	7	VERY good way to present	
Was it useful to display the lines you wrote as subtitles on the speech sequences?why?										
		NOT Useful	1	2	3	4	5	6	7	VERY Useful

REFERENCE MATERIAL

Down the left-hand side of the tablets were some small icons, for reference materials.

Was the Literary Device definition & impact screen useful?

NOT Useful 1 2 3 4 5 6 7 VERY Useful

Was the Task info panel useful?

 NOT Useful
 1
 2
 3
 4
 5
 6
 7
 VERY Useful

What features of the Script-Detective activity were confusing?

LEARNING

Do you feel **you have a good understanding of the script devices** used in Julius Caesar having done this activity? YES / NO

What is your favourite script device used in Mark Anthony's speech ...and why?

Is this **as good as other ways** of learning Shakespeare?

BETTER THAN OTHER WAYS / THE SAME / NOT BETTER

TEAM WORK

How did you work as a team?

Describe how you worked: Did one person take charge of the tablet? Did you discuss things first and then make decisions?

SUMMARY

Which bits of the last two lessons (today & yesterday) did you like best and why?

In the future, if we were to create one of these experiences for you to use, maybe with other subjects, what would you like it to do? How would you change it?

What did you NOT like?



Annex C Interview questions and discussion topics

2-IMMERSE: Evaluation of Theatre in Schools

Interview Scripts to camera

TEACHERS

- 1. Overall –is this a good way to teach *Shakespeare in Schools*.
- 2. As a tool to support learning -We brought together Shakespeare's text, the performance, learning activities, resources, and students annotations.
 - Is this a good way to engage the students?
 - ...and why (strengths/weaknesses)?
- 3. Did it aid team work or prevent it?
- 4. We have presented an adaptable framework (Watch/Make/Share; Multiple connected screens)
 - What are you views on the framework?:
 - It could be adapted it for different student abilities, different equipment (phones, pcs)
 - What other subjects or content would work.
- 5. In future you could create your own modules/experiences? –what would they be?
- 6. How did the experience perform in reference to any initial concerns you had?
- 7. Is this a better than a single screen approach (e.g., Just using a white board, or a TV)?

STUDENTS

- 1. Overall -was this a good experience for you -and why?
- 2. We brought together Shakespeare's text, the performance, resources, activities, and your line annotations:
 - Was this a good tool to support your learning?
 - Did it engage you more?
 - Did it make things easier to understand?
- 3. Did you work as a team?
 - How did that work? (E.g., Did someone take control?)
- 4. This is an adaptable framework:
 - Would you like to learn other things in this way?
 - What would they be?
- 5. Is it better than a single screen approach? (E.g., just using a white board, or a TV)?