New Media and Shakespeare Education

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New Media and Shakespeare Education

Approved

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2

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The 1997-2001 casts of The Young Company, Orlando Shakespeare Theater

The Shakespeare Theatre Association

In memory of my grandparents, Ann and Vern Torczon

Curriculum Vitae

Jay L. Shepherd JLShepherd3@gmail.com | 407.421.2399 http://www.JLShepherd.wordpress.com **EDUCATION** M.S. Arts Management | Performing Arts Concentration March 2013 Graduate Certificate in Nonprofit Management Currently enrolled in final term at the University of Oregon, Eugene, OR B.A. Liberal Studies in Elementary Education, Minor: Studio Art May 2008 Graduated with Honors from Humboldt State University, Arcata, CA **PROFESSIONAL EXPERIENCES** Marketing and Development Associate | Theater at Monmouth June 2012 – present 796 Main Street, Monmouth, ME 04259 Designed and implemented social media strategy for 2012 Summer Season; built and maintained blog site, increased Facebook and Twitter presence and increased number of followers Aided in development of protocols and scheduling for box office staff, ticket sales, house management, volunteer and silent auction coordination Tour Manager and actor for 2012 Shakespeare in Maine Communities production of Hamlet, touring to middle and high schools across Maine, reaching over 3,000 students and community members Responsible for writing and distributing press releases to media contacts, designing and distributing fundraiser invitations to donors and board members, aiding in development of 2013 Marketing Plan Directing 2013 Page to Stage Tour of The Legend of Finn MacCool, touring to elementary schools and community centers across Maine Development and Education Assistant | Contemporary Arts Center July - Sept. 2011 900 Camp St. New Orleans, LA 70130 504.528.3805 Production Assistant for Whitney White Linen Night fundraiser, serving as assistant volunteer coordinator for over 60 volunteers, archiving event material, informing production schedule, interfacing with vendors Expanded the database of area schools from approximately 250 to over 700 contacts, resulting in a postcard mailing and e-blast promoting Artist for a Day program Designed and implemented student summer camp evaluation surveys; doubled the number of parent evaluations responses from week to week Feb. - March 2012 STA Conference 'Social Media Maven' | Orlando Shakespeare Theater 812 E. Rollins St., #100, Orlando, FL 407.447.1700 Collaborated with Orlando Shakespeare Theater artistic director to create a social media presence for Shakespeare Theatre Association Conference 2012 Designed and maintained STA's first conference blog, which included daily session notes and video highlights; blog utilized by STA members both in attendance and those not physically present Due to success and popularity of blog, the social media plan and blog template were used again at STA's 2013 Conference Graduate Teaching Fellow, Arts Administration | University of Oregon Sept. 2011 – June 2012 5230 University of Oregon, Eugene, OR 97403-5230 Coordinated the University of Oregon Arts in Healthcare Symposium with approximately. 20 participants; responsible for registration, volunteer coordination, and communication with symposium hosts/presenters Teaching assistant for AAD undergraduate courses; worked closely with course instructors and approximately. 80 students per term; responsible for grading, communicating with students, and maintaining course blog sites

 Assisted in museum studies research initiatives, including installation and documentation of Gertrude Bass Warner exhibit at the Jordan Schnitzer Museum of Art; culminated in creation of archival video

Jay L. Shepherd

LEADERSHIP & ENGAGEMENT

AAD Student Advisory Group Coordinator | University or Oregon 5230 University of Oregon, Eugene, OR 97403-5230

- Nominated by peers to serve as liaison between AAD graduate students and faculty/staff ٠
- Co-authored SAG mission and bylaws; created and maintained blog site for disseminating information
- Organized and hosted quarterly feedback forums, peer-to-peer work sessions, extracurricular events, and end-of-year gathering Oct. - Nov. 2011

Education Coordinator | (sub)Urban Projections

5230 University of Oregon, Eugene, OR 97403-5230

- Organized artist talk and reception for City of Eugene's (sub)Urban Projections, a digital art festival taking place in the streets and alleyways of downtown Eugene
- Secured venue and four featured artists for a discussion panel open to the public
- Designed invitation for City of Eugene and utilized social media to market the event

Studio Manager | Peace, Love, and Pottery (formerly BrushFire) Sept. 2008 - June 2011 584 Olive St. Eugene, OR 97401 541.485.7161

- Responsible for managing local paint-your-own pottery studio
- Duties included: creating schedules and managing inventory, creating and distributing promotional e-newsletters, overseeing donation requests, providing strong customer service, opening and closing cash register procedures, custom pottery paint work

TEACHING & FACILITATION

Guest Artist and Teacher | Young Writer's Association PO Box 52538, Eugene, OR 97405 541.485.2259

- Designed and conducted unit-themed ceramics activities with 3rd-8th grade students
- Collaborated with camp director to create age- and time-appropriate projects, including terra-cotta tiles for a study on ancient Greece, and coil-pot face-jugs for a Mark Twain unit
- Education Associate | Orlando Shakespeare Theater 812 E. Rollins St. # 100, Orlando, FL 407.447.1700
- Co-directed summer camps and intensives exploring Shakespeare's life and work, culminating in a final performance; students ranged in age from 4-18
- Formulated/customized curriculum to challenge students, including adapting scripts and scenes from Shakespeare's canon
- Conducted residency program in Orange County Public School, teaching interactive theater games and exercises in elementary after-school program

PROFESSIONAL DEVELOPMENT

Member, Emerging Leaders in the Arts Network Americans for the Arts, 2011	present
STA Conference: Shakespeare Here and Everywhere Shakespeare Theatre Association	2012
Oregon Arts Summit: The Art of Adaptation Oregon Arts Commission	2010
CCSA Convention, Reno, NV Contemporary Ceramic Studios Association	2010
Co-author, Cultural Mapping: A Study of Civic Engagement in Salem, OR Sustainable Cities Initiative	2010

SKILLS & INTERESTS

Skilled with both Windows and Macintosh operating systems, Microsoft and LibreOffice software, WordPress, iMovie, Prezi, iContact, Constant Contact, Adobe CS5, Point of Sale, Choice Ticketing Software

Accomplished in multitasking, building partnerships, collaboration, list-making, cat-charming, ferret-wrangling, saying "yes," vegan baking, tree-hugging, ashtanga yoga, playing cello at a 6th-grade level, ceramics, book-making, crocheting, road trips

page 2

5

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Abstract

William Shakespeare's plays and sonnets are among the most influential in the English language, touching on timeless themes and emotions. As such, Shakespeare's plays are standard in many high-school English classes, but too often students fail to connect with these stories through traditional classroom methods. Shakespeare theaters with active education departments work to develop programming that facilitates personal connections with Shakespeare's plays through performance- and language-centered instruction, sharing their best practices with students and educators. However, the educational landscape is changing. Technology and digital media play an increasingly important role in K-12 education with an emphasis on building 21st century skills and integrating technology that students use in their daily lives. This document explores the role of new media in Shakespeare education and technology in education, as well as findings from the 2012 Shakespeare Theatre Association Conference. These elements contribute to the overall conclusions that new media is effectively integrated in Shakespeare education when it supports active, theater-centered learning, without impeding the live theater experience.

Research Questions

Main research question: What is the role of new media in Shakespeare education?

Supporting Questions

- What makes for an effective Shakespeare learning experience?
- What lessons, programs, or activities exist that incorporate technology into a Shakespeare learning experience?
- What possibilities exist for further effective integration?

Keywords

Shakespeare, technology, new media, K-12 education, theater, participation, 21st century skills, project-based learning

Table of Contents

Chapter 1 Introduction: Why Shakespeare and Technology?	8
Chapter 2 Research Approach	9
Chapter 3 Literature Review: Shakespeare Education and Engagement for K-12 Students	. 10
Chapter 4 Technology in Education	24
Chapter 5 PBL: Where the Best Practices Crossover	. 34
Chapter 6 Final Analysis: New Media in Shakespeare Education	. 39
 Appendix A The 2012 Shakespeare Theatre Association Conference: My Role and Its Impact on the Research Appendix B ISTE's NETS for Students Appendix C ISTE's NETS for Teachers 	42 45
References	. 47

Chapter 1 | Introduction: Why Shakespeare and Technology?

William Shakespeare's collection of plays and sonnets are among the most influential contributions to arts and culture in the English-speaking world. His plays touch on emotions and themes that are timeless, and in understanding his plays, we have a better understanding of ourselves. Despite Shakespeare's importance in our history, many people are averse to his works; language often being the primary barrier. While Shakespeare wrote in modern English, language changes over time, adapting to societal shifts and trends. Over the course of nearly 500 years, new words have emerged and others have become obsolete, resulting in unfamiliar vocabulary in our modern English. To make matters more intimidating, Shakespeare employed the use of many literary and poetic devices in his writing, oftentimes bending and breaking norms to suit his purposes. Listening to a passage written by Shakespeare for the first time can sound like hearing a foreign language, and without the interpretation of a Shakespeare scholar, the lack of understanding goes unresolved. These barriers that exist between Shakespeare's usage of "modern English" and our own "modern English" prevents many students and adults from appreciating an important, enriching portion of the arts. The key to breaking down this barrier starts with early childhood education of Shakespeare that carries on into high school, creating future audience members and supporters of live theater.

Additionally, the role that technology can play in breaking down these barriers must be considered. In this high-tech age of iPhones, iPods, and unlimited Wi-Fi, many teachers are searching for new ways to connect with and engage students in the classroom. Considering the ubiquitous usage of technology among students today and the possibilities that new media presents to engage youth in meaningful, interactive activities, how can these innovations be utilized by educators of pre-college-aged students to facilitate dynamic experiences with Shakespeare's language that last a lifetime?

This study aims to approach this topic from a performing arts institutional level, focusing on educational programs offered by professional producers of Shakespeare's works, as opposed to lesson plans created for K-12 classroom teachers. Many of the programs offered by Shakespeare theaters include in-school residencies facilitated by teaching artists who are required to comply with the same educational standards and practices to which classroom teachers are held. In addition, Shakespeare theaters with active education departments often create and provide teaching materials for classroom educators, blurring the distinction between professional Shakespeare institutions and classrooms.

My research addresses this primary question: What is the role of new media in Shakespeare education? In answering this question, several subquestions also will be addressed: What makes an effective Shakespeare learning experience? What lessons, programs, or activities already exist that incorporate technology into a Shakespeare learning experience? What are the possibilities for further effective integration?

Chapter 2 | Research Approach

My interest in the crossover of technology and education stems from my extensive background in Shakespeare performance and elementary education. Over the years I have developed a passion for theater arts and arts education with a specific interest in breaking down barriers that inhibit participation and engagement with Shakespeare's plays, ensuring that his works are more accessible to diverse audiences. Experiences with Shakespeare education in my own life have demonstrated the inherent value in Shakespeare outreach programming. I was fortunate to receive a strong foundation in Shakespeare education from an early age, beginning with family influences and later engaging in professional training throughout high school. I have experienced firsthand the transformative nature of theater, especially Shakespeare, and

have seen in myself as well as my peers the power that comes from connecting with the Bard's poetry and stories. I also understand the transformative nature of technology, and the educational possibilities that are presented by the integration of digital media into the learning process. Knowing that not all students will have the opportunity to participate in Shakespeare workshops that allow for an immersive, engaging experience, I look to technology and its current influence in the field of education to discover if digital media can supplement the lack of participatory experiences that can stimulate students to connect in a personal way with Shakespeare's words.

My research design includes a review of the literature concerning both Shakespeare education as well as technology in education; attendance of the Shakespeare Theatre Association Conference in 2012¹; participation in the University of Oregon's Technology and Education course²; and my own involvement with technology as I blogged through the research experience³. This amalgamation of experiences has led to a deeper insight into the fields of Shakespeare education and technology in education, and, most importantly, where those two fields intersect.

Chapter 3 | Literature Review: Shakespeare Education and Engagement for K-12 Students

In order to understand how technology can and does impact Shakespeare education, an understanding of the best practices for Shakespeare education is required. I discovered in the early stages of my research that I could not begin a discussion of Shakespeare and technology

¹ The Shakespeare Theatre Association, www.sta.org, is a professional organization that provides a forum for producers of Shakespeare's plays to collaborate. I worked with the 2012 Conference host, Orlando Shakespeare Theater, to build a blog site for the conference, www.sta2012.wordpress.com. This aspect of my conference participation is discussed in more detail in Appendix A.

² EDST 422/522 is a required course for the University of Oregon's undergraduate Education majors. Course syllabus and assignments can be found online at https://shakespeareducation.wordpress.com/electives/edst-522/

³ My Research Blog, www.shakespeareducation.wordpress.com, documents my research process

without addressing why Shakespeare education matters in the first place. Utilizing peer reviewed literature from educational journals and publications, this section explores the reasoning behind teaching Shakespeare to young people, from kindergarten through high school, as well as benefits of and strategies for enriched engagement and participation with Shakespeare's plays. In addition, this review begins to explore new tactics for Shakespeare education that involve the employment of technology and digital media to increase engagement among 21st century students. Finally, I draw from information presented at the 2012 Shakespeare Theatre Association Conference in Orlando, Florida for the most current trends in the field of technology and Shakespeare education from representatives of leading Shakespeare theaters across the country.

A common question that emerges in the review of literature on Shakespeare education is "Why Shakespeare for kids?" For example, Gearhart (2007) asks, when many of Shakespeare's themes include content questionable for young audiences, including murder, adultery, revenge, and suicide, why have children's authors insisted for centuries on adapting his plays for young readers? To explore this question, Gearhart examines several published adaptations of Shakespeare's plays, including Charles and Mary Lambs' (1807) *Tales From Shakespeare* and Edith Nesbit's (1900) *The Children's Shakespeare*. Gearhart points out that *Tales From Shakespeare* is more an interpretation of the text, rather than an adaptation of a play into narrative form (p. 56). Bottoms (2004) agrees that while the Lambs' renditions of Shakespeare's texts may have increased awareness of his plays, the plot lines those readers have grown accustomed to are censored interpretations of Shakespeare's works, made to paint the playwright's works as examples of high morality and strong character. Gearhart examines the Lambs' approach to *Hamlet* in which certain questionable content (Hamlet's thoughts of suicide or his sexually charged confrontation with his mother in Act III Scene 4's "closet scene") is excluded, and areas of intended ambiguity (is Hamlet truly crazy or is he feigning it?) are

decided for the reader. These decisions by the authors serve as censorship, and Gearhart wonders why teach Shakespeare at all if the interpretations we must distill for young audiences retain little of the original artistry (p. 56)?

The question is valid, but is met with an overwhelming response from a variety of sources citing the benefits of teaching Shakespeare to young audiences. Studies show that the skills students learn through working with Shakespeare have far-reaching, long-lasting effects they'll take with them into adulthood (Hansen, 2011; Paquette, 2007; Seidel, 1999; Spangler, 2009; Wood, 1997). Skills such as being able to work with a team, listening and responding, critical thinking, public speaking, diction and enunciation, and self-reflection are among the benefits of engaging with Shakespeare's text at a young age (Hansen, 2011, p. 188). Paquette (2007) finds that children who study complex works such as Shakespeare's are then able to process other forms of challenging language in other disciplines, including music and mathematics (p. 42). Seidel agrees, noting that students who participated in Shakespeare workshops⁴ learned strategies that apply to reading a variety of complex texts (p. 86). In addition, when students come together to make sense of Shakespeare's plays, a "strong sense of community can be developed... especially through the challenging approach of acting the texts" (ibid). The process of taking a text that seems too difficult to understand and being able to break it down and make it personal is an empowering process for young people. It builds self-esteem and provides students with a link to history and culture.

Hansen (2011) claims that understanding Shakespeare not only builds self-esteem among young people, but that the act of making his works accessible to a broad spectrum of youth from diverse backgrounds is an issue of social justice. She argues that, although in his time

⁴ Seidel's monograph *Stand and Unfold Yourself* examines Harvard's Project Zero Study of education workshops conducted by Shakespeare & Company in Lenox, Massachusetts. This study is discussed further in Chapter 5.

Shakespeare was a writer for the common person, he has become a "cultural commodity" in contemporary society, where knowledge of him and his works are "entrenched parts of educated, elite culture" (p. 180-181). There then exists an obligation by educators to take Shakespeare off this pedestal and empower youth to understand his poetry and prose, giving them equal footing with members of the "educated, elite culture" in understanding the human condition. Hansen refers to Shakespeare as a "gatekeeping point," a term she borrows from Lisa Delpit's *Other People's Children: Cultural Conflict in the Classroom* (1995). Delpit explains that students, particularly minority students, are often held to lower standards throughout their education, and that "pretending gatekeeping points don't exist is to ensure that many students will not pass through them" (p. 39). Hansen argues that in improving access to Shakespeare, we are not "challenging the perceived cultural capital associated with the playwright and his works," but are instead "shar[ing] the wealth" and in doing so, "enhancing[ing] the individual" (p. 181).

The key to successful Shakespeare education is teaching Shakespeare well. For children to be able to find an appreciation for Shakespeare's texts, they must have the opportunity to participate and engage with his works in an individualized, personal way. This goes beyond reading a summary out of a book and involves getting the students out from behind their desks and speaking Shakespeare's words aloud. When it comes to Shakespeare education, "engaging" is the operative word, rather than simply "learning."

The UK has seen a shift in the dialogue involving arts learning and Shakespeare education, with an emphasis on increasing "engagement" and "participation" rather than merely "access." (Rumbold, 2010, pp. 321-322). Across the board, advocates for Shakespeare education stress the importance of allowing students to *play* rather than be *taught*. Teachers are meant to act as facilitators for individual experiences and exploration of the text rather than as keepers of knowledge that only can be accessed through reading and lectures (Wood, 1997, p. 459).

Many Shakespeare theaters design workshops to train teachers how to empower their students to discover Shakespeare through play. The Folger Shakespeare Library, Washington, D.C.'s nationally recognized leader in Shakespeare education, believes that "the best way to learn Shakespeare is by *doing* Shakespeare" (Folger Shakespeare Library, n.d.). In addition to the numerous online resources and lesson plans, Folger offers a variety of workshops and mini-institutes across the country, helping teachers to empower their students to "own [Shakespeare's] language" in a classroom setting, while also providing an opportunity to collaborate and play in a performance environment.

A Massachusetts high school English teacher, Paquette (2007) attended a training session with Shakespeare & Company, the largest theater-in-education program in New England, in 2002. Through the workshop, taught by Education Director Kevin G. Coleman and sponsored by the National Endowment for the Humanities (NEH), Paquette learned techniques on how to make her classroom a conducive environment for students to explore Shakespeare's plays, engaging students in play and working to dispell any negative preconceived notions about the text. She notes that our education system is set up so that younger children are encouraged to develop their imaginations and learn through recess and role-playing activities, but the high school setting allows little room for imagination or play, making the transition from childhood to adulthood a difficult one (p. 41). She has seen how, when students are able to get out of their chairs and interact with Shakespeare's language through movement and dialogue, they engage on multiple levels of learning intelligences, also appealing to kinesthetic learners who might have difficulty connecting with the text otherwise. Susan Spangler, a high school English teacher discusses the role of visual literacy in her essay Stop Reading Shakespeare! (2009). She reinforces the idea that it is essential for students to experience the performance aspect of Shakespeare's plays in order to be able to understand them and challenges teachers to use the stage production of the play as

the primary text, and to use the script as a tool for further exploration (p. 131).

By the time students are in high school, they are prepared to handle some of the more mature themes in Shakespeare's plays, and in doing so, are able to find ways to relate themes from 17th century plays to their own lives (Paquette, 2007; King, 1985). These connections help students in processing areas of love, grief, anger, jealousy, integrity, faith, and many other issues and emotions. In his essay *Starting Shakespeare*, King explains how he waits to introduce Shakespeare to students until the age of 13, when they still retain a bit of "pre-adolescent enthusiasm," but that their understanding of language is growing, and they are beginning to understand more complex human issues (p. 57).

Like Gearhart, King finds that teaching Shakespeare at a younger age requires some of the watering down of the themes and language that, the more you do, the further you get from Shakespeare's original plays. King claims "the language is just too high a hurdle to attempt," and in making compromises to the text, one "can hardly claim to be dealing with Shakespeare's plays" (ibid). However, teaching Shakespeare to young children doesn't mean introducing them to all of Shakespeare's plays, and waiting to teach kids Shakespeare until they're in middle or high school may mean they have time to develop negative preconceived notions about the language, assuming it to be difficult, boring, or irrelevant. Wood (1997) teaches at Far Brook School in New Jersey, where the drama teacher begins introducing Shakespeare's plays to children in first and second grade. He finds that the younger students are when introduced to Shakespeare, the less intimidated they are by the differences in the unfamiliar sounds of the language. Since they are still learning and formulating their own vocabulary, younger students aren't afraid to say that they don't understand what they're saying or to risk looking silly when acting out a scene. Play is still fun at that age, and an integral part of development.

While the themes of Hamlet may be too complex for a first grader, the fairies, magic,

and love stories from *A Midsummer Night's Dream* or *The Tempest* are not. Children love these types of stories and can get excited by the imagery, theatrics, and play involved in learning about Shakespeare. Wood reports that in nursery school, children are listening to story versions of Shakespeare's plays, drawing pictures of characters, and participating in dramatic play using lines from Shakespeare's plays (p. 458). One of her fellow teachers even purchased a newt to bring into the classroom after her students became fascinated by the "newts and blindworms" mentioned in the lullaby Titania's fairies sing in Act II, Scene 2 of *Midsummer*.

Kindergarten teacher and National Endowment for the Humanities (NEH) teacherscholar Sherry Stidolph has spent much of her time exploring Shakespeare, child development, and fairy tales; she observes that children understand different types of stories at different ages. By the age of five, children grasp that sequences of events happen in a certain order, and they can comprehend the concepts of pretend, and what it means to illustrate a story (Burr, 1996, p. 14). Stidolph recommends that teachers who want to introduce Shakespeare to young students should begin with his final plays—*The Tempest, Pericles*, and *The Winter's Tale*—in that order. She finds they are perfect for four- and five-year-olds because they resemble familiar tales, possessing elements of magic, fairies, monsters, kings, princesses, and princes. A play like *Pericles* is rarely performed, but Stidolph asserts that its storyline involving pirates and shipwrecks and disguise are all elements that are "emotionally accessible" for kindergarteners (ibid). A play like *Midsummer* is better suited for eight- and nine-year-olds, when students are able to better grasp some of the character motivations, particularly those dealing with child/ parent dynamics.

Studies show that getting children interested in Shakespeare at a young age is the key to a lifelong relationship with the Bard (Burr, 1996; Gearhart, 2007; King 1995; Paquette, 2007; Wood 1997). While many of Shakespeare's plays deal with issues too complex for young

children, there are some that can be taught with little adaptation to the original plot. I agree with Gearhart and King's assertions that watered-down adaptations of Shakespeare's more complicated and challenging plays diminish the integrity of his work. However, his canon of nearly 40 plays and almost 200 poems offers a variety of possibilities for children to begin exploring the language without compromising integrity.

A portion of the emerging literature dealing with student participation and Shakespeare involves integrating Shakespeare with digital literacy (Desmet, 2009, Shamburg & Craighead, 2009). The digital age plays an increasingly important role in our culture, and teachers and organizations are finding ways to increase youth participation with Shakespeare through digital media. Desmet (2009) recommends teachers use applications such as YouTube to introduce students to Shakespeare "mashups," remixes of pop culture with Shakespeare's lines and characters. Through YouTube videos, students engage with Shakespeare's themes via a platform that is familiar and relatable. YouTube videos allow students the chance to view and engage with amateur video creations, other student works, as well as clips from professional productions. Using YouTube as a way to increase classroom access to performances and analyses of Shakespeare's works engages students and helps bridge the gap between the 17th and 21st centuries.

Shamburg & Craighead (2009) explore two additional examples of ways teachers are incorporating digital practices into their explorations of Shakespeare. In a study of *Romeo and Juliet*, high school students in Abingdon, Virginia created original video that explored themes from the play, such as "fight" or "romance." They remixed Hollywood movie clips and pop culture music with their own performances of the text (p. 74). In this way, fusing modern cultural references with Shakespeare's verse, students make connections with plays that are over 400 years old. In a study of *Macbeth*, McKinley High students in Washington, D.C. created audio

plays to tell the story. Using the original script, students performed scenes from the play using only an audio platform to tell their versions (p. 75). Shamburg & Craighead note that students must have a clear understanding of the language in order to convey meaning using only voice and no physicality. Teachers embracing forms of digital technology are finding ways to engage with modern students while keeping up with the changes of an increasingly participatory culture, in general.

Shakespeare Virtually Everywhere

Shakespeare institutions also are exploring ways to engage with contemporary students through technology in their educational programming. As education is a major component of most Shakespeare theaters' organizational missions, many of them have administrative departments devoted to increasing awareness of the Bard. At the 2012 Shakespeare Theatre Association (STA) Conference in Orlando, Florida, a panel of Shakespeare education administrators came together for a discussion of "Shakespeare Virtually Everywhere," focusing on Shakespeare theaters and how social media impacts their educational missions⁵. The panel was moderated by Mike LoMonico, Senior Consultant on National Education for the Folger Shakespeare Library, and comprised arts educators Sarah Enloe, Director of Education for the American Shakespeare Center in Virginia; Rebecca Ennals, Artistic Director of Education Programs for the San Francisco Shakespeare Festival in California; Harper Ray, Digital Manager, Globe Education for Shakespeare's Globe in London; and Josh Stavros, Associate Education Director for the Utah Shakespeare Festival. These organizations are among those that have established their own best practices for Shakespeare education and are paving the way for

⁵ The full description of this (and other) 2012 STA conference session(s) can be found in the online program: http://sta2012.wordpress.com/conference-schedules/conference-schedule/#sessionb

establishing best practices with technology integration. In this conference session these arts leaders set out to address the following questions: 1) How can the web and new media support active theater-centered learning? 2) Is screen-based learning a contradiction when trying to engage students with the "now" of live theater? 3) How can we avoid resorting to posting study guides online? 4) What opportunities does the web offer us for collaborative projects ("Main Conference Schedule | 2012 STA Conference at Orlando Shakespeare Theater," 2012)?

The questions themselves give insight into the expectations STA members have for the role of technology. The use of participatory language such as "active," "engage," "opportunities," and "collaboration" in their literature expresses an accurate representation of the values that members of the STA Education Focus Group hold close, as evidenced in these institutions' own programming. For example, the Folger Shakespeare Library in Washington, D.C. emphasizes that Shakespeare must be performed in order to be understood. Folger Education's website⁶ describes its approach as "performance-based" and "language-centered," and provides a variety of workshops for teachers and students to learn more about approaching the Bard's work. In addition, Folger hosts a robust, interactive website with archives of resources for teachers and students that provide both "a solid historical-cultural foundation to children learning about the early modern period [while inviting] them to engage in exercises that certainly keep them active" (Gearhart, 2007, p. 62).

Likewise, Virginia's American Shakespeare Center⁷ (ASC) takes a language-centered <u>approach to its</u> Shakespeare instruction while also including historical context to Shakespeare's <u>6 http://www.folger.edu/</u>

As an original-practice Shakespeare company, ASC works to stay true to Elizabethan production values, giving audiences a sense of what it was like to see a play (or rather *hear* a play, as Elizabethans would have said) during Shakespeare's time. "Using a stage unimpeded by sets, and with the audience sharing the same light as the actors," the language becomes the focus, and the relationship between the actor and audience member becomes a vital, engaging part of the production (American Shakespeare Center, n.d.).

work. ASC offers study guides for 14 of Shakespeare's plays, available for free download on its website⁸, in addition to a variety of supplemental activities and workshops for both teachers and students. San Francisco Shakespeare Festival and Utah Shakespeare Festival both offer a number of camps, workshops, and educational resources through their websites as well. In addition, both companies take adapted Shakespeare productions on tour to area schools, reaching out to thousands of students each year. Productions are fully staged, run approximately one hour, use Shakespeare's original language, and include opportunities for workshops and discussions with the actors after the performance.

Shakespeare's Globe in London is the mecca of Shakespeare education. Paying homage to the historic Globe Theatre where Shakespeare's plays were originally performed, the Globe's workshops, performances, lectures, staged readings, exhibits, tours, and other events are centered around "furthering the experience and international understanding of Shakespeare in performance" (Shakespeare's Globe, n.d.). The organization's website offers a virtual tour of the Globe facilities⁹, and extensive links to online resources¹⁰.

The representatives from the participating STA theaters were in agreement that technology, defined as web and new media, plays an important role in education today. Because technologies are changing and advancing so quickly, the best practices for incorporating new media can become outdated before they can be written. The STA Conference provides a valuable annual forum for Shakespeare organizations to share their successes and resources with one another, keeping pace with the growth.

While the value of collaboration among institutions was acknowledged in the panel, it was also discussed as an area of weakness in real-world practice. Instead of sharing resources

⁸ http://www.americanshakespearecenter.com/

⁹ http://www.shakespearesglobe.com/about-us/virtual-tour

¹⁰ http://www.shakespearesglobe.com/education/library-research/library-archive/recommended-online-resources

and pointing students or teachers to another organization's website for educational materials, Shakespeare theaters often waste efforts by reinventing the wheel. While it seems more effective to share resources and collaborate with other organizations on educational materials, it is at odds with what many funders are looking for in their sponsorship grants. As mentioned in the panel, many grant proposals require evidence and documentation of original lesson plans and educational materials—a requirement that doesn't necessarily best serve a theater or its educational efforts. In addition, theaters have to keep in mind issues of cost. While many would love to be able to give away educational materials (and many do), there are development costs incurred by the organization to be considered. If theaters are sharing and distributing their educational materials, how can they be appropriately compensated for their efforts?

Collaboration is something that the STA clearly values, and organizational efforts to facilitate the member theaters' educational missions will continue to be developed in years to come, especially as the need for strong new media applications devoted to Shakespeare education increases. The STA Education Focus Group recognizes that there is a place for new media in educational practices, but also recognizes the concerns that screen-based technologies could negatively impact the live experience of theater. STA educators maintain that best practices for Shakespeare education are performance- and language-based, requiring the live actor/ audience component to be effective. Innovations in digital media that seek to circumnavigate or substitute the live theater experience do students a disservice, depriving them of the essential building blocks needed to connect with Shakespeare's text.

Rebecca Ennals of the San Francisco Shakespeare Festival is interested in understanding how to use technology in such a way that it makes people want to experience the in-person interactions that live theater facilitates. For example, she observes that kids want to learn in highly interactive ways, but that many teachers lack an understanding of how to use the latest

advances, such as Smart Boards, even if funding is available to provide these materials. In addition, she finds many parents are eager to get their kids away from computer screens and mobile devices. Thinking about ways to use social media that can engage students and encourage a live Shakespeare experience, Ennals has ideas for using flashmob-models of communication to publicize guerilla-style, pop-up Shakespeare performances throughout San Francisco parks. Instead of traditional advertisements, performance times and locations would be communicated using social media platforms such as Twitter and Facebook¹¹. Using this model, new media could be used to engage audiences of all ages through a familiar platform, drawing them in to the spectacle of live theater.

Another highlight of the "Social Media and Shakespeare Education" panel conversation at the STA Conference was the unveiling of soon-to-come web-based application *The Scene Machine* from Shakespeare's Globe in London. Harper Ray, Digital Manager at Globe Education, encourages theaters to "embrace the medium" of digital technologies and use them for their strengths: as a tool for rapid response, low-cost delivery, an international footprint, and two-way communication. Globe Education comprises forward thinkers utilizing technology in a way that puts the text into action. *The Scene Machine* will allow students (young and old) to make creative choices about Shakespeare's plays and take on the role of the director, creating their own scenes that can be uploaded to their favorite social media sites and shared with friends. *The Scene Machine* programmers will work with the Globe's acting company, recording the performers as they deliver lines from a given scene of a play with a series of different emotions.

¹¹ Rebecca Ennals' concept for pop-up Shakespeare, using social media to spread the word about locations, became a reality in October, 2012. San Francisco Shakespeare Festival introduced "30 Days of Free Shakespeare in the Parklet," where actors performed 10-minute scenes and monologues from the plays SFSF has produced over their last 30 years (San Francisco Shakespeare Festival, n.d.). Performance dates and times were predetermined, but locations were made public through social media platforms just days before the shows.

For example, the simple line "Whither wander you?" from *A Midsummer Night's Dream* can be said with joy, sorrow, anger, fear, and so on, and each reading can give the scene a different motivation. Given the variety of choices to consider, students can create scenes, invent, build, and resolve conflict, all based on their own creative interpretations. Keeping in mind the importance of the actor/audience relationship, according to ASC's Sarah Enloe, the next step in the classroom after having the chance to work and play in a web-based environment is to have students perform the scene. While a tool such as *The Scene Machine* could be viewed as a substitution for performance, it and other new media applications should be approached in such a way that facilitate performance.

Summary

Increasing the opportunities for children to engage with Shakespeare's timeless plays is an important step in breaking down the barriers that prevent people from understanding Shakespeare's language. Starting with children in elementary school, teachers can foster an excitement and appreciation for Shakespeare's plays that will carry them through high school and into adulthood. Shakespeare's contributions to the literary world and the English language make his works a fixture in many high school English classes, and teachers often have the difficult task of how to introduce Shakespeare's plays in a way that is relatable. A variety of strategies can be employed to engage students in meaningful ways with Shakespeare's plays, but best practices as demonstrated by nationally renowned Shakespeare theaters emphasize a reverence for the original text, and the notion that students must perform Shakespeare to understand it. An emergent strategy in Shakespeare education involves interaction with new media. Modern students have different expectations and needs when it comes to modes of communication and means of engagement. Authorities on Shakespeare education aim to new media as a means of enhancing the performance experience essential to Shakespeare appreciation and understanding, as opposed to replacing it.

Chapter 4 | Technology in Education

My undergraduate degree is in elementary education, and during my studies (which took place in the early to mid-2000s), there was little discussion concerning the role of technology in the classroom. At that time, the technological landscape was just beginning to shift. Social media was then an emerging platform, and smart phones were on the verge of becoming mainstream. Interactive whiteboards were being installed in some of the more technologically advanced schools, and desktop computers, sometimes laptops, were available for use in many classrooms. Within a few short years, the technological landscape evolved quickly, creating infinite applications. The topic of technology and education is a contested one, with new studies and articles appearing daily from advocating organizations such as the International Society for Technology in Education (ISTE) and The George Lucas Educational Foundation. The explosion of technology and digital media within our society, and particularly with younger generations, is changing the way many teachers approach education, and thus, changing how we prepare future teachers for the field. Enrollment in the University of Oregon's EDST 422/522 class: Education Technology, provided me with the opportunity to explore how technology is being approached by aspiring educators. Course readings and lectures, class discussions, and my own research into best practices concerning technology in education gave insight into this ever-changing field.

In a society that is becoming increasingly participatory and more reliant on digital technology, more schools are shifting curricula, finding ways to integrate technology into the classroom. Proponents in favor of integrating computing devices, software, or Internet in K-12 schools for instructional purposes have argued for decades that these tools can provide expanded

learning opportunities, "provid[ing] our next generation of students [with] new teaching and learning tools and approaches" (Kimmel & Deek, 1996, p. 87). Technology integration is a necessarily popular topic in the world of education, and the amount of emergent literature supporting effective technology integration in the classroom outweighs the opposition. New studies are being published each month; while some are pro-technology and some more cautionary, each seriously addresses the phenomena of new media in education, and presents insights into this rapidly changing field.

Much of the hesitancy and opposition among educators and other experts stems largely from concerns about overuse of technology and digital media among children and adolescents. Technology is endemic among today's students, and daily technology consumption only continues to increase. Current research available from *Consumer Reports* tells us that by the age of five, more than half of all American children are interacting with a computer or tablet device on a regular basis (Clinton & Steyer, 2012). As children get older, the trend increases. The American Academy of Pediatrics reports that "seventy-five percent of teenagers now own cell phones," used for social media, texting, and instant messaging (O'Keefe, MD & Clearke-Pearson, MD, 2011). According to Clinton and Steyer, by the time they get to middle school, kids are spending more time engaging with digital media than they are with their parents or teachers.

Children born within the last two decades know only of a world with readily available Internet access, and further implications of this level of constant connectivity remain to be seen. However, studies are beginning to emerge that demonstrate how heavy media use can alter the way the brain works. Heavy media use in students is associated with negatives such as limited attention span, lower comprehension, poor focus, greater risk for depression and diminished long-term memory (Clinton & Steyer, 2012). In a recent study on technology use by the Kaiser Family Foundation, researchers found that nearly half of the student participants who were

considered heavy media users (those engaging with technology for 16 or more hours a day) were performing at C-level or below when it came to school work (Lewin, 2010). "It's such short attention span stuff," claims Todd Oppenheimer, author of *The Flickering Mind*, who refers to technology in the classroom as "instant gratification education" ("Digital Nation," 2010). "A plot comes to you, you pursue it, you see a website, you click on it...all this bifurcates the brain, keeps it from being able to pursue one linear thought, and teaches you that you should be able to have every urge answered the minute the urge occurs" (ibid).

While the long-term effects of heavy media usage are unknown, current studies are indicating that media usage can impact how the brain functions and processes information. At the very least, it alters social behaviors and values. In her TED Talk, *Connected, but Alone?* (2012), Sherry Turkle asserts that "we're letting technology take us places we don't want to go," and that our attachments to technology are not only changing what we do but who we are as individuals, and eventually, as a society. Texting and emailing during board meetings, at the dinner table, or even at a funeral are examples of what Turkle calls "being together but not being together" (ibid). We are connecting, but not with the people who are around us. Turkle argues that this is troublesome when it comes to relating to one another, and when it comes to being alone with oneself. We become used to communicating in short "sips" of discreet information, and the process of truly getting to know someone becomes unfamiliar. With evidence-based research demonstrating the extensive usage of technology among today's students and its myriad negative side effects, teachers are forced to wrestle with the challenging decision to either embrace technology in their classrooms or resist it.

In addition to ethical concerns about how technology use affects student behavior and comprehension, there are also practical concerns regarding technology in the classroom. While effective technology integration may have demonstrated positive effects, there is no guarantee

that technology will be implemented well. New educators entering the field are generally more tech savvy than their tenured counterparts, many of whom lack training and support to effectively integrate technology into class activities (Kleiman, 2000). Rose Porpora, English Teacher at Chatham high school, confesses in her interview with *Frontline* that she feels like a dinosaur in her classrooms, while her students are naturals ("Growing Up Online," 2008). This disconnect is due to several factors, including lack of ongoing professional development for teachers and rapid changes in technology, many of them unproven in the classroom ("Technology Implementation in Schools: Key Factors to Consider," n.d.).

It is challenging for school administrators to sift through continually updated and quickly outdated research in order to determine what form of new media teachers should be bringing into their classrooms. They must then work to ensure that their teachers are sufficiently prepared to integrate these technologies into their lessons—a process that can take years to achieve, requiring extensive support and professional development opportunities available to administration and staff (Kleiman, 2000). Teachers who are expected to effectively integrate technology without administrative support are less likely to become adept with the new media, and instead wind up using digital media in superficial ways that fail to serve either the students or the teachers in meaningful ways.

In addition, in 2000, Kleiman argued that "agreed-upon" best practices for technology use in K-12 classrooms do not exist, due to the various goals among educators and administrators when it comes to incorporating technology into the classroom. These goals may include improving basic skills in math; reading and writing in order to improve standardized test scores; motivating and engaging students; broadening curriculum objectives; empowering teachers to hone their own approaches; preparing students for future careers; and keeping education relevant for 21st century learners (ibid). Different goals lead to different demands for resources, strategies for implementation, and evaluation criteria. An absence of consistent goals within an institution can lead to confusion within an organization, ultimately decreasing the likelihood of effective use and integration.

While agreed-upon best practices for technology in education may not have existed over a decade ago, a recent shift away from the standardized testing of the "No Child Left Behind" era has educators moving toward teaching and engaging the whole student, equipping them with 21st century skills they will use as participants in a global society (Deubel, 2009). Partnership for 21st Century Skills (2011), an advocate organization for 21st century learning, has established a Framework under which to operate, suggesting that Information, Media, and Technology Skills should be given equal weight in the classroom as Learning and Innovation and Life, and Career Skills, seen in *Figure 1*. These skill-sets, layered in with Core Subject education, should pervade all aspects of learning, including Standards and Assessments, Curriculum and Instruction, Professional Development, and Learning Environments.

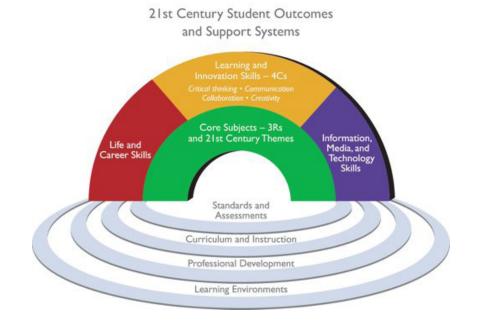


Figure 1: Partnership for 21st Century Skills (2011)

In order to guide the technology component of the 21st Century Skill Framework, the International Society for Technology in Education has defined a series of National Educational Technology Standards (NETS) that are being circulated worldwide and implemented on the local level. NETS are not designed for students only, however. As previously discussed, teachers and administrators play essential roles in successful technology integration. As such, each set of NETS are tailored to specific roles within the educational environment, including Students, Teachers, Administrators, Coaches, and Computer Science Educators. The NETS outline expectations for participants in what is becoming an "increasingly connected global and digital world" ("NETS Standards," 2011). Much like a set of state educational standards, the NETS for students include six major standards with profiles for different age groups that describe key points of development. The six standards outlined in the NETS for students are: Creativity and Innovation; Communication and Collaboration; Research and Information Fluency; Critical Thinking, Problem Solving, and Decision Making; Digital Citizenship; and Technology Operations and Concepts. These standards overlap seamlessly with the 21st Century Skills Framework, each recognizing that students should be able to use technology to analyze, learn, and explore the world in which they live. In order to design, implement, and assess learning in students, according to the NETS, teachers are expected be able to: Facilitate and Inspire Students' Learning and Creativity; Design and Develop Digital Age Leaning Experiences and Assessments; Model Digital Age Work and Learning; Promote and Model Digital Citizenship and Responsibility; and Engage in Professional Growth and Leadership ("NETS-T-Standards," 2008). A common component between most of the NETS is Digital Citizenship, signaling the importance of social, ethical, and practical understandings of our evolving digital culture. Overviews of each of the NETS can be seen in *Figure 2*, and student and teacher NETS are detailed in Appendices B and C.

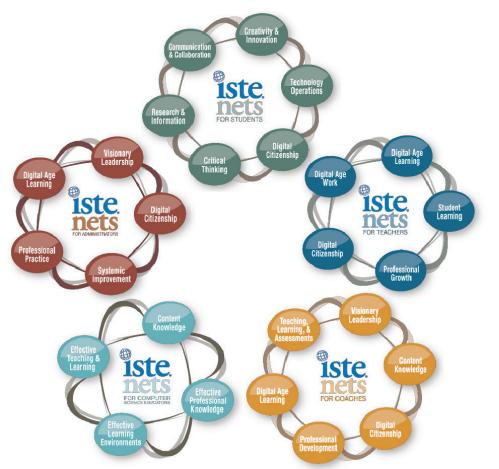


Figure 2: National Educational Technology Standards (2012)

Many students today are already actively engaged in the world of technology and digital media. Many of them are creators of this media themselves, already demonstrating NETS competencies. In his white paper *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century* (2009), Henry Jenkins claims that young people today live in a participatory culture, one "with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, some type of informal mentorship whereby what is known by the most experienced is passed along to novices... [and] one in which members believe their contributions matter, feel[ing] some degree of social connection with one another" (p. 3). This culture can manifest itself in a multitude of ways,

including memberships to online groups or forums, the production of creative forms such as remixes or mashups, crowd- sourcing of information, and circulating one's own media creations.

This type of creative expression is common among today's youth, many of whom use participatory culture to create and shape their identities online. "Digital natives," or those who communicate through the Internet and have an Internet identity, consider themselves creators "in every sense of the word," whether it's posting comments and photos to social media sites, or hosting blogs and sharing personal stories or reflections ("Born Digital: Creators," 2010). Jenkins asserts that access to these cultures and the participation therein is a determinant of success, "shaping which youth will succeed and which will be left behind as they enter school and the workplace" (p. 3). With skills this critical to achieve, it becomes an institutional obligation to ensure equal access to the opportunities and experiences that will help them succeed in the future. It is not enough to assume that students will learn how to engage effectively and appropriately with technology outside of the classroom. Ensuring that students understand how to harness the power of this technology and use it to make positive contributions to society becomes an essential part of a child's development, making it essential that schools and teachers are able to offer access to 21st century resources.

As an assignment for my EDST 522 class at the University of Oregon, I conducted a technology profile of a local middle school, Cal Young, informed by a series of observations of two technology-focused classes taught by instructor Eric Schiff. I was a student of Mr. Schiff's at the University of Oregon in Fall and Winter 2011, where he also works as an adjunct instructor for the Arts & Administration program's Information Design and Technology/Multimedia courses. During that time Mr. Schiff would often reference the work his middle schoolers were doing at Cal Young, which involved some of the very same assignments we graduate students were struggling through, including creating logo designs in Adobe Illustrator, videos in iMovie,

and designing our own websites.

It was very clear in speaking with Mr. Schiff that he has worked hard to urge the Cal Young administration to support the technology integration efforts he has envisioned. As one who has served as a technology consultant, coordinator, and instructor for approximately 20 years, Schiff has a strong understanding of how technology can enhance learning. Schiff is an active proponent of effective technology integration in the classroom, with an emphasis on project-based learning (PBL) and the creation of personal learning environments (PLEs). Schiff is also a member of Cal Young's Technology Leadership Team, a group of 10 teachers who meet weekly to discuss the school's technology-integration strategies. Together they completed a Technology Integration Plan for 2010-2013 which clearly outlines the school's overall tech vision, goals and objectives, resources, plan of action, assessment measures, and obstacles.

Cal Young's vision for technology integration includes a commitment to "teaching, supporting, and enhancing students foundational digital literacy skills for appropriate and purposeful application and integration in their daily curriculum and personal learning environments" (Arnold-Boyd et al., n.d.). In addition is a desire to see students "use technology as active learners to engage, reflect, and take responsibility for learning and reinforcing skills that give them confidence and success in achieving their individual goals" as well as contributing to the greater good in their communities (ibid). The goals and objectives in place to help achieve this overall mission are taken directly from the NETS, with a focus on specific items that Cal Young recognizes need to be addressed more effectively in their school. These items include: higher proficiency in keyboarding skills, more integrated word-processing instruction, increasing student use of multimedia in their presentations, and purchasing a classroom set of iPads (ibid).

Cal Young's plan for achieving these technology goals involves a hybrid set of content standards informed by both the NETS and 4J Instructional Technology Skills and Concepts

Scope and Sequence. NETS Standards 1-9 are addressed, and an outline as to how these standards will be met inside the classroom and across the curriculum are explained. For example, NETS Standard 1 addresses Creativity and Innovation. Cal Young's Action Plan to address this Standard includes the design and creation of websites and digital movies by students, as well as gathering and organizing materials for Language Arts and Social Studies through the use of PowerPoint and Google Apps.

It was evident in my observation at Cal Young that the Integration Plan is an active document, one that is being put into action rather than sitting in a desk drawer. One of its most popular successes has been the "ePortfolio program," currently gaining district attention. Schiff explained that the 4J District was already supporting the WordPress blogging platform for its faculty, and with some encouragement, the install was expanded to include a WordPress site for all Cal Young students. The students use their ePortfolios to archive and reflect on every assignment in each of Schiff's classes¹².

Eric Sheniger, Principal of New Milford High School in Connecticut, was featured on the *Huffington Post's* Education Blog with his five most *Common Misunderstandings of Educators Who Fear Technology*, one of which was assessment (2012). According to Sheninger, "many teachers and administrators alike often fear how students can be appropriately assessed in technology-rich learning environments" (ibid). As new ways of learning are integrated into the classroom, there will be a need for new modes of assessment. With ePortfolios, Mr. Schiff finds that assessment is streamlined, and he is given a more complete picture of students' overall understanding as they post their assignments than other more traditional modes of assessment allow. He also enjoys the ease of organization, as he always knows where to find each student's

¹² Eric Schiff was also a founding member of the University of Oregon's Arts & Administration ePortfolio project, which began utilizing WordPress for student and faculty blogs in 2005. More information on this ongoing project can be found at http://aaablogs.uoregon.edu/eportfolio/.

assignments. With all of a student's assignments posted chronologically to his or her ePortfolio, Schiff is also able to evaluate growth over time.

While concerns still exist about technology integration in the classroom, technology advocates champion effective technology use that prepares students for the digital world. ISTE's NETS are becoming increasingly recognized and adopted worldwide as best practices for learning, teaching, and leading in a technology-driven age. While overuse of technology is beginning to demonstrate negative side-effects on students and children, effective technology integration in the classroom has shown to help increase problem-solving skills, inspire collaboration, and ready students for their futures in a global marketplace. The key to effective technology integration lies in an overall objective of educating the whole child, implementing projects and activities where technology can be used to enhance the learning experience, rather than take away from it.

Chapter 5 | PBL: Where the Best Practices Crossover

Best practices for Shakespeare education involve performance- and language-based instruction, layered with historical context, which encourages students to develop personal connections with Shakespeare's poetry and prose. Best practices for technology integration in education involve designing curricula that engages the whole child by preparing him or her to be a responsible, global citizen in the current digital age. Literature from the George Lucas Educational Foundation's web resource, *Edutopia*, suggests that "effective tech integration must happen across the curriculum in ways that research shows deepen and enhance the learning process ...[through] support[ing] four key components of learning: active engagement, participation in groups, frequent interaction and feedback, and connection to real-world experts" ("Why Integrate Technology Into the Curriculum?: The Reasons Are Many," 2008).

Operating under these sets of values that embrace both the 21st Century Skill Framework and NETS, a clear overlap exists between the sets of best practices from Shakespeare education and technology in education. Increasing in popularity and demonstrating its efficacy in research, project-based learning (PBL) is an educational approach that is highly praised and supported by the George Lucas Educational Foundation. PBL breaks some of the traditional models of education and operates largely under an inquiry-based model, with students working together in small groups to explore answers to real-world problems and challenges. Stemming from the ideas of education reformer John Dewey, which were further explored by his colleague William Kirkpatrick, PBL is an "alternative to the desk-bound, transmission-based approach of most traditional classrooms," where students have the opportunity to work together, "solving authentic problems...using the materials and methods of the profession, and creating products or performances" (Seidel, 1999, p. 84). The nature of PBL requires active engagement from the students, leading to deeper understanding of the subjects they're studying as well as higher retention rates for information learned ("Why Teach With Project-Based Learning?: Providing Students With a Well-Rounded Classroom Experience," 2008).

Shakespeare & Company (S&C), a nationally recognized Shakespeare theater in Lenox, Massachusetts, provides summer camps, workshops, and in-school residencies to students and teachers throughout the New England area. The organization's education program, founded in 1978, has "evolved from their distinctive approach to rehearsal, performance, and their training of actors" (Seidel, 1999, p. 80). This approach, language- and performance-centered as we have seen with leading Shakespeare institutions, holds a deep "respect for words—the worlds of meaning they contain—and a desire not to diminish or simplify those words" (p. 82). Identifying that this approach presents a stark contrast, both in practice and results, to traditional teaching models, a team with Harvard's Project Zero set out in 1995 to examine S&C's educational

outreach program, *The Fall Festival of Shakespeare*, where over 40 teaching artists in 11 schools reach hundreds of students each year (p. 80). What they discovered was an intensive PBL approach to Shakespeare that results in students understanding and connecting with Shakespeare's plays in a way researchers find is lacking in most high school classrooms.

Students with S&C approach the text through a series of exercises and rehearsals, working to understand the play from the inside out. The program is structured by the belief that "understanding can only truly be assessed, and, for that matter, even achieved, through performance," an idea based on pedagogy from education reformers David Perkins, Howard Gardner, Vito Perrone, and their colleagues in the *Teaching for Understanding Project* (p. 84). Perkins asserts that "to gauge a person's understanding at a given time, ask the person to do something that puts the understanding to work—explaining, solving a problem, building an argument, constructing a product...what learners do in response not only shows their level of current understanding but very likely advances it" (Perkins, 1998, p. 41). The performance method of evaluation is literal with S&C's participants, providing students with an opportunity to share their understanding of the work with an audience of hundreds. Festival performances are more than "school-room exercises: they are authentic acts of communication, culture and community" (Seidel, p. 84), allowing students an opportunity to bring their own interpretations of Shakespeare to life, connecting with the language, and imbuing it with meaning and understanding. Students are learning not only about Shakespeare and his language, but they are also learning about acting, working in creative communities, and also themselves (p. 85). Each aspect of the learning process contributes to the other, creating a holistic, multifaceted approach to Shakespeare's plays.

Steinberg (1998) offers a framework for examining the "rigor and relevance" of PBL activities. She asks a series of questions relating to the six elements that "she argues are critical

to the design of powerful projects": authenticity, academic rigor, applied learning, active exploration, adult relationships, and assessment practices (Seidel, p. 84). Seidel summarizes Steinberg's PBL evaluation questions:

- Is it a problem or question that might be tackled by an adult at work or in the community?
- Does it challenge students to use methods of inquiry central to one or more disciplines?
- Does the project lead students to acquire and use competencies expected in highperformance work organizations? (that is, teamwork, appropriate use of technology, problem solving, communications)?
- Are students expected to communicate what they are learning though presentations and performances?
- Do students have an opportunity to work closely with at least one adult with relevant expertise and experience?
- Do students reflect regularly on their learning, using clear project criteria that they have helped to set, and do adults from outside the classroom help students develop a sense of the real-world standards for this type of work (p. 84)?

Seidel finds that the research conducted by Harvard's Project Zero study demonstrates that Shakespeare & Company's programming meets Steinberg's standards, answering "yes" to each of these questions, suggesting it to be a model for both PBL and effective Shakespeare education.

Since rigorous and relevant PBL activities are based on real-world issues, rarely are the bounds of a project confined by any one subject. English and literature teachers can work with teachers across the curricula to establish a set of learning goals students should aim to achieve in their projects. Working in groups, students design how they will achieve those learning goals. For example, English teacher Mary Mobley and history teacher Michael Chambers from Manor New Tech High School in Manor, Texas collaborated on the learning outcomes for a project based

on the popularity of Suzanne Collins' novel *The Hunger Games* (Nobori, 2012). The project, designed to last three weeks, covered concepts "including the pre-World War II global economic crisis, the rise of totalitarianism, and the societal moral dilemmas that world leaders at that time faced" (ibid). It was then up to students to determine how they were going to learn the concepts and draw parallels to similar themes in the book. Because of the historical, political, and social relevance that Shakespeare's plays still have today, similarly Shakespeare PBL activities have the potential to be incorporated to a variety of different subject matters.

At the 2012 Shakespeare Theatre Association Conference, Harper Ray explained how students partaking in workshops facilitated by London's Globe Education read Shakespeare's plays in class and build study guides collaboratively via online wiki sites (2012). This allows students to contribute to the study guides in class and still access them from outside the classroom. Through this PBL approach to creating digital study guides, it becomes possible for students to demonstrate each of the six NETS competencies outlined by ISTE¹³, working creatively and collaboratively and utilizing digital tools to gather and synthesize information.

Additionally, Mike LoMonico discussed Folger Library's *Experiencing Shakespeare*, a free one-hour electronic field trip involving over 311,000 students from across the country (ibid)¹⁴. The program allowed students to "travel [virtually, in real time] backstage with professional actors rehearsing for a Shakespeare performance, see original documents relating to Shakespeare's life and times, and enjoy special behind-the-scenes access to the Folger" ("Experiencing Shakespeare Virtual Field Trip," n.d.). Through new media, students toured the Folger Library, interacting with professionals in the field. In addition, prior to the field trip, students submitted videos of their own Shakespeare performances to the Folger Library. The

¹³ See Appendix B for full Student NETS

¹⁴ Folger's first (and at the time of this paper, only) Experiencing Shakespeare field trip occurred March 6, 2012

clips were edited together in a mashup of favorite lines and quotes from Shakespeare's plays¹⁵. Not only are such students demonstrating NETS competencies through video production and participation in the virtual field trip, but this PBL approach enables Folger to demonstrate NETS competencies as defined for teachers, in inspiring student learning and creativity, and modeling digital-age work and learning¹⁶.

Shakespeare and technology make an effective team with PBL activities. With PBL, creativity, ingenuity, and problem-solving skills must all come into play as students design not only how they will *learn* the information required, but how they will *demonstrate* their learning. Any project a student designs can easily accommodate technology-integration to enhance their process and/or final product on a number of levels, including computer and Internet use, interactive whiteboards, GPS devices, digital cameras and video recorders, and any associated editing programs or equipment ("Why Teach With Project-Based Learning?: Providing Students With a Well-Rounded Classroom Experience," 2008). Technology also can be used to provide immediate and ongoing feedback to students through the use of online journals and discussion forums. These forums encourage students to share ideas and resources with one another, stimulating dialogue and communication in a virtual environment. With project-based learning, technology use becomes a tool rather than a distraction, helping students to achieve learning goals in meaningful and memorable ways.

Chapter 6 | Final Analysis: New Media in Shakespeare Education

This study was designed to examine the role of new media in Shakespeare education, define an effective Shakespeare learning experience, explore existing lessons, programs, and

¹⁵ The mashup can be seen at http://www.folger.edu/template.cfm?cid=4218

¹⁶ See Appendix C for full Teacher NETS

activities that incorporate technology with Shakespeare education, and identify existing gaps as well as possibilities for further integration. A series of research experiences have contributed to a greater understanding in each of these areas, including a review of the literature published on Shakespeare education and technology in education, as well as capstone coursework focusing on the 2012 Shakespeare Theatre Association Conference, and technology for educators. In addition, my own personal experiences with Shakespeare's plays as an actor, teacher, director, company member, student, and audience member add an additional layer of meaning and understanding to the study.

Looking to flagship Shakespeare theaters (Folger Shakespeare Library, American Shakespeare Center, Utah Shakespeare Festival, San Francisco Shakespeare Festival, Shakespeare's Globe, and Shakespeare & Company) and their education programs for standards and best practices in Shakespeare education, there is agreement among these institutions that approaches to teaching Shakespeare should be centered on performance and language, with historical context playing a strong supporting role. Therefore, the role of new media in Shakespeare education must be to support active, theater-centered learning, and not replace or circumnavigate the live theater experience. In examining best practices regarding Shakespeare education and technology integration, respectively, project-based learning emerges as a successful approach in both areas of study (Edutopia, 2008; Siedel, 1999; Steinberg, 1998). Drawing on inquiry-based models that challenge students to think critically, reflect on their learning, and demonstrate learning through performance, Shakespeare educators can make room in PBL activities for engagement with new media while exploring Shakespeare's writings. Folger Shakespeare Library's virtual field trip, the Globe's Scene Machine, and San Francisco Shakespeare Festival's popup performances demonstrate how new media can be used to facilitate engagement with Shakespeare and his plays, by committing to best practices for both technology

integration and effective Shakespeare learning experiences and without replacing the live theater experience.

While I discovered a number of different Shakespeare-related web-based resources available to teachers and students, overall there lacks a standard quality evaluation method for these tools. As best practices for Shakespeare and new media continue to develop, an established rubric or approval rating could help inform teachers, guiding them toward worthwhile applications. As a forum for leaders in Shakespeare education, the Shakespeare Theatre Association could play a role in establishing a standard evaluation method, highlighting the work of member organizations and providing a comprehensive online inventory of STA member educational resources.

Many of the possibilities I see for further technology integration are beyond the scope of my research. My focus has been on K-12 Shakespeare education from a performing arts organization's perspective, but my experiences have demonstrated how much more encompassing a theater's educational mission can be when aided by new media. Blogs, social media, and other web-based activities are approaches theaters can use to educate audiences of all ages, including them in a participatory Shakespeare world. Advances in new media allow for theaters to connect with audiences of diverse ages with equally diverse levels of familiarity with Shakespeare's language and history. If new media's function in Shakespeare education is to facilitate and enhance the live theatre experience, Shakespeare institutions can use these emergent technologies to engage a broad audience, reaching out not only to future patrons, but current ones as well.

Appendix A | The 2012 Shakespeare Theatre Association Conference: My Role and Its Impact on the Research

Most of the peer-reviewed literature available on Shakespeare education focuses on Shakespeare being taught by an elementary or high school teacher in the classroom. However, I was interested in gaining a better understanding of Shakespeare education from the perspective of a performing arts organization, particularly as it pertained to emergent technology. I discovered that the international Shakespeare Theatre Association (STA) would be hosting a conference at my home theater in Orlando, Florida, and the topic of Shakespeare education and technology would be discussed in detail. I reached out to Jim Helsinger, Orlando Shakespeare Theater's artistic director, to devise a way that I might attend the members-only conference. Helsinger, as host of the conference, was searching for a way to bring the STA Conference into the 21st century. After brainstorming several ideas, we determined that I could build a WordPress blog to document the conference, allowing me to engage with technology in an educational capacity while also exploring how Shakespeare theaters are using technology to further their own educational missions. My experience working and attending the 2012 Shakespeare Theatre Association Conference proved to be a unique opportunity to immerse myself in the world of Shakespeare theater and gain an understanding of the values and inner-dynamics of this umbrella organization.

Established in 1991 as the Shakespeare Theatre Association of America, STAA originally comprised nearly 40 theaters primarily involved in the production of Shakespeare's plays. These founding organizations came together to provide a network for supporting and sharing ideas related to American production and education of the Bard's work. More than two decades later, the organization has more than tripled its number of members, and in recent years, has embraced a more worldly approach, dropping the "of America" from its name, add theaters from across the

globe—and including The Globe! The scope of the STA makes it an ideal network through which to understand trends and practices related to Shakespeare production and education worldwide.

Each year the STA comes together at a different member company's home theater for a week of discussion and debate about current issues related to production and education of Shakespeare's works. This is the STA's mission: "To provide a forum for the artistic, managerial, educational leadership for theatres primarily involved with the production of the works of William Shakespeare; to discuss issues and methods of work, resources, and information; and to act as an advocate for Shakespearean productions and training" ("Shakespeare Theatre Association," n.d.). The annual conference serves as a cultivating ground for networking, and an opportunity for exchange. At the 2012 conference I attended, the sense of camaraderie among STA members was palpable, and I was grateful to be welcomed into the family in order to facilitate a social media presence for the conference, and in the process, inform my research on technology and Shakespeare education.

My primary responsibility leading up to and during the conference was building and maintaining a conference blog site. This was the first time a blog had ever been created for a STA Conference, and that made for a challenging personal experience as I interfaced with technology to provide an educational component for the conference. Overall the blog was deemed a great success by the STA members. On the last night of the conference, I received a number of thank-yous from attendees who found the blog useful, because they were able to sit and listen to the conference sessions without having to take notes. The fact that the host had designated note-takers for each session that were being posted to the blog on a daily basis meant that conference participants could listen and engage, rather than merely document the experience. In addition, the blog increased the visibility of STA in the greater, global Shakespeare community. One attendee was a Ph.D. candidate at Florida State University in Tallahassee working on founding an original

practice Shakespeare company; he learned about the conference on the first day only after his friend discovered the blog and sent him a link. He promptly registered to become a member of the STA and drove down to Orlando, joining us for the remainder of the conference.

The blog also had a wide reach of followers. Not only was it a useful tool for conference attendees, but STA members and general Shakespeare enthusiasts nationwide were able to follow along with the conference, reading the notes and participating in live Tweeting during the sessions. While the debate over using social media during a theater performance continues, Tweeting during the conference was widely accepted. We were sure to include a message in the conference program that encouraged Tweeting during conference sessions and directed members to use the "hashtag #sta12." This way all conference-related Tweets were archived under a single hashtag and an RSS feed was included on the conference blog site. There were approximately 10 to 15 STA members who were regularly Tweeting throughout the conference, offering another level of insight into the programming. As noted by one of the conference participants, the live Twitter feed was especially useful during breakout sessions where multiple topics were being discussed at once. The Twitter feed allowed participants to be physically present in the room for one session but still have a virtual presence in the others.

These success stories demonstrate the educational value that can be achieved by integrating new media into Shakespeare organizations. The positive reception the blog received from the STA leadership makes it likely that it will continue to be offered as a service by conference hosts in years to come. Indeed, although I was unable to attend the 2013 STA Conference in Philadelphia, I consulted with STA's general manager about the blog template I created in 2012. The same infrastructure I designed was used again for the 2013 Conference with minimal alterations, demonstrating its efficacy the first year and STA's adaptability to new media.

Appendix B | ISTE's NETS for Students

from http://www.iste.org/standards

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes
- b. Create original works as a means of personal or group expression
- c. Use models and simulations to explore complex systems and issues
- d. Identify trends and forecast possibilities

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- Develop cultural understanding and global awareness by engaging with learners of other cultures
- d. Contribute to project teams to produce original works or solve problems

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3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

- a. Plan strategies to guide inquiry
- Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. Process data and report results

4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- a. Identify and define authentic problems and significant questions for investigation
- b. Plan and manage activities to develop a solution or complete a project
- c. Collect and analyze data to identify solutions and/or make informed decisions
- d. Use multiple processes and diverse perspectives to explore alternative solutions



Appendix C | ISTE's NETS for Teachers

From http://www.iste.org/standards

Effective teachers model and apply the NETS-S as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators.

1. Facilitate and Inspire Student Learning and Creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

- a. Promote, support, and model creative and innovative thinking and inventiveness
- Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and Develop Digital Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS-S.

 Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress

ADVANCING DIGITAL AGE TEACH

- Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

3. Model Digital Age Work and Learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

- a. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
- c. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats
- Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

References

- Arnold-Boyd, S., Schiff, E., Johnson, J., Hulling, P., Harpole, S., Wade, E., ... Home,, H. (n.d.). Cal Young Tech Plan. Retrieved May 20, 2012, from http://issuu.com/samrarian/ docs/calyoungtechplan
- Born Digital: Creators. (2010). *Youth and Media*. Retrieved June 5, 2012, from http://youthandmedia.org/videos/borndigital/
- Bottoms, J. (2004). "To Read Aright": Representations of Shakespeare for Children. *Children's Literature*, 32, 1–14.
- Burr, C. (1996). Shakespeare for kids. *Humanities*, 17(3), 14–18.
- Clinton, C., & Steyer, J. P. (2012, May 21). Is the Internet hurting children? CNN.com. Retrieved May 23, 2012, from http://edition.cnn.com/2012/05/21/opinion/clinton-steyer-internetkids/index.html
- Delpit, L. D. (1995). *Other people's children: Cultural conflict in the classroom*. New York: New York Press.
- Desmet, C., & Bailey, R. (2009). The Shakespeare Dialogues: (Re)producing The Tempest in Secondary and University Education. *College Literature*, 36(1), 121–140.
- Deubel, P. (2009, September 16). Social Networking in Schools: Incentives for Participation. *THE Journal*. Retrieved May 28, 2012, from http://thejournal.com/articles/2009/09/16/ social-networking-in-schools-incentives-for-participation.aspx
- Digital Nation. (2010, February 2). *Frontline*. PBS. Retrieved April 9, 2012 from http://video.pbs.org/video/1402987791/
- Experiencing Shakespeare Virtual Field Trip-Folger Shakespeare Library. (n.d.). Retrieved from http://www.folger.edu/template.cfm?cid=4070

Folger Shakespeare Library. (n.d.). Teach and Learn. Retrieved January 23, 2013, from

http://www.folger.edu/Content/Teach-and-Learn/Teach-and-Learn-.cfm

- Gearhart, S. S., & ت. ستيفاني س. (2007). "Faint and Imperfect Stamps": The Problem with Adaptations of Shakespeare for Children. *Journal of Comparative Poetics*, (27), 44–67.
- Growing Up Online. (2008, January 28). *FRONTLINE*. PBS. Retrieved April 30, 2012 from http://www.pbs.org/wgbh/pages/frontline/kidsonline/view/
- Hansen, M. C. (2010). "O Brave New World": Service Learning and Shakespeare. Pedagogy: *Critical Approaches to Teaching Literature, Language, Composition and Culture*, 11(1), 177–197.
- Jenkins, H. (2009). Confronting the Challenges of Participatory Culture: Media Education for the 21st Century. MacArthur Foundation.
- Kimmel, H., & Deek, F. (1996). Instructional Technology: A Tool or a Panacea? Journal of Science Education and Technology, 5(1), 87–92.
- King, N. (1985). Starting Shakespeare. In R. Adams (Ed.), *Teaching Shakespeare: Essays on Approaches to Shakespeare in School and Colleges* (pp. 57–76). London: Robert Royce Limited.
- Kleiman, G. M. (2000). Myths and Realities About Technology in K-12 Schools. *LNT Perspectives*, (14). Retrieved from www.sfu.ca/educ260/documents/myths.pdf
- Lewin, T. (2010, January 20). If Your Kids Are Awake, They're Probably Online. *New York Times*. Retrieved from http://www.nytimes.com/2010/01/20/education/20wired.html
- LoMonico, M., Enloe, S., Ennals, R., Ray, H., & Stavros, J. (2012, March 2). *Shakespeare Virtually Everywhere: Social Media and the Educational Mission*. Presented at the 2012 Shakespeare Theatre Association Conference, Orlando Shakespeare Theater. Retrieved from http://sta2012.wordpress.com

Main Conference Schedule | 2012 STA Conference at Orlando Shakespeare Theater. (2012).

Retrieved February 15, 2013, from http://sta2012.wordpress.com/conference-schedules/ conference-schedule/#sessionb

NETS Standards. (2011). *International Society for Technology in Education*. Retrieved June 4, 2012, from http://www.iste.org/standards.aspx

NETS-T-Standards. (2008). International Society for Technology in Education.

- Nobori, M. (2012, May 23). A Step-by-Step Guide to the Best Projects. *Edutopia*. Retrieved from http://www.edutopia.org/stw-project-based-learning-best-practices-guide
- O'Keefe, MD, G., & Clearke-Pearson, MD, K. (2011). The Impact of Social Media on Children, Adolescents, and Families. *Pediatrics*, 127(4), 800–804.

Paquette, M. (2007). Sex and Violence: Words at Play in the Shakespeare Classroom. *The English Journal*, 96(3), 40–45.

- Perkins, D. (1998). The Intelligent Eye: Learning to Think by Looking at Art. Santa Monica, CA: Getty Center for Education in the Arts.
- Rumbold, K. (2010). From "Access" to "Creativity": Shakespeare Institutions, New Media, and the Language of Cultural Value. *Shakespeare Quarterly*, 61(3), 313–336.
- San Francisco Shakespeare Festival. (n.d.). Shakespeare in the Parklet! San Francisco Shakespeare Festival. Retrieved February 10, 2013 from http://www.sfshakes.org/special/ index.html
- Seidel, S. (1999). "Stand and unfold yourself" a monograph on the Shakespeare & Company research study. In *Champions of Change: The Impact of the Arts on Learning* (pp. 79–90). The Arts Education Partnership.
- Shakespeare Theatre Association | For producers of the works of Shakespeare. (n.d.). Retrieved November 25, 2012, from http://stahome.org/

Shakespeare's Globe. (n.d.). About Us / Shakespeare's Globe. Retrieved January 26, from http://

www.shakespearesglobe.com/about-us

- Sheninger, E. (2012, May 15). Common Misunderstandings of Educators Who Fear Technology. *Huff Post Education Blog*. Retrieved June 3,2012 from http://www.huffingtonpost.com/ eric-sheninger/common-misunderstandings-_b_1516429.html
- Sherry Turkle: Connected, but alone? (2012, February). *Ted.com*. Retrieved June 3, 2012 from http://www.ted.com/talks/sherry_turkle_alone_together.html
- Steinberg, A. (1998). *Real Learning, Real Work: School-To-Work As High School Reform*. New York: Routledge.
- Technology Implementation in Schools: Key Factors to Consider. (n.d.). *Center for Implementing Technology in Education*. Retrieved April 9, 2012 from http://www.cited.org/index.aspx?page_id=187
- Why Integrate Technology into the Curriculum?: The Reasons Are Many. (2008, March 16). *Edutopia*. Retrieved June 5, 2012 from http://www.edutopia.org/technology-integrationintroduction
- Why Teach with Project-Based Learning?: Providing Students With a Well-Rounded Classroom Experience. (2008, February 28). *Edutopia*. Retrieved June 5, 2012 from http://www.edutopia.org/project-learning-introduction
- Wood, R. (1997). Shakespeare in an Elementary School Setting: A Unique and Inspiring Educational Experience. *The Phi Delta Kappa International*, 78(6), 457–459.