

ImaginOn: The Joe & Joan Martin Center INTERACTIVE EDUCATIONAL PROGRAMS

I. Project Purpose

It is nationally recognized that public libraries play a vital educational role in the lives of children and families.¹ As part of an increasing national focus on the “21st century learner,” it is also recognized that lifelong learning or informal learning is central to our education – and that libraries have new opportunities to serve as vital learning resources by building on their position as a trusted community resource while working to effectively use library resources to foster critical thinking and information literacy skills.² The Institute of Museum & Library Services (IMLS) has also stated that in order to meet the challenges of 21st century learner, that libraries should become part of a network of learning resources that share a common educational mission, including schools and other community based educational activities.

We know that children and teens learn best when they are deeply engaged in tasks that fascinate them – that inquisitiveness drive’s children’s learning and that technology plays a key role.³ Much research has also been done on the benefits of integrating arts and education and the resulting positive benefits for developing language skills, reading, writing, and interpersonal skills. However, while we know that young people are using technology in libraries for enhanced learning opportunities, much of the evidence is largely anecdotal.⁴ ImaginOn: The Joe & Joan Martin Center is a national model for how libraries can seize new opportunities to combine their assets with innovative technologies, and partner with community organizations to help inspire minds, nurture creativity and develop critical life skills in young people.

What began as a conversation, more than seven years ago, about collaborative potential between the Public Library of Charlotte & Mecklenburg County (PLCMC) and Children’s Theatre of Charlotte, has evolved into a vision of an institution dedicated to young people that would be more than simply the combination of a children’s library and children’s theatre. Both organizations are respected leaders in their fields with successful experience in developing model arts, humanities, educational and technically-oriented programs. Building on these strengths, ImaginOn will foster lifelong learning through programs where hard work and play unite, where creativity is respected and encouraged, and where children learn and discover together.

ImaginOn, scheduled to open in late 2005, is a 102,000 square foot joint Public Library/ Children’s Theatre of Charlotte facility that encompasses an entire city block (Appendix A, Page 9). Together in ImaginOn, these organizations will serve a half-million visitors each year. While ImaginOn will include “traditional” theatre and library resources, ImaginOn will also include multiple new ways of combining traditional library/theatre resources. This includes three Interactive Educational Programs that represent a new direction for libraries -- that go beyond traditional methods of engaging and sustaining life-long learners by using technology to support

¹ Urban Libraries Council. 2002. *Urban Children, Youth and Families: Public Libraries’ Roles and Contributions*.

² Institute of Museum & Library Services. Nov 9, 2000. *The Launch of the 21st Century Learner Initiative*.

³ Abbott, John and Terence Ryan. Nov 1999. *Constructing Knowledge, Reconstructing Schooling*. www.21learn.org.

⁴ Kuhlmann, Amy. December 2001. *Children Learning With Technology Beyond the School Bell and Building: What Do We Know?* North Central Regional Educational Laboratory.

the way in which youth in the 21st century learn, gather and process information. Submitted as the Library's TOP focus, these programs include: (see Project Diagram, Appendix B, Page 10.)

1. A major web-based Interactive Installation that will offer unparalleled opportunities for dialogue within, and among, different groups of people.
2. Interactive Blue Screen technology to focus on improved media literacy.
3. An interactive web-based resource, ImagiNetwork, to provide parents & teachers with additional information and resources on using ImaginOn resources including the Interactive Installation and Blue Screen programming.

Interactive Installation: The interactive installation will include literacy-based electronic tools for groups and individuals including: 1) Story Stations, computer workstations that encourages story-making, word, history and culturally-related games individually or in groups (Story Station Hubs), provide access to Library and Theatre databases and archives, and provide virtual visits to other ImaginOn locations (i.e., scene shop, storytelling theatre) for additional exploration and learning; and 2) LINCScopes, strategically placed “telescopes” and child-sized monitors that offer children the opportunity to discover other happenings in the facility or within a program, see child-created artwork, read stories, and more. Specific content and interactive activities will change on a regular basis to align with scheduled Children's Theatre plays and Public Library themes. Although physically located in ImaginOn, creative work created through these tools will be available to a larger community via the ImaginOn web site. And, many of the engaging educational activities will be available to children and families who are virtual ImaginOn visitors through a digital network. TOP funding will be used for the final phase of Installation design and implementation that includes 15 Story Stations, 3 Story Station Hubs, and 6 LINCScopes (see Appendix C, pages 11-14). Usage scenarios of how creativity and learning will be encouraged:

- *Single visitor:* A 12-year-old boy reluctantly goes to the library to look for books for a homework assignment that is due the next week. After he gets the books he needs, he is drawn to a Story Station, where he makes up a series of words, which are then projected to the LINCScopes. Because of the physical arrangement of ImaginOn, the boy is able to watch other visitors enjoy his words—he even hears people repeating them out loud. This is the first time he has felt comfortable in a library since he was a little kid. Once at home, he logs on to the ImaginOn web site, where he signs up for a writing workshop. He'll be back.
- *Spontaneous team:* Three 10-year-olds finish their “intro to improv” class in the Theatre, and discover that they have a half an hour before a parent picks them up. They gravitate to the Story Hub, where they play with a dance theatre program, designing, choreographing, and performing virtually. A group of children gather behind them to watch the final performance.

Blue Screen Programming: The ImaginOn facility will include a dedicated space (1,225 square feet) that will double as a black-box style theatre and blue screen theatre. Blue screen or “chroma key” technology allows actors/speakers to perform in front of a blue background screen, upon which background images are superimposed later by computer. The purpose of this space is to provide innovative and original approaches to production and programs that appeal to teens, giving visitors the opportunity to bring stories to life with tremendous freedom of expression using moving images and sound. A key programming focus for ImaginOn staff will be educating students on media literacy, the ability to view or read *any* media message, critically. Blue Screen programming also provides opportunities to explore possible career opportunities including learning about such technology as live action with sync-sound (i.e., newscasts, book reviews,

video logs), and animation techniques including stop-motion animation, clay animation, paper-cut animation, shadow puppet animation, and web-based live action. TOP funding will be used for related equipment, software, installation and staff training. Usage scenarios of how this programming will encourage creativity and learning include:

- *Rants and Raves*: A weekly “webcast” program developed on a virtual set presented by and for students that reviews plays, books and other materials that can be shared with others through the *ImaginOn* web site.
- *A Picture Says a 1000 Words*: Using modern and historical images from the media, teens will create a presentation in the blue screen theatre that explains the impact of media on our culture. A streaming video version of this presentation will become part of the on-line activities developed for the play, “The Diary of Anne Frank.”

ImagiNetwork: This web-based resource will target parents and teachers with pre & post *ImaginOn* visit activities, suggestions and resources. Families attending theatre performances can access Family Play Guides that link library resources to theatre activities for a deepened experience. Realizing that adults are often the most difficult audience to engage with technology, *ImagiNetwork* will include on-line tutorials that parents and teacher can use to understand how the interactive installation and blue screen theatre can be utilized to deepen the visitor experience as well as to connect to curriculum goals. While no direct TOP funding is requested, *ImagiNetwork* is important for supporting overall project goals. Usage scenario example:

- *School group*: A seventh grade class has been studying the book and play of “The Diary of Anne Frank,” and such related books as “Night” and “Number the Stars” in anticipation of attending a performance of the play at the Theatre. Their teacher downloads text, audio, and video from *ImagiNetwork* to extend the experience. As part of their final assignment, the class writes poems that deal with tolerance and bravery and shares them via the web site.

Our overall Interactive Educational Program goals are: 1) Young minds will be challenged, inspired and excited through extraordinary experiences that bring stories to life; 2) Children, families and teachers will experiment creatively; 3) An “experience method” of self-directed learning and exploration will be created; 4) Technology will be harnessed to create new efficiencies and better communication; 5) Cultural and educational organizations will find a model approach to integrating interactive technologies for enhanced lifelong learning; and 6) PLCMC and Children’s Theatre discover new lessons about their separate organizations and the *ImaginOn* partnership that will continue to improve library and theatre services to young people and their families. Measurable outcomes are that young adults acquire and improve communication skills, critical thinking skills, and creative expression through technology.

II. Innovation

ImaginOn is a national model – the first time a public library and children’s theater have integrated their resources in one facility. *ImaginOn* allows both agencies to expand existing educational programming, while working together to create new and exciting ways of exposing children to the power of words. Through its center city location and networked technologies, resources will be accessible to all children and young adults, with a special focus on providing increased opportunities for “at-risk” youth, inner-city youth, and those traditionally underserved. Partners for Livable Communities (Washington, D.C.), recently honored *ImaginOn* with a Bridge Builders Award, recognizing its use of culture as a bridge for community development.

The combination of literature, library and drama resources -- of the written, spoken and electronic word -- is a natural yet innovative combination. Taking the traditional art forms of storytelling and performance through the channels of new media tools presents them to a young audience who is accustomed to creating, playing and learning with digital media. Don Tapscott, in his commentary *The Kids are Alright: Technology Doesn't Make Them "little criminals,"* makes the valid point that young people use technology to play, learn, communicate and form relationships as children always have. However, digital technologies are also creating an environment that may accelerate child development, and children without access to the new media will be at a development disadvantage.⁵ Through ImaginOn, we help address concerns about the digital divide and providing access to technology to populations who may not have the opportunity to work creatively with these new tools.

This partnership represents an untested strategy for both organizations and pushes the institutions to a new level of public service. Project success depends on “traditionally trained” library and theatre staff willing to embrace the power of technology beyond simply making it available for use, to using technology as a focal point for connecting the two institutions. In developing the proposed Interactive Educational Programs, we considered models of innovative partnerships, innovative uses of technology, and organizations (primarily museums) who offer “experiences.” This project also builds upon PLCMC’s history of developing successful projects that integrate technology. For example:

- Charlotte’s Web community network (1994-1996): Led by PLCMC with NTIA - TIIAP funding, this national model established an extensive infrastructure and network of services in the Charlotte area, providing free access to information, educational resources, and email. This project stimulated incredible technical growth within PLCMC.
- PLCMC Family of Web Sites (1995 to Present): PLCMC has created 13 distinct web sites that provide exceptional information access and/or original content. *Hands On Crafts*, a partnership with the Mint Museums and funded by IMLS, opens the world of NC crafts to children and families in an interactive, fun, and engaging way including online clay and fiber studios (see Appendix D, page 15). *StoryPlace* is an interactive, bilingual web site to provide children with a virtual storytime experience through thematic online stories, activities, recommended reading and parent tips.
- Train Your Brain (2003): Created with teen input, PLCMC developed the first online summer reading program for libraries and received numerous requests from across the country for replication advice/permission. Train Your Brain addressed staff concerns of how to streamline traditional program mechanics (registration, reports, prize drawings) so staff could provide personal interactions with teens.
- Smart Connections (2003-present): A partnership with the Mint Museums that builds on the idea of combining “active” experiences, such as visiting a Museum, with additional learning opportunities through the Public Library. Project highlights include: 1) A combination working library card and Museum discount card; and 2) A web site for further exploration of specific artists, art genres, and exhibit related information with a link to the Library’s web site for materials access (Appendix E, page 16).

⁵ Tapscott, Don. June 1998. *The Kids are Alright: Technology Doesn't Make Them little criminals.* www.cnn.com.

Other models include: Cerritos Public Library (California); Denver Children’s Museum/Denver Public Library; Houston Children’s Museum; Port Discovery (Baltimore, MD); Zeum (San Francisco); and the Sony Wonder Technology Lab (NYC). A description of project highlights related to our Interactive Educational Programs is attached (see Appendix F, page17). From our survey of other institutions and based on prior PLCMC uses of new technology, this proposed project moves the public library and children’s theatre fields from using technology to enhance existing services and resources to using technology to truly create new services and resources.

III. Community Involvement

Partnerships: ImaginOn is a unique partnership of two organizations committed to a concept where new learning opportunities for youth combine the best resources of each organization. The total ImaginOn construction cost is \$36.2 million, funded primarily by voter-approved bonds and additional county appropriations. While the Public Library owns the facility, staff and board members of both organizations have been actively involved in planning and designing ImaginOn over the past 7 years. Key staff continues to meet on a regular basis (currently weekly) to make sure project tasks stay on schedule. A separate “core team” of 5 Children’s Theatre and 5 PLCMC staff members have also been meeting monthly over the last 2 years to work on identifying related integration issues – marketing/branding, space usage, special programming opportunities, shared hardware and software needs, and more. A subgroup of this core team is charged with developing online activities to support the 2004-05 Children’s Theatre production season that will be available through a new ImaginOn web site (Appendix G, page 18).

Much partnership work is ongoing – allowing the organizations to become familiar with each other’s assets, to forge solid working relationships, and to develop an ImaginOn creative “team.” Our Interactive Educational Program is the result of planning between the two organizations on ways to combine partner strengths with technology to provide engaging learning opportunities. We have worked with two proposed project consultants, ESI and John Lemmon Films, since 2000 to discuss organizational goals and end user needs. Partner roles are:

- **PLCMC:** 1) Overall project coordination including fiscal responsibilities, equipment maintenance, and communication with outside vendors/consultants. 2) Shares equally in determining innovative applications of technology with library/theatre resources and in maintaining/updating project content. 3) Leads project evaluation. 4) Shares equally in raising needed project funds. 5) Shares equally in designing educational curriculum that integrates Interactive Educational Program with other ImaginOn resources.
- **Children’s Theatre:** 1) Shares equally in determining innovative applications of technology with library/theatre resources. 2) Participates fully in project evaluation. 3) Shares equally in raising needed project funds. 4) Shares equally in promoting project use and in designing educational curriculum that integrates Interactive Educational Program with other ImaginOn resources for visiting school and other groups.

Support for End User : ImaginOn staff training will be critical for ensuring that staff can support the end user. The Library employs a full-time Library Resources Trainer to identify, design and deliver a variety of staff training. PLCMC schedules intensive staff training sessions prior to the public release of new software and/or electronic resources. Intensive training for all ImaginOn-related technology will be incorporated into staff training so that youth, their teachers and parents have excellent “front-line” service. As noted earlier, ImagiNetwork will include on-

line tutorials that parents and teacher can use to understand how the interactive installation and blue screen theatre can be utilized to deepen the visitor experience as well as to connect to curriculum goals. We will offer special teacher/group leader workshops that will allow teachers to learn about available technology, and subsequently help their students take advantage of the opportunities. The Interactive Educational Programs are primarily designed for children with at least elementary reading skills, generally ages 8 and up.

Stakeholder Involvement: As we considered what ImaginOn should be and offer, we conducted 6 focus groups with children and parents; 2 focus groups on what kinds of experiences were interesting and 4 focus groups where children/teens described ideal spaces. Those comments became the starting point for planning for the ImaginOn experience. Two facility, related on-line polls were also taken: for furnishings input; and a name the building contest. The organizations' board members, senior staff, and selected community leaders and funding supporters have also participated in several group presentations and discussions with facility architects and ESI consultant staff. Staff has also met with affiliate organizations of the Arts & Science Council of Charlotte/Mecklenburg to discuss ways that these organizations could benefit from the proposed Interactive Educational Program technology.

IV. Evaluation

To evaluate project success, an evaluation consultant will help us design the following strategies:

- An electronic survey, that seamlessly follows a child's use of the Interactive Installation or Blue Screen programming either on site or via the ImaginOn network, to determine their quality of experience rating, track rate of project utilization/repeat visitors and visitor demographics. Data will be directed to a database for analysis.
- Periodic on-site observations of children using the technology, including interviews with accompanying parents or teachers, to study the level of interaction, interest, and output. Library/Children's Theatre staff would also be interviewed to help determine how the project is used and record staff challenges in maintaining and updating content.
- Outside, "expert" feedback from technology/education leaders on potential program impact.
- Case studies of 6 diverse young people that frequently or regularly use the Interactive Educational Programs – following their levels of increasing skills attainment, project engagement, and creative products as a result of their overall experiences.

V. Project Feasibility

Organizational Capacity: The Public Library has successful experience in managing grant-funded, large-scale projects including past projects funded by the U.S. Department of Commerce and the Institute of Museum & Library Services. PLCMC also has extensive experience in developing technology-based educational projects such as the previously noted examples. Our Family of Web Sites average over 2.6 million page views each month and have been recognized nationally by ALA, PBS, Learning Magazine and more for their contributions to web users.

ImaginOn: The Joe & Joan Martin Center is a partnership of two of the Southeast's most renowned learning institutions. These organizations share a common goal of providing opportunities for children and families to become educated, enriched and inspired through the written, spoken and electronic word. The Public Library of Charlotte & Mecklenburg County was named national Library of the Year in 1995 and was awarded the National Library of the

Future award in 1996, in part for its work to connect technology and traditional library services for increased community impact. Children's Theatre of Charlotte is ranked #2 in the nation in audience attendance for youth theatres, serving 233,000 young people and families annually. (See Appendix H, page 19-20 for additional organizational information.) Key project staff includes: PLCMC - Charles Brown, Director of Libraries; Melanie Huggins, Youth Services Director; Helene Blowers, Web Services Director; and Tony Tallent, Assistant Youth Services Director; and Children's Theatre - Bruce LaRowe, Executive Director; Valerie Rhymer, Education Director; and Alan Poindexter, Artistic Director (See Appendix I, page 21).

In planning the Interactive Educational Programs, Library and Children's Theatre staff have worked with Edwin Schlossberg Incorporated (ESI) and John Lemmon Films (JLF) for the Installation and Blue Screen programming areas respectively. ESI is a design firm that is internationally recognized for working with organizations on successful interactive experiences, including the American Family Immigration History Center at Ellis Island, Chicago's Eloise W. Martin Center (ECHO), and the Sony Wonder Technology Lab in NYC. JLF is an award-winning Charlotte-based company that produces clay animation and cel animation for TV commercials, interactive web sites and animated web games for clients including Disney, Cartoon Network, Tandy Corporation, Dairy Queen and Pacific Bell. (See Appendix J, page 22).

Technical Approach: ImaginOn will use giga-ethernet local area network wiring throughout the 102,000 square foot facility to fully enable both voice and data communications. It will also use coax cabling to support video applications. The proposed Interactive Educational Programs uses the technical foundation already in place in PLCMC including an Information Technology department with responsibilities for maintaining the Library's existing network that includes approximately 700 computers, numerous electronic resources for public access, and a 11,000 sq. ft. Virtual Village Communication Center with advanced software applications and assistive technologies. Our proposed project is primarily web-based and will be integrated with Educational Video On Demand, the ImaginOn website, and the Library's "card catalog." We are using commercially available telecommunications throughout ImaginOn, and while wireless technology use is being explored for the Interactive Programs, cable is being donated to the ImaginOn facility. We are developing software unique to the Interactive Installation that is not commercially available; backend functions will allow staff to change, update and/or maintain specific content and activities to align with scheduled play performances by Children's Theatre and special Library projects or focus themes. Animation Systems as part of Blue Screen programming will be networked together so teens can collaborate and communicate by sharing image and audio files. Using the ImaginOn web site, students will globally share projects. PLCMC will be responsible for maintaining the technology used so that it can accommodate a growing number of users with increased storage capabilities, and for upgrading/replacing technology to accommodate changing audio and video streaming standards as part of its computer replacement policy. (See Appendix K, page 23-26 for related technology diagrams.)

Implementation Timeline

October '04: Meeting of project partners and consultants for final/adjusted project scope.
February '05: Interactive Installation final content designed for Story Station/Hub & LINCScopes; Blue Screen/Animation Systems designed; Online evaluation components developed based on final content; Fundraising goals on track.

- July '05: Animation Systems and Interactive Installation tested and refined; Initial ImagiNetwork resources complete.
- October '05: Story Stations/Hubs and Blue Screen/Animation Systems ready for public use; Begin collecting evaluation data.
- February '06: Remaining elements of Interactive Installation useable by public; ImaginOn staff begin updating/changing Interactive Installation content to coincide with specific Children's Theatre performances, Library Summer Reading themes, etc.
- October'06: Final project evaluation complete.

Privacy/Security: Protecting the privacy of end users is important in all Library and Children's Theatre programs. As a matter of general library practice, no personal records or holding information related to use of library materials is ever shared. We comply with CIPA rules in protecting children's use of the Internet. Only first name, last initial are used whenever comments, artwork, or other child-created projects are shared through the Library's web sites. Goals for the Interactive Educational Programs are not related to individually identifiable information and all project evaluation will conform to Library/Children's Theatre privacy policies. Students selected to participate in case studies for project evaluation will require parental permission, with dissemination of results respecting personal information.

Sustainability: The Public Library is responsible for maintaining, updating and replacing all equipment related to the Interactive Educational Programs as part of its technology plan and scheduled computer replacement policy. Primary source of sustainability funds will be Library funds, with other private/public funds sought as required. ImaginOn staff, part Library/part Children's Theatre, will be responsible for updating and maintaining program content and activities as part of its overall combined staffing plan and ImaginOn agreement.

Dissemination: Project dissemination will occur through related field conferences, presentations and journals. PLCMC staff regularly participate as conference presenters at American Library Association/Public Library Association conferences and Urban Libraries Council discussions and workshops, share information via library/children's listservs, receive promotion through *Library Journal* and *School Library Journal*, and interact formally and informally as consultants and resource referrals to libraries across the country. Children's Theatre staff are active members and presenters in Metrolina Theatre Association, Arts North Carolina, Southeastern Theatre Conference, American Alliance for Theatre Educators, and ASSITEJ (an international theatre network). Library and Children's Theatre will actively seek to disseminate lessons learned about the project, the values of partnerships, and the impact on lifelong learning.

VI. Project Budget

As it relates to "sole source" issues, ESI Design and John Lemmon Films were chosen based on their length of their professional experience and level of nationally-recognized projects using interactive technology. These two vendor consultants work closely with PLCMC and Children's Theatre staff to provide a turnkey operation that can produce the tools and maintain the vision and integrity of our overall project design. We have worked with these firms since 2000 to help us formulate a project design that connects our missions in helping young adults gain and improve communication skills, critical thinking skills, and creative expression through the use of innovative technologies.