

Unexplored Paths: The Impact of Thinking Routines on  
Historic Site Tour Guides

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## **Abstract**

Inquiry-based teaching methods are an emerging practice in the field of museum education. This study sought to find out if the inquiry-based teaching method of thinking routines that is commonly used in art museums would impact historic site tours and tour guides. A multiple descriptive case study was used to describe the experiences of four tour guides while they used thinking routines on tours in a historic church. The study was guided by the following research questions: How does training tour guides with two thinking routines (Interpretation with Justification and Connect, Extend, Challenge) alter the touring skills of guides in a historic site? Based on the perception of the guide, how do thinking routines improve tours at a historic site?

Four tour guides used two thinking routines over one month in the summer of 2014. During the study the researcher conducted pre and post-interviews. Tour guides kept detailed journals about their experiences using the thinking routines. Data was produced in narrative form of each of the tour guides experience.

This study had several conclusions. First and foremost, the tour guides benefited from the use of thinking routines on their historic site tours. The guides demonstrated that the use of thinking routines enhanced their knowledge and touring skills. The tour guides also benefited by engagement with families, children, and international visitors. Finally, the study concluded that time was a factor that contributed to the impact of the use of thinking routines on tours. This study contributed to the understanding of how thinking routines impacted historic site tours from the perception of the tour guide.

## Dedication

*In memory of*

*Harold “Sandy” & Iris Emmel Bieber, and*

*Ina Emmel*

*To*

*Julia Katherine Bieber Shields,*

*and William Metcalf & Sarah Dean Watts Metcalf*





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I would like to thank my friends and family who got me through this long research process. I would also like to thank Rebecca Mitchell from the Philadelphia Museum of Art for her help with my research and inspiration for a methodology. I would also like to acknowledge the support and guidance for this paper from Dr. Helen Shannon and Dr. David Thomas. Without their knowledge and guidance I would have lost focus. I would also like to thank my Christ Church Philadelphia family and Anne McLaughlin for their support and participation in this project. Without their support and encouragement of my career goals none of this research would have been possible. I am also thankful for the help I received from my committee chair, Emily Parker of the Rosenbach Museum and Library for her knowledge and support of my thesis. I would also like to thank Adrienne Whaley from the African American Museum for stepping in to be on my committee. Finally, I would like to thank those to whom I dedicated this thesis, my great-grandparents and grandparents who took me to so many museums and historic sites when I was young.

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## Nomenclature

**Cognition/Cognitive:** As defined by psychologist Rudolf Arnheim, “all mental operations involved in receiving, storing, and processing of information: sensory perception, memory, thinking, and learning. Includes perception.”<sup>1</sup>

**Connect, Extend, Challenge (CEC):** Thinking routine based on Project Zero’s Artful Thinking Program that makes connections between new information and prior knowledge.

**Critical Thinking:** The objective analysis and evaluation of an issue or subject in order to form a judgment in which deep thought occurs. For the purpose of this study, the term “critical thinking” is used to describe what occurs during the use of a thinking routine.

**Equilibration:** Piaget believed that all children try to strike a balance between assimilation and accommodation, which is achieved through a mechanism Piaget called equilibration. As children progress through the stages of cognitive development, it is important to maintain a balance between applying previous knowledge (assimilation) and changing behavior to account for new knowledge (accommodation). Equilibration helps explain how children are able to move from one stage of thought into the next.

**Gestalt Psychology:** A theory from the Berlin School that suggests that the brain is holistic, parallel, and analog, with self-organizing tendencies. The principle also maintains that the human eye sees objects entirely before perceiving individual parts.

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<sup>1</sup> Arnheim, Rudolf. *Visual Thinking*. Berkeley: University of California Press, 1969, 13-34.

**Historic Site:** For this particular study, a historic site is any site that maintains historical integrity as a building, i.e. house, church, factory, or hotel.

**Historical Thinking:** The development of reasoned judgments about the past based on the consideration and synthesis of multiple historical sources (documents, photographs, sites, museums, etc.).<sup>2</sup> Usually used to train amateurs to think like professional historians.

**Inquiry-Based Teaching:** A teaching strategy that encourages involvement in learning to seek resolutions to questions and issues while one constructs new knowledge. In the context of this study, inquiry-based teaching is defined as the use of questioning strategies (thinking routines) to encourage thinking and participatory learning in an historical setting.

**Interpretation with Justification (IWJ):** Thinking routine based on Project Zero's Artful Thinking Program that encourages description of a visual image and asks the viewer to build an explanation.

**Interpretation:** According to Freeman Tilden, interpretation is an educational activity which aims to reveal meanings and relationships through the use of original objects, firsthand experiences, and by illustrative media, rather than to simply communicate factual information.<sup>3</sup>

**Meta-Cognition:** Knowing how to think about your own thinking.

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<sup>2</sup> Christine Baron, "Understanding Historical Thinking at Historic Sites," *Journal of Educational Psychology*, Vol. 104 (2012):833.

<sup>3</sup> Freeman Tilden, *Interpreting Our Heritage* (Chapel Hill: University of North Carolina Press, 1957), 8.

**Pedagogy:** The method and practice of teaching, especially as an academic subject or theoretical concept. In this study, the term “pedagogy” refers to the method or plan that a site or museum uses to train tour guides or docents on how to educate the public.

**Six Continua to Assess Thinking:** Created by Harvard University’s Project Zero Artful Thinking Program, the Six Continua to Assess Thinking is a rubric used to assess thinking in a classroom setting. Each of the six continua have a scale of 1 to 4 to rate thinking.

**Thinking Routine:** Product of Harvard University’s Project Zero Artful Thinking Program. Thinking routines are a series of questioning strategies for educators to encourage critical thinking through inquiry in a wide variety of subjects, including art, science, social studies, and literature.

**Visual Thinking Strategies:** A method to teach critical thinking through teacher-facilitated art discussions of a visual image. This method is based on the research of Abigail Housen’s stages of aesthetic development.

## Chapter 1: Introduction

“Unexplored paths lead to undiscovered treasures.”<sup>4</sup>

*-Constance Chuks Friday*

Museum educators in art museums use many different techniques to engage with and help visitors learn how to look at art. Currently, Visual Thinking Strategies (VTS), Artful Thinking, and historical thinking are a few popular techniques that are used in a wide variety of museums. All of these techniques focus on building critical thinking skills and teaching visitors how to look at art and history in different ways. One of those techniques, Artful Thinking, created by Harvard University’s Project Zero, is an inquiry-based teaching method museum educators can use to help visitors construct new knowledge and develop critical thinking skills. The main benefit of this teaching method is critical thinking, the objective analysis and evaluation of an issue in order to form a judgment. Artful Thinking was designed for the classroom; however, the techniques are being used in art museums nationwide. Artful Thinking can also make historic site tours a rich and thought-provoking experience.

Historic sites are immersive environments that offer unique opportunities to promote ways of close looking and critical thinking that are not typically practiced within

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<sup>4</sup> Constance Chucks Friday. “Quotes about Critical Thinking,” GoodReads. <http://www.goodreads.com/quotes/1527736-unexplored-paths-lead-to-undiscovered-treasures> (accessed October 30, 2014).



general classroom settings.<sup>5</sup> Currently, many historic sites follow the six principles of interpretation laid out by former National Park Service Historian Freeman Tilden (See page 26). These principles instruct guides and docents to be visitor-centered. For example, one principle is that information should always connect to prior knowledge of the visitor. Inquiry-based techniques such as Artful Thinking, Visual Thinking Strategies, and historical thinking help foster the connection between new and prior knowledge. These connections are the undiscovered treasures that await visitors and tour guides alike when learning about history and art.

This study sought to find out if inquiry-based teaching techniques could be used in a historic site setting to improve the touring skills and knowledge of tour guides. This study looked at the point of view of the tour guide in order to draw a conclusion. This study is guided by the research questions: How does training tour guides with two thinking routines (Interpretation with Justification and Connect, Extend, Challenge) alter the touring skills of guides in a historic site? Based on the perception of the guide, how do thinking routines improve tours at a historic site? The hypotheses for this study are: after using the two thinking routines, tour guides would prefer to use the thinking routines within their tours and if the tour guides become comfortable with the thinking routines, then the guides will find that their tours are improved.

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<sup>5</sup> Liz Dawes Duraisingh and Shari Tishman. "Slow Looking: Promoting Historical Thinking through Close Observation of Objects and Material Features at Historic Sites" Preprint, 2014, 2.

### ***Rationale for Study***

The purpose of this study was to find out if the use of the inquiry-based teaching practice, called thinking routines, would improve historic site tours based on the perception of the tour guide. The researcher chose to study the perception of the tour guide in order to obtain rich descriptions of how the routines were used in a historic site setting. This method was also chosen to find out if critical thinking transferred to the guides' knowledge and touring skills. This study did not look at the viewpoint of the visitors because of time and site restrictions. This study also sought to find out if using selected thinking routines will improve the tour guide's knowledge and touring skills. The researcher found that a smaller percentage of historic sites have a pre-set pedagogy in use for teaching on tours compared to traditional art and history museums.

### ***Current Site Touring Practice***

The site selected for this study is Christ Church Philadelphia, an Episcopal Church and national historic landmark that is located within Independence National Historic Park. Visitors come from all over the world to see the church where many of America's founding fathers worshipped. The site is very welcoming and tries to accommodate its diverse visitors. Visitors are personally greeted and tour information is available in a variety of languages. Tour groups usually consist of 5-15 people and last 20-30 minutes. Currently, tours at the site consist of several parts; a tour begins with the visitor sitting in one of the pews in the church, usually the presidential pew (See Appendix, 77). This creates a very personal experience for each visitor. Sitting in this particular pew makes visitors feel special and comfortable in the space. Visitors generally

take time to look at the scenery. The guide then introduces the history of the church and the building, discusses the construction of the steeple and Benjamin Franklin's role in fundraising for the church.

Following this introduction, tour guides encourage visitors to walk around or sit in other pews. During this time guides continue to give information about the church bells, organ, and other fixtures in the building. This generally includes information about the site's origins and the date of creation. The largest component of each tour consists of a discussion about some of the 15 signers of the Declaration of Independence who attended services, as well as the role of the Church during the Revolutionary War. It is heavily emphasized that visitors take action for change as the founding fathers of America did. Guides also point out the difficulties and dangers the founders faced during the Revolutionary War. Following this portion of the tour, guides answer questions and encourage visitors to explore the building and its exhibits, as well as the gift shop. Guides also encourage conversations about historical topics with visitors. Many visitors share their memories, stories, and experiences with the guides. At the end of a visit, guides also encourage visitors to take a tour of the church's burial ground.

## **Chapter 2: Review of the Literature**

### **Introduction**

In order to find out if inquiry-based teaching strategies would improve historic site tours, the researcher will outline several concepts in regards to inquiry. The first topic that will be discussed is critical thinking and its definition. Within this section, critical thinking skills, inquiry-based teaching, the role of prior knowledge, and what discourages critical thinking will also be examined. Understanding the key elements of what critical thinking is and how it works is important to learning how to implement the teaching technique. The following section will review Harvard University's Artful Thinking Project and the thinking routines used in this study. Two thinking routines chosen by the researcher will be summarized. The succeeding section will discuss Visual Thinking Strategies method, theory, and its relation to Artful Thinking. The last three sections of the Review of Literature will detail examples of inquiry-based teaching, historic site interpretation, and the limitations historic sites face.

### **Critical Thinking: What is it?**

What is critical thinking? How does one think critically? How can museum professionals encourage it? These are all questions that educational psychologists and museum educators have been seeking to answer. Critical thinking has many definitions. According to leading educational researcher Robert H. Ennis from the University of Illinois, "critical thinking is reasonable, reflective thinking that is focused on deciding

what to believe or do.”<sup>6</sup> Philosopher Matthew Lipman defines critical thinking as, “skillful, responsible thinking that is conducive to good judgment because it is sensitive to context, relies on criteria, and is self correcting.”<sup>7</sup> Dr. Richard Paul, Director at the Sonoma State University Center for Critical Thinking, says, “critical thinking is thinking about your thinking, while you’re thinking, in order to make your thinking better.”<sup>8</sup> All of these definitions convey in words the spirit of how thinking critically occurs.

### ***Critical Thinking Skills***

Along with defining critical thinking, it is important to consider the components of critical thinking. The activity of thinking critically is reflective first and foremost. This action causes a chain reaction of thoughts based on prior experience and knowledge. For example, if one was to go on a historic site tour that dealt with the topic of slavery, it is likely that the person has a point of view, opinion, or connection to the topic causing personal reflection on the visitor’s part. All of these thoughts then need to be sorted out and formulated explicitly for that particular person, which is where the act of critical thinking takes place. This process is not just done by a visitor, but also by a tour guide or docent. Like visitors, tour guides need to sort out their prior knowledge and experience in order to formulate how their tour is structured. Tour guides also need to sort out their thoughts and experiences in order to decide how to convey information on a tour.

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<sup>6</sup> Gerald M. Nosich, *Learning to Think Things Through: A Guide to Critical Thinking Across the Curriculum*. 2<sup>nd</sup> ed. (Columbus: Pearson Prentice Hall, 2005), 2. Gerald Nosich is a professor at Buffalo State College. Nosich has given more than 150 national and international workshops on teaching for critical thinking. Nosich has also worked for the U.S. Department of Education

<sup>7</sup> Gerald M. Nosich, *Learning to Think Things Through*, 2.

<sup>8</sup> Gerald M. Nosich, 2.

Therefore, tour guides engage in critical thinking in order to construct an intellectual map of their tour content.

Although critical thinking begins with the sorting of knowledge, it also involves standards. For Gerald Nosich, Professor of Education at Buffalo State College, critical thinking involves one's thinking measuring up to criteria.<sup>9</sup> Can one use evidence that is relevant, think about something accurately, or think deeply about a topic or issue? Accuracy, relevance, and depth are needed for one to actually think critically. Critical thinking is also reasonable and authentic. Thoughts should also be rational and clear. These are important skills to acquire. According to Nosich, there are no real rules to tell us if our reasoning is correct, therefore one must use reasoning to evaluate rules.<sup>10</sup>

The criteria for thinking critically involve accuracy, relevance, and depth. Nosich suggests that there are three parts to critical thinking: asking questions, trying to answer those questions using reasoning, and believing the results of one's reasoning.<sup>11</sup> Asking good questions that go to the heart of the subject is important. Thinking critically involves being able to notice that there are questions that should be addressed. Reasoning involves trying to find other ways of answering questions and being able to defend your answer. Once a question has been answered reasonably, one tends to believe one's answer because of thinking deeply about the question or issue.

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<sup>9</sup> Gerald M. Nosich, 3.

<sup>10</sup> Gerald M. Nosich, 5.

<sup>11</sup> Gerald M. Nosich, 5-6.

### ***Inquiry-Based Teaching***

Inquiry-based teaching involves the use of critical thinking to analyze an authentic investigation of real phenomena.<sup>12</sup> For the purpose of this study, inquiry-based teaching is defined as the use of questioning strategies to encourage thinking and participatory learning in a setting.<sup>13</sup> In most cases, inquiry-based teaching involves analysis of a real situation, however it can be applied to hypothetical situations. The process of using an inquiry-based method helps the learner to gain new knowledge about said phenomena. Neil Stephenson, writer for Teach Inquiry, a blog about inquiry-based education, suggests that, “an inquiry-based approach to teaching and learning is its potential to increase intellectual engagement and foster deep understanding through the development of a hands-on, minds-on, and ‘research-based disposition’ towards teaching and learning.”<sup>14</sup>

Inquiry skills can be used in all subjects, but are traditionally used in science and social studies education. The National Science Education Standards identify inquiry skills as the following.<sup>15</sup>

- The ability to identify questions that can be answered through scientific investigations.
- The ability to design and conduct a scientific investigation.

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<sup>12</sup> Deanna Khun, *Education for Thinking* (Cambridge: Harvard University Press, 2005), 91.

<sup>13</sup> Rika Burnham and Elliot Kai-Kee. *Teaching in the Art Museum: Interpretations as Experience* (Los Angeles: Getty Publications, 2011), 47.

<sup>14</sup> Neil Stephenson, "Introduction," Teach Inquiry Blog, <http://www.teachinquiry.com/index/Introduction.html> (accessed April 16, 2014).

<sup>15</sup> Deanna Khun, *Education for Thinking*, 40. The 1996 standards are current.

- The ability to use the appropriate tools and techniques to gather, analyze, and interpret data.
- The ability to develop descriptions, explanations, predictions, and models using evidence.
- The ability to think critically and logically to make the relationships between evidence and explanations.

In contrast to traditional teaching methods, inquiry-based practice emphasizes the manner of learning in addition to the intended attainment of knowledge. Inquiry-based learning is drawn from the constructivist theory of learning, the notion that understanding is built through the active development of conceptual frameworks by the learner.<sup>16</sup> According to Stephenson, there are three key implications for effective instructional practices:<sup>17</sup>

1. Students come with preconceptions about the world. This means teaching practices must draw out and work with preexisting understandings and make ‘thinking’ visible and central to the learning.
2. Competence in an area of study requires factual knowledge organized in the context of conceptual frameworks to facilitate retrieval and application. Activities should be designed to develop understanding through in-depth study of topics.
3. Meta-cognition (thinking about thinking) helps students take control of their learning. An opportunity for students to define learning goals and monitor their own understanding needs to be embedded into classroom tasks.

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<sup>16</sup> Neil Stephenson, “What is Inquiry-Based Thinking?” Thinking In Mind, <http://www.thinkinginmind.com/2011/08/what-is-inquiry-based-learning/> (accessed April 16, 2014).

<sup>17</sup> Neil Stephenson, “What is Inquiry-Based Thinking?”



While this approach is used in many art, anthropological, and natural history museums today, it is often a challenge. The educator has to take the visitor's preexisting understandings and create a new understanding and connections in which visitors can think more deeply about a topic. Besides the issue of creating dialogue with visitors and connecting new and prior knowledge, the real challenge is time. How can the educator effectively help visitors think deeply in a short period of time? Is this possible? These two questions are what we must think about in terms of institutional practices.

### ***Constructivism***

Many museums have adapted the constructivist approach to learning. Constructivism is the idea that learners construct knowledge for themselves by making connections between their lives (prior knowledge) and the objects they encounter in museums.<sup>18</sup> In the constructivist museum, educators must ask the question, how do we know people are learning? George E. Hein, Professor of Educational Studies at Lesley University, has written extensively on the subject. Hein suggests that the constructivist museum has the following characteristics:<sup>19</sup>

- Lack of predetermined sequence.
- The opportunity for the visitor to make connections with familiar concepts and objects.
- Exhibits that encourage comparisons between the unfamiliar and new.
- Museums which are accessible to the community.

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<sup>18</sup> Melinda M. Mayer. "Bridging the Theory-Practice Divide." *Art Education*, March 2005, 14.

<sup>19</sup> George E. Hein, "The Constructivist Museum." In *The Educational Role of the Museum*, ed. Eilean Hopper-Greenhill (London: Routledge, 1999), 73-78.

Overall, the constructivist educational theory argues that the focus should be on the learner, not the subject matter. Museums worldwide have adopted this theory of learning by using inquiry-based teaching. Inquiry-based teaching methods encourage connections with prior experiences and knowledge. These methods also encourage people to make comparisons between new and unfamiliar topics. One example of this is the Artful Thinking routine called Connect, Extend, Challenge (see page 14). The line of questioning in this routine inspires connections to prior knowledge (connect), asks one to make comparisons and extend their knowledge, and challenges them to ask more questions. Closely linked with constructivism and inquiry-based teaching is the role of prior knowledge and personal experience.

### ***Prior Knowledge and Personal Experience***

“All things can be made richer and more attainable when you examine them thoughtfully.”

*-Gerald M. Nosich, Learning to Think Things Through*

F. C. Bartlett, one of the research pioneers on retention of information found that, “people tended to interpret information in terms of previously acquired knowledge and concepts, which in turn influence their recall of the material.”<sup>20</sup> Prior knowledge and experience play a large role in critical thinking. For example, when a controversial topic is brought up in conversation, we usually evaluate how much it agrees with our own views. This is followed by giving reasons for or against the topic. This is not the product

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<sup>20</sup> J. Bransford, *Human Cognition* (Belmont: Wadsworth, 1979), 156.

of critical evaluation, but is an opinion one just happens to hold.<sup>21</sup> Without reasoning through the evidence first, we form judgments that are not based on facts.

Personal experience also plays a part in critical thinking. Personal experience allows us to gain a vast amount of knowledge that we can use to draw conclusions. However, one's personal experiences are limited and cause us to make generalizations that led us to make distorted conclusions.<sup>22</sup> Along with personal experience is meaningfulness. People find meaning in their personal experience. Critical thinking allows people to create more meaning out of knowledge they incur.

### ***What Discourages Critical Thinking?***

In formal education there are several practices that discourage critical thinking. Many of these educational practices extend to some museums and historic sites where students and visitors are the passive recipient of knowledge. This practice was adapted from the early methods of classroom teaching. It is the most prevalent method that discourages critical thinking and has been used for decades. The docent or tour guide's role in this method is to give factual information. This is still very common, as it is what most tour guides over fifty are familiar with because of how they were taught in school. However, Barbara Abramoff Levy, Sandra Mackenzie Lloyd, and Susan Porter Schreniber, the authors of *Great Tours! Thematic Tours and Guide Training for Historic Sites* believe a good tour involves interaction between the visitor and guide as well as

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<sup>21</sup> Gerald M. Nosich, 27.

<sup>22</sup> Gerald M. Nosich, 27.

interaction among visitors.<sup>23</sup> Another practice that discourages critical thinking is the assumption that those on a tour should memorize or retain the information that has been presented. Without the use of critical thinking strategies, connections to information aren't as explicit and information will not be remembered. Although hindering, the researcher believes that these practices can be changed through the use of a structured teaching pedagogy for a museum or historic site-touring program. The following sections will introduce some inquiry-based teaching methods used in formal education and museums.

### **Thinking Routines: Method and Practice**

#### ***Project Zero's Artful Thinking Initiative***

One of the most widely used educational teaching methods for critical thinking is Artful Thinking. Artful Thinking is a product of Harvard University's Project Zero. Project Zero is an educational research group at the Harvard Graduate School of Education composed of many research projects. Project Zero has examined the development of learning processes in children, adults, and organizations since 1967.<sup>24</sup> The purpose of the Artful Thinking Program is to help teachers use works of visual art and music in their curriculum in ways that strengthen student thinking and learning in all core subjects. This method was originally created for the classroom teacher. There were two goals for the project: to help teachers create rich connections between works of art and curricular topics, and to help teachers use art as a force for developing students'

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<sup>23</sup> Barbara Abramoff Levy, Sandra Mackenzie Lloyd, and Susan Porter Schreniber, *Great Tours! Thematic Tours and Guide Training for Historic Sites* (Lanham: AltaMira Press), 2001.

<sup>24</sup> "About Us." Project Zero. <http://projectzero.gse.harvard.edu/> (accessed June 10, 2014).

thinking dispositions.<sup>25</sup> Artful Thinking uses a painter's palette as a metaphor for the six thinking dispositions that are part of the program (See Figure 1).<sup>26</sup>



**Figure 1**

Image created by Project Zero Artful Thinking Program.

The six thinking dispositions are reasoning, questioning & investigation, observing & describing, exploring viewpoints, finding complexity, and comparing & connecting. These six thinking dispositions are comprised of several thinking routines. Thinking routines are short and easy strategies to extend and deepen thinking. The routines are flexible and used repeatedly in art, social studies, and language arts. Artful thinking is used in many institutions, mainly art museums. The Philadelphia Museum of Art (PMA) uses artful thinking to influence their teaching methods of school tours for grades K-12.<sup>27</sup>

<sup>25</sup> Patricia Palmer and Shari Tishman, "Artful Thinking," Project Zero, [http://www.pz.gse.harvard.edu/artful\\_thinking.php](http://www.pz.gse.harvard.edu/artful_thinking.php) (accessed April 16, 2014).

<sup>26</sup> "Artful Thinking Palette," Project Zero, [http://www.pzartfulthinking.org/atp\\_palette.php](http://www.pzartfulthinking.org/atp_palette.php) (accessed April 16, 2014).

<sup>27</sup> "4-12 Collection Tours," Philadelphia Museum of Art, <http://www.philamuseum.org/>

### ***Thinking Routines Used in the Study***

This study used two thinking strategies from the reasoning and comparing & connecting thinking dispositions. Within the comparing & connecting thinking disposition is, “Connect, Extend, Challenge.” This thinking routine asks three questions, one in each category.<sup>28</sup>

**Connect:** How are the ideas and information presented connected to what you already knew?

**Extend:** What new ideas did you get that extended or pushed your thinking in new directions?

**Challenge:** What is still challenging or confusing for you to get your mind around?

This type of thinking routine encourages connections between new and prior knowledge. It also encourages reflection on what one has learned. This routine can be used in small groups or individuals in any setting for any topic. It should be used after learning something new. There is no minimum for how much content needs to be learned before this routine can be used. There is also no strict protocol for how questions are worded. Therefore, they can be adapted to each individual situation accordingly. This thinking routine was chosen for this study because of the content presented on the historic site tour. The majority of the content in the tour of the selected site for this study is connected to the prior knowledge of the visitor. For

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education/606-507.html?page=3 (accessed April 16, 2014). “K-3 Collection Tours,” Philadelphia Museum of Art, <http://www.philamuseum.org/education/606-507.html?page=2> (accessed April 16, 2014).

<sup>28</sup>“Connect, Extend, Challenge,” Artful Thinking, [http://www.pzartfulthinking.org/connect\\_extend\\_challenge.php](http://www.pzartfulthinking.org/connect_extend_challenge.php) (accessed April 16, 2014).

example, many visitors are familiar with the topic of the American Revolution or Benjamin Franklin; therefore, they have some prior knowledge on the subject. This thinking routine is meant to challenge a visitor's prior knowledge while making a connection with the new knowledge learned on the historic site tour.

The other thinking disposition of reasoning includes the thinking routine, "What makes you say that?" or Interpretation with Justification (IWJ). This thinking routine asks two questions, one on interpretation of a space or object, and one to justify the answer.<sup>29</sup>

**Interpretation:** What is going on?

**Justification:** What makes you say that?

This thinking routine encourages evidential reasoning as well as an understanding of multiple points of view. This routine works best in small groups and the questions can be adapted to fit a given situation. This routine is flexible in terms of subject matter and can be applied to objects, paintings, architecture, and literature. Shari Tishman, a researcher at Project Zero, believes that the close examination of material objects can promote active learning in a way that other mediums fail to do.<sup>30</sup> Tishman and Shuh have also noted that objects can engage most visitors regardless of their background.<sup>31</sup> This thinking routine can also elicit a wide variety of questions and perspectives from visitors. Considering the flexibility and versatility of this thinking routine, it was chosen for this study. The

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<sup>29</sup> "What Makes You Say That?" Artful Thinking, [http://www.pzartfulthinking.org/what\\_makes\\_you\\_say\\_that.php](http://www.pzartfulthinking.org/what_makes_you_say_that.php) (accessed April 16, 2014).

<sup>30</sup> Liz Dawes Duraisingh and Shari Tishman. "Slow Looking: Promoting Historical Thinking through Close Observation of Objects and Material Features at Historic Sites" Preprint, 2014, 3.

<sup>31</sup> Liz Dawes Duraisingh and Shari Thisman, 3.

researcher also wanted to explore how this thinking routine would impact touring skills and knowledge in a historic site setting. This thinking routine is a flexible adoption of a strict method used in art museums called Visual Thinking Strategies (VTS).

### **Visual Thinking Strategies: Method, Theory, and Its Relation to Artful Thinking**

#### ***Method & Theory***

Visual Thinking Strategies (VTS) is based on psychologist Abigail Housen and museum educator Phillip Yenawine's research on aesthetic development. VTS is named after the work of Rudolf Arnheim, a psychologist who studied Gestalt psychology. Gestalt psychology holds that perception is the product of complex interactions among various stimuli (such as art or a historic space). In his book, *Visual Thinking*, Arnheim discussed the connection between visual perception and thought, which he calls visual thinking.<sup>32</sup> When looking at an object or a work of art, one thinks even as our brains sort out what we see. Arnheim calls this an act of cognition. Cognition is all mental operations involved in receiving, storing, and processing of information: sensory perception, memory, thinking, and learning.<sup>33</sup> VTS builds on this premise using visual sources to teach critical thinking.<sup>34</sup>

VTS follows a very strict method that includes analyzing a group of similar works (i.e. paintings, photos, sculpture) that have an explicit narrative. The visual sources are

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<sup>32</sup> Rudolf Arnheim, *Visual Thinking* (Berkeley: University of California Press, 1969), 14.

<sup>33</sup> Rudolf Arnheim, *Visual Thinking*, 13.

<sup>34</sup> Visual Understanding in Education Staff, "VTS Research and Theory," Visual Understanding in Education, <http://vtshome.org/research/articles-other-readings> (accessed Jan. 10, 2014), 2.



chosen with the audience in mind. The goal is to select a series of images that the audience can draw conclusions from. The lesson is done by the facilitator asking two simple questions: What is going on in this picture and why do you say that? While these questions are posed the audience is encouraged to discuss their thoughts as a group with limited facilitator interference. The other part of the lesson is that the facilitator cannot give any background information, however audience members may relate to prior knowledge they have on the subject of the work. The end goal is to have the audience state more about their thoughts and opinions than the facilitator, ultimately resulting in deep thinking about the series of works.

Like the IWJ thinking routine, VTS takes the characteristics of cognition into consideration in order to choose visual sources for a lesson and to help aid the facilitator. It is also important to maintain what developmental psychologist Jean Piaget calls equilibration or a balance between applying previous knowledge (assimilation) and changing behavior to account for new knowledge (accommodation).<sup>35</sup> VTS also takes into account that as learners we can only accommodate what is in our capacity to grasp.<sup>36</sup> This idea builds on cultural psychologist Lev Vygotsky's theories of proximal development and sociocultural influence. The zone of proximal development "is the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers."<sup>37</sup> VTS and Artful Thinking follow this definition. The assistance of more capable peers in the same

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<sup>35</sup> Derek Hook, Jacki Watts, and Kate Cockcroft, *Developmental Psychology*, 179.

<sup>36</sup> Visual Understanding in Education Staff, "VTS Research and Theory."

<sup>37</sup> Lev Vygotsky, *Mind in Society* (Cambridge, MA: Harvard University Press, 1978), 86.

framework (i.e. VTS lesson or guided tour) helps others learn. Vygotsky, therefore, helped explain the importance of other children in teaching, or in the case of this study, it also applies to adults. The theory of sociocultural influence also plays a part in VTS and Artful Thinking lessons. Whether it is a lesson for adults or for children, one's cultural and moral background plays a role in the cognitive development of an individual. VTS and Artful Thinking also seek to build on sociocultural developments to play on the interests and the capacities of the learner.

### ***VTS & Artful Thinking***

VTS and Artful Thinking also build on epistemological theory or the theory of knowledge. These teaching methods seek to teach critical thinking through conversation. Epistemological theory suggests that a visitor's prior knowledge can be used by museum educators to promote active engagement and critical thinking. The theory also holds that conversation is the key to developing critical thinking skills. Mark Felton and Deanna Kuhn suggest that there are four epistemological levels: realist, absolutist, multiplist, and evaluativist.<sup>38</sup> The realist's assertions are copies of an external reality. The multiplist's assertions are freely chosen opinions. The absolutist's assertions are facts that are either correct or incorrect in what they consider reality. The evaluativist's assertions are judgments that are evaluated and compared to parts of an argument or evidence. These levels are divided by an individual's assertions, knowledge, and critical thinking. These levels also correlate to Piaget's stages of development. For example pre-school aged children are strict realists in which no critical thinking takes place.<sup>39</sup> In terms of the goal

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<sup>38</sup> Mark K. Felton and Deanna Kuhn, "How Do I Know? The Epistemological Roots of Critical Thinking," *The Journal of Museum Education* 32, no. 2 (July 1, 2007), 104.

<sup>39</sup> Mark K. Felton and Deanna Kuhn, "How Do I Know?," 104.

of VTS, the objective is to obtain the level of the evaluator. The evaluator makes judgments that can be evaluated and compared to an argument or evidence. Knowledge is open to evaluation and critical thinking serves as a vehicle for evaluating the merit of previous judgments based on evidence.<sup>40</sup>

VTS is favored in several art museums, however there are some museum educators who feel that VTS is not the best tool to use because the museum educator cannot offer any information about the artwork during the activity. This has been a topic of debate in the museum community. Veteran art museum educators Philip Yenawine, and Danielle Rice, former Director of Education at the Philadelphia Museum of Art, explored the debate of what is the most effective process to facilitate learning, especially in a gallery/exhibit setting. Yenawine, who formerly worked at the Museum of Modern Art, is in favor of object-centered learning using the VTS method that creates a serious connection with the object not the "seductive" information about the object, seductive information being, For instance, George Washington slept here, for example.<sup>41</sup> These types of information are intriguing to visitors; however learning that George Washington slept in a particular place doesn't always encourage the use of critical thinking skills. Rice feels that VTS neglects the information that visitors should be given about an object. She feels that Seduction Theory is the best way to get visitors to interact and look more closely at an object, and encourages a visitor to further analyze the subject.<sup>42</sup> Because of

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<sup>40</sup> Mark K. Felton and Deanna Kuhn, 104.

<sup>41</sup> Rice, Danielle, and Philip Yenawine, "A Conversation on Object-Centered Learning in Art Museums," *Curator: The Museum Journal* 45, no. 4 (2002): 289–301. Seductive information is a term used to describe facts or stories sites tell to increase visitor engagement and interest, such as the example about George Washington.

<sup>42</sup> Rice, Danielle, and Philip Yenawine, 289-301.

this debate, some thinking routines of the Artful Thinking project are a compromise between the two teaching methods.

### **Examples of Inquiry-Based Teaching in Museums and Historic Sites**

The researcher will outline methods, research, and examples of inquiry-based techniques in a variety of museums and historic sites. The researcher visited the museums and sites included in this section in order to assess programs and gallery teaching techniques.

#### ***The University of Pennsylvania Museum of Archaeology and Anthropology***

The University of Pennsylvania Museum of Archaeology and Anthropology has a classroom workshop entitled *Mummy Makers*. This program allows 6<sup>th</sup>-8<sup>th</sup> grade children to become an ancient Egyptian embalmer using fabricated mummies. The goal of this workshop is that, “students will explore mummification as they witness each step of the process including brain removal, evisceration, desiccation, and wrapping.”<sup>43</sup> Students also investigate the religious significance of mummification. *Mummy Makers* incorporates both math and science, along with the ancient history. During this program, museum educators use questioning techniques to encourage thinking about mummification and ancient Egyptian culture in order to promote critical thinking and participatory learning in students.

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<sup>43</sup> Penn Museum. "Mummy Makers." Penn Museum - Classroom Workshops.<http://www.penn.museum/educators-k-12/classroom-workshops.html> (accessed April 27, 2014).

### *The Academy of Natural Sciences of Drexel University*

The Academy of Natural Sciences of Drexel University has conducted research studies on inquiry-based teaching in their museum. In 2008, it studied the way school-aged children learn from dioramas in the museum. Participants were interviewed and completed a drawing activity. Participants were asked how they felt when looking at a diorama, and what the diorama meant to them. The students were then encouraged to draw what they saw when looking at a diorama. This activity promoted dialogue between the educator and the student about their drawings and opinions. The study concluded that, “there is a verbal and visual connection between children’s interpretation of the habitat dioramas.”<sup>44</sup> Overall, the study helped the education department understand how to teach school aged children about the dioramas in the museum.

In 2011, another study was conducted at the Academy of Natural Sciences that researched the use of Visual Thinking Strategies (described in detail on page 18) with live animals to promote adult learning. Participants attended two days of lessons using Visual Thinking Strategies with live animals. The facilitator was trained in the methods of VTS and only asked the prescribed questions used in the method. Personal meaning maps were used to document participant’s thoughts in order to create data.<sup>45</sup> The study had five conclusions.

1. The combination live animal/Visual Thinking Strategies method sometimes facilitates the learning experience through social learning and observation skills Active participation

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<sup>44</sup> Aimee Dobberstein, “Research Evaluation of Habitat Dioramas” (Academy of Natural Sciences of Drexel University, 2008), 3.

<sup>45</sup> Personal meaning maps are a way for visitors to map out in words or pictures what something means to them based on their personal experience and prior knowledge.

in the “process of science” can be seen during combination live animal/Visual Thinking Strategies presentations.

2. Emotional connections between participants and the animals were demonstrated during the presentations. This may sometimes lead to conservation attitudes.
3. There is a difference in the Visual Thinking Strategies experience at a science museum compared to the typical art museum experience. This difference might stem from the participants differing expectations between art and science.
4. The combination live animal/Visual Thinking Strategies method sometimes facilitates the learning experience through social learning.
5. Observation skills, demonstrated during the combination live animal/Visual Thinking Strategies presentation, were an important component of the characteristics of this new method of teaching with live animals.<sup>46</sup>

Overall, this study has influenced the inquiry-based teaching methods at the museum; however, Visual Thinking Strategies are not explicitly used in daily teaching. Since VTS requires professionals training it is an expensive endeavor for the museum. As outlined in the discussion of VTS, the strict method is not always agreeable to all museum educators, therefore the museum does not explicitly use it in daily teaching currently.

### ***Barnes Foundation***

In contrast to history and science museums, the Barnes Foundation, an art museum, has had a long-standing pedagogy created by educational reformer John Dewey in 1917, after museum founder Albert Barnes read Dewey’s book, *Democracy and*

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<sup>46</sup> Jacqueline S. Genovesi, “An Exploratory Study of a New Educational Method Using Live Animals and Visual Thinking Strategies for Natural Science Teaching in Museums” (Dissertation, Drexel University, 2011), x.

*Education*.<sup>47</sup> Dewey's work has had a continual impact on museum education. At the Barnes, the education department follows the following pedagogy:<sup>48</sup>

- Dialogic (conversational) and inquiry-based strategies
- Learner-centered practice
- Game-based learning
- Slow looking/invitation-based looking

The inquiry-based strategies used at the Barnes somewhat resembles Visual Thinking Strategies, however the main influence of Dewey's work supersedes VTS. The pedagogy is closely aligned with the dialogic model advanced by art educators Rika Burnham and Elliot Kai-Kee, who encourage visitors to think deeply about art and have reflective conversations in the museum.

### ***The Philadelphia Museum of Art***

The Philadelphia Museum of Art (PMA) has a long-standing teaching pedagogy that features critical thinking and inquiry. Educators at the PMA are influenced by Harvard University's Project Zero Artful Thinking program (described in detail on page 14). This program provides educators with a wide variety of questioning techniques to promote critical thinking while looking at art. The education department also considers the work of Rika Burnham, head of education at the Frick Collection, Psychologist

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<sup>47</sup> Blake Bradford, Bernard C. Watson Director of Education Barnes Foundation e-mail to author, March 25, 2014.

<sup>48</sup> Blake Bradford, Bernard C. Watson Director of Education Barnes Foundation e-mail to author, March 25, 2014.

Howard Gardner's multiple intelligences, founding member of Project Zero David Perkins, and George Hein's work on the constructivist museum.<sup>49</sup>

The researcher observed a tour with school children at Cedar Grove, a historic house museum operated by the Philadelphia Museum of Art. Cedar Grove is a summer cottage built in 1799. On tours for schools, there are at least five trained docents who conduct the tour. Docents are trained for one year before they give tours independently. Training includes weekly classes on interpretation skills and content knowledge. Students are broken into small groups of no more than ten. While conducting the tour the docents ask many questions that are based on Artful Thinking routines. Examples include comparing and contrasting architectural features, interpreting objects while justifying their meaning, and memory recall. The researcher observed that the small group size allowed for engaging interaction between the tour guide and copious amounts of dialogue. Dialogue was between the guide and the group as well as between students.

### ***The Rosenbach Museum and Library***

While art museums have taken the lead with inquiry-based teaching strategies, some historic sites such as The Rosenbach Museum and Library are also using strategies of inquiry in their tours.<sup>50</sup> The Rosenbach has a strict docent training practice for their historic site. Each training period for docents is comprised of at least 15 sessions that include lectures and hands-on training. This includes a formal syllabus that includes four

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<sup>49</sup> Rebecca Mitchell, Manager of Teacher Services, Philadelphia Museum of Art, e-mail to author, March 28, 2014.

<sup>50</sup> The Rosenbach Museum and Library is a historic house and library in Philadelphia, Pennsylvania that has a large collection of books, manuscripts, and decorative arts.



months of weekly training activities. Each training session has a lecture, review of readings, and a workshop. Topics of the docent training sessions include: Introduction to the museum, introduction to facilities, historical content, discussion about conversations with visitors, how to observe and talk about objects, how to read your tour group, and best practices for tour guides. Docents are trained to use the 5 W's to prepare visitors for what they will encounter on a tour.

- Who am I?
- What am I?
- Where we are?
- What we will see?
- When we will be finished?

Docents are also trained to assess a group for disabilities, language difficulties, approach, age, and interests. Docents are directed to let the visitor's interests guide the tour. The docents are then encouraged to create some dialogue with visitors that include using inquiry techniques.

## Historic Site Interpretation and Learning

*“Dry words and facts will not fire hearts.”*

**-John Muir**

Pamela Ann Cunningham of the Mt. Vernon Ladies Association established the first American historic site. In 1859, Mrs. Cunningham saved George Washington’s home, Mt. Vernon, from ruin. This began the national effort to save historic sites to inspire patriotism and civic virtue.<sup>51</sup> Following Mt. Vernon, Colonial Williamsburg and Monticello were saved and preserved. Gradually over decades of preservation efforts, the educational purpose of sites emerged. Today, historic sites serve the dual purpose of preservation and education. The practice of historic site interpretation became the vehicle for learning in the historic site setting.

Historic site interpretation has a wide range of meaning for people based on their background and experience. Freeman Tilden, a former National Park Service Historian, was one of the first to write about the principles and theories of interpretation, has a clear definition of the word interpretation. Tilden said interpretation was, “an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information.”<sup>52</sup> Based on this definition, many historic sites are endeavoring to develop interpretive plans that will appeal to a range of people and

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<sup>51</sup> Suzanne B Schell, “On Interpretation and Historic Sites,” *The Journal of Museum Education*. 10, no. 3 (Summer 1985): 6-7.

<sup>52</sup> Freeman Tilden, *Interpreting Our Heritage* (Chapel Hill: University of North Carolina Press, 1957), 8.

learning styles. One example is Monticello, where in addition to house tours, there are tours that focus on the gardens, landscape, and African American life.<sup>53</sup>

Realizing that historic sites needed a set of principles to achieve their interpretive goals, Tilden created six principles that are now a part of the National Park Service Manual for interpreters and are considered a working pedagogy.<sup>54</sup> The six principles are:

- Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
- Information, as such is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, interpretation includes information.
- Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical, or architectural. Any art is in some degree teachable.
- The chief aim of interpretation is not instruction, but provocation.
- Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.
- Interpretation addressed to children, up to age twelve, should not be a dilution of the presentation to adults, but should follow a fundamentally different approach.

To be at its best it will require a separate program.

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<sup>53</sup> George W. McDaniel, "At Historic Houses and Buildings: Connecting Past, Present, and Future," in *Public History: Essays from the Field*, ed. James Gardner and Peter LaPaglia. (Malabar, FL: Krieger Publishing Co., 1999), 245.

<sup>54</sup> Freeman Tilden, *Interpreting Our Heritage*, 9.

The role of the interpreter is to create dialogue between the artifact and the visitor.<sup>55</sup>

Within the field of historic site interpretation the “this is” tour is very common. This type of tour can be ineffective in helping visitors to make connections with the subject matter. Suzanne B. Schell, a museum consultant, suggests that functional interpretation of how and why objects and structures were used is much more meaningful to the public.<sup>56</sup> This allows tour guides to relate the past to life experiences of visitors to a historic site.

### ***Promoting Historical Thinking***

A more contemporary goal of historic site interpretation is the promotion of historical thinking. Currently, there is a growing interest in the use of historic sites to promote historical thinking among teachers, tour guides, and visitors. Professor of Education and researcher, Shari Tishman of Project Zero, calls for a more active and transferable learning experience. Tishman calls this, “from edification to engagement.”<sup>57</sup> Along with Tilden’s Principles, there are two other frameworks that are important to consider when analyzing objects or buildings. Professor of history and social studies at Boston University, Cristine Baron’s framework for examining historic buildings and the “Winterthur Model” are other methods of interpretation. Baron’s framework is divided into five categories: origination, intertectonality, stratification, supposition, and

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<sup>55</sup> Suzanne B Schell, “On Interpretation and Historic Sites,” *The Journal of Museum Education*. 10, no. 3 (Summer 1985): 6-7.

<sup>56</sup> Suzanne B Schell, “On Interpretation and Historic Sites,” 8.

<sup>57</sup> Liz Dawes Duraisingh and Shari Tishman. “Slow Looking: Promoting Historical Thinking through Close Observation of Objects and Material Features at Historic Sites” Preprint, 2014, 1.

empathetic insight.<sup>58</sup> The origination category inquires about the origin and design on an object in relation to society. Intertextuality seeks to ask questions about how an object compares to other examples of the same type. Stratification asks questions about how an object has been used and what it's meaning is or was. Supposition asks one to consider what they have learned and how that connects with prior knowledge. Empathetic insight asks questions to bring everything together by asking the visitor to put themselves in the place of the topics presented.

Former Curator of Winterthur, E. McLung Fleming, created the “Winterthur Model” in 1974. Fleming lists four analytic functions for analyzing decorative artifacts:<sup>59</sup>

1. Description, classification, authentication
2. Evaluation and possible contextualization with other objects
3. Cultural analysis-how the object was used/what it meant
4. Interpretation “to establish the relevance and significance of the artifact for our contemporary time and culture”

Fleming felt that these functions were important to understanding and learning about artifacts. Cultural analysis (understanding the use and meaning) of an object was the most important function when looking at an artifact.

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<sup>58</sup> Liz Dawes Duraisingh and Shari Tishman. “Slow Looking: Promoting Historical Thinking through Close Observation of Objects and Material Features at Historic Sites” Preprint, 7-8. Christine Baron. “Structuring Historic Site-Based History Laboratories for Teacher Education” *Journal of Museum Education*, 39 (2014): 1.

<sup>59</sup> Liz Dawes Duraisingh and Shari Tishman, 9.

### ***Limitations and Roadblocks***

As mentioned previously, art museums, in particular, have adopted inquiry-based teaching methods more quickly than historic sites.<sup>60</sup> This is partially because of the particular nature of a historic site. Unlike an art museum, historic sites can be a wide variety of entities such as: houses, municipal buildings, battlefields, cemeteries, hotels, churches, and parks. The diversity of what a historic site is and what it presents to the public is what makes it difficult to streamline a teaching pedagogy for inquiry-based teaching, unlike art museums, who whether large or small have similar artifacts to present.

Time is also an issue in historic sites and art museums. How much time is a group of visitors willing to spend on a tour? Some historic sites, like Independence Hall in Philadelphia, Pennsylvania have timed tours to accommodate the large number of visitors and the site used in this study, Christ Church Philadelphia, tour guides only have a limited time to give tours. Since time is a factor, the question becomes, what is there time to tell visitors? What is the most important thing to teach? Facts or how to think about facts? Many sites will decide that facts are the most important component of a site visit. Art museums differ from historic sites on the issue of time because of resources. Many art museums have the resources to professionally train educators in inquiry-based methods of teaching, while a small percentage of historic sites have those resources available.

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<sup>60</sup> Some historic sites do currently use inquiry-based teaching methods, however art museums have adapted the practice more quickly and it is widespread.

In this chapter, the researcher has outlined current teaching techniques that promote critical thinking as well as previous research on the topic. The following chapter will outline the methodology of the study. The last two chapters will describe the data in narrative form in order to analyze it. The final chapter will discuss the conclusions of the study as well as implications for the field and future research.

### **Chapter 3: Methodology**

This chapter outlines the methodology for a descriptive case study design that was used for conducting research. The purpose of this study was to find out if the art museum teaching practice of thinking routines would improve historic site tours and tour guide skills based on the tour guide's perception. This study was guided by the research questions; How does training tour guides with two thinking routines alter the touring skills of guides in a historic site? Based on the perception of the guide, how do thinking routines improve tours at a historic site? Thinking routines were the educational practice of choice for this study because of their ability to apply to multiple types of subject matter (history, architecture, decorative arts etc.). These routines were also selected because they support the practice of historical thinking and foster critical thinking skills. The thinking routines for this study included Interpretation with Justification (IWJ) and Connect, Extend, Challenge (CEC). These thinking routines were used separately on historic site tours. The researcher used pre and post-interviews, as well as journaling prompts to accumulate data. A rationale for using an exploratory case study design, a description of the site, sampling procedure, data collection, and analysis are discussed.

#### **Methods Summary**

In order to better understand the tour guide's point of view, a multiple descriptive case study design was selected for this study. This qualitative method allows the researcher to collect rich descriptions of tour guide perceptions about the use of thinking routines in a historic site. This study examined if the use of two thinking routines on



historic site tours would improve tour guide skills and tours based on the perspective of each tour guide. The two thinking routines chosen for this study are based on Project Zero's Artful Thinking program described in the Review of the Literature.

### **Research Design Rationale**

A descriptive case study design was selected for this study so that the researcher could explore, examine, and describe tour guide skills and tour improvement.<sup>61</sup> This type of case study was used to explore those situations in which the intervention being evaluated has no clear, single set of outcomes.<sup>62</sup> According to researchers Hancock R. Dawson and Robert Algozzine, case study research allows the researcher to evaluate multiple realities that are not easily quantifiable, such as how to measure visitor responsiveness and engagement.<sup>63</sup> It is important to consider if the design will be a single or multiple case studies and what type of research problem it serves. Single case study methodology can be used as a critical test of an existing theory, a rare or unique circumstance, a representative case, or where the case serves a longitudinal purpose.<sup>64</sup> A multiple case study examines a number of different individuals, programs, and/or subjects. These are compared or contrasted using multiple data methods. This study was a multiple (4) case study.

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<sup>61</sup> The term improvement in this study was measured by researcher observation and tour guide perception of their own improvement.

<sup>62</sup> Yin, R. K., *Case Study Research: Design and Methods* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.

<sup>63</sup> Hancock R. Dawson and Robert Algozzine, *Doing Case Study Research: A Practical Guide for Beginner Researchers* (New York: Teachers College Press, 2006), 72.

<sup>64</sup> Robert K. Yin, *Case Study Research: Design and Methods* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.

The rationale for using a multiple descriptive case study design is that each case shows how thinking routines improved tour guide skills and touring practices.

Descriptive case studies are useful in presenting basic information about a topic in education about which little research has been done.<sup>65</sup> There is no literature found to suggest that case studies have been conducted on thinking routines in historic sites. The majority of the literature describes instances in art museums. Therefore, this study explored the use of thinking routines on historic topics.

### **Research Team**

The research team for this study was comprised of the researcher and two other individuals. The researcher is a twenty-three year old female who holds a Bachelor of Science degree in historic preservation and a Bachelor of Arts degree in history. The researcher is also in the process of completing a Master of Arts in Museum Education. The researcher has three years experience working as a tour guide in historic sites. The second individual of the research team is a fifty-year-old female who holds a Bachelor of Science in Biology as well as a Master of Arts in Gifted Education, and a Doctorate in Education. This individual has 28 years of experience as a classroom teacher. She is familiar with thinking strategies and has training in inquiry-based techniques. She is also an experienced researcher and has published gifted education curriculum. The third individual on the research team is a twenty-five year old male who holds a Bachelor of Science in unified science education. He has three years of experience teaching and has

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<sup>65</sup> Sharan B. Merriam, *Case Study Research in Education: A Qualitative Approach* (San Francisco: Jossey-Bass Publishers, 1988), 20.

experience analyzing data. The researcher has chosen these individuals based on their knowledge of educational practices and research methods.

### **Reflexive Journals**

The research team for this study used reflexive journals before and after data analysis to disclose any biases they may have toward the data. These journals provided context for the way some of the data was interpreted.

Pre-analysis questions included:

- What are your pre-conceived notions about inquiry-based learning?
- Do you have experience using inquiry-based teaching to promote critical thinking?
- Is there anything you would like to disclose before analyzing the data?

Post-analysis questions included:

- Is there anything you would like to disclose about the data analysis process?

### **Site and Sample Selection**

#### ***Site Selection***

The site selected for this study was Christ Church, an Episcopal church and National Historic Landmark that is located within Independence National Historic Park located in Philadelphia, Pennsylvania. The site is located in an urban city with a population of 1, 526, 006.<sup>66</sup> The city has a number of historic sites; this site was selected

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<sup>66</sup> U. S. Census Bureau, "American FactFinder - Community Facts," [http://factfinder2.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml) (accessed April 6, 2014).

because of its unique setting and number of tours given daily. In 2013, the site had 133, 236 visitors between May and August.<sup>67</sup> The congregation was established in 1695 and was founded as the first Episcopal Church in America. Its mission is, “To enhance the experience of visitors, the [Church] has launched plans to expand the scope of services offered. These plans include innovative and interpretive ways to bring to life the history of [the] Church and its significant role in shaping the early direction of this nation.”<sup>68</sup> The site has been giving history-based tours since the 1950’s. Guides give the tours and are trained by senior tour guides. The training process includes a tour script and onsite observation and shadowing (See Appendix III, 86). Guide training can take up to two months. Guides usually have a college degree in history, architecture, or art. Some also have teaching experience in secondary and higher education.

### ***Sample Selection***

The participants of this study were paid historic site tour guides. The institution paid all guides an hourly wage. The tour guides ranged in age from 22-65 years of age. In this study, two tour guides were male and two tour guides were female. Each of the guides has a Bachelor’s Degree in history, architecture, or art history. Two of the guides have over five years of experience and the other two have less than five years of experience. The tour guides were selected using purposeful sampling based on each guide’s experience and education, as well as willingness to participate. Purposeful sampling is used to provide rich and focused case studies to allow inquiry and

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<sup>67</sup> Christ Church Preservation Trust, “Attendance and Revenue FY 2013” (unpublished report, 2013).

<sup>68</sup> “Preservation Trust,” Christ Church in Philadelphia, <http://www.christchurchphila.org/Historic-Christ-Church/Preservation-Trust/62/> (accessed April 9, 2014).

understanding of a phenomenon in depth.<sup>69</sup> Guides with various backgrounds and experience were chosen to diversify the case studies. Some guides were not chosen because of their unwillingness to change the way they conduct tours. This study relies on the guides being able to adapt their touring style slightly.

## **Measures and Analysis**

### ***Outline of Procedure***

This multiple descriptive case study included four participants (tour guides). The researcher conducted pre-interviews with each participant. Participants were divided into two groups A and B. Group A was trained for three days on how to use the Connect, Extend, Challenge (CEC) thinking routine. Each guide was trained separately. Training included one day of lecture explanation and several days of practice while the researcher observed the participant. Group B was trained in the same manner and the same amount of time on how to use the interpretation with justification (IWJ) thinking routine (See Table 1 below).

Following the training sessions, groups A and B gave tours using the assigned thinking routine for two weeks. During the two weeks, each guide was asked to fill out the provided journaling sheets to reflect on their experiences using the designated thinking routines. Journals were completed after each shift. A shift was between four and eight hours in length. The tour guides kept these journals until they completed two weeks of tours. Journals were then given to the researcher for data analysis. Groups A and B

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<sup>69</sup> Michael Quinn Patton, *Qualitative Research and Evaluation Methods*. 3rd ed. (Thousand Oaks: Sage Publications, 2002), 46 & 231.

gave tours using each of these thinking routines for two weeks. The participants were told that they had to only use one thinking routine on each tour. However, if a participant used the wrong thinking routine they were required to mention it in the journal. During these two weeks, the participants continued to fill out the journaling sheets. Following data collection during tours, the researcher conducted a post tour interview with each of the participants to make comparisons between the pre and post tour experience in each case study.

**Table 1: Tour Guide Thinking Routine Schedule**

<b>Week of Tours</b>	<b>Group A</b>	<b>Group B</b>
<b>Week 1</b>	CEC	IWJ
<b>Week 2</b>	CEC	IWJ
<b>Week 3</b>	IWJ	CEC
<b>Week 4</b>	IWJ	CEC

### ***Training Protocol***

Training sessions included a teaching session about each thinking routine as well as practice with using the routines during tours. During the teaching session, tour guides were given a packet of information about the questions to ask as well as information about the thinking routines and how they can be used based on the Artful Thinking website (See Appendix III, 86). The packet also included a short list of what to do and what not to do while using the routines. The lecture session was an hour; the rest of the training consisted of the participants practicing their tour using the new strategies. The researcher observed the participants to ensure they understood the content and how to use

the thinking routine on a tour. Training was complete after the researcher and the participant felt comfortable with how the thinking routine was being used.

### **Description of Data Collection**

#### ***Interview Protocol***

The interviews in this study were semi-structured. Semi-structured interviews use an interview protocol that serves as a guide. This type of interview allows the interviewee to explain their point of view and experiences in depth. Although this type of interview does not have consistent data across participants, according to Danica G. Hays and Anneliese A. Singh, “it makes up for this disadvantage by including more participant voice, as appropriate, to provide a richer picture of a phenomenon under investigation.”<sup>70</sup> The order and wording of the interview questions are not predetermined. Interviews were scheduled in advance and conducted in a common space used by the tour guides that was comfortable and familiar to them. Interviews lasted for ten minutes to an hour. The interview began by addressing the following:<sup>71</sup>

- The purpose of the inquiry/interview
- The protection of participants
- Logistics (time, place, and number of interviews)

Questions were not asked in any particular order nor were they worded exactly the same in each interview. This is a traditional practice for semi-structured interviews.<sup>72</sup> However,

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<sup>70</sup> Danica G. Hays and Anneliese A. Singh, *Qualitative Inquiry in Clinical and Educational Settings*, ( New York: Guilford Press, 2012), 239.

<sup>71</sup> Sharan B. Merriam, *Case Study Research in Education: A Qualitative Approach*, 77.

<sup>72</sup> Danica G. Hays and Anneliese A. Singh, *Qualitative Inquiry in Clinical and Educational Settings*, 239.

Michael Quinn Patton suggests that questions about experience be asked first in an interview.<sup>73</sup> The questions for each interview were created based on question categories suggested by Patton.<sup>74</sup> These categories include background, experience, opinion, and feeling questions (See Table 2 & 3). Open-ended questions were used in order for the researcher to understand the world as seen by the interviewees. During the post-interviews the researcher asked questions about the journal for clarification of the written responses.

**Table 2 Pre-Interview Questions**

Questions for Tour Guides: Pre-Interview	Research Question 1	Research Question 2
Suppose I am on one of your tours, how would it be conducted?	x	x
How do you feel about new methods of giving tours?	x	x
How do you respond to visitor's interests on a tour?	x	
How do you feel about your method for giving tours currently?	x	x
Would you be comfortable adding some new techniques to your touring method?		x
Do you think there is room for improvement in your touring practices?		x
Is there anything else you would like to add?	x	x

<sup>73</sup> Michael Quinn Patton, *Qualitative Research and Evaluation Methods*, 352-353.

<sup>74</sup> Michael Quinn Patton, 348-351.



**Table 3 Post-Interview Questions**

Questions for Tour Guides: Post-Interview	Research Question 1	Research Question 2
<b>Did the use of thinking routines improve your tours? Please explain in detail.</b>	X	X
<b>How comfortable were you with using the thinking routines through out your experience?</b>		X
<b>Did the routines improve the tour more for you or the visitor in this experience?</b>	X	X
<b>Were the questions or comments from visitors different when using the thinking routines?</b>	X	X
<b>Do you feel that this teaching method improved your knowledge and understanding of the site?</b>	X	X
<b>Suppose I am on one of your tours now that you have learned about thinking routines, how would you use them?</b>	X	X
<b>Was using thinking routines different than you expected?</b>	X	X
<b>In general, can you tell me about some of your experiences with visitors while using thinking routines on your tours?</b>	X	
<b>How did your experience with each thinking routine compare?</b>	X	X
<b>How likely are you to continue using thinking routines in your tours?</b>	X	X
<b>Do you feel that this teaching method improved your touring skills? Explain.</b>		X
<b>Is there anything else you would like to add?</b>	X	X

Interview data was digitally recorded using a computer and a cell phone as backup. The recorder was turned on five minutes before each interview and was not turned off until interactions with each participant are completed. The researcher took

notes using the following format (Figure 2) created by Merriam in order to capture data that cannot be recorded.<sup>75</sup>

**Figure 2 Interview Notes**

<b>Interviewee #--</b>	
<b>Gender:</b>	<b>Age:</b>
<b>Place of Interview:</b>	
<b>Respondent's Comments</b>	<b>Researcher's Notes</b>

After the interviews are conducted the researcher transcribed them verbatim.

Transcriptions were analyzed and compared by the research team using a content summary sheet (See Appendix IV, 88) to draw conclusions about the participants' experience using thinking routines. The conclusions were used to triangulate data for the case narrative for each tour guide's individual experience.

### ***Journaling Protocol***

Journaling was used to assess the guide's viewpoint while using thinking routines on their tours. Journals are a less invasive manner to collect data that also provide rich descriptions of a phenomenon that may not be noticed using other forms of data collection.<sup>76</sup> Participants were given a journaling sheet to fill out after each shift (See Appendix II, 86). Each tour guide will be assigned a letter and number (i.e. 1A) to maintain participant protection. This number will be listed on the top of each journaling

<sup>75</sup> Sharan B. Merriam, 84-85.

<sup>76</sup> Danica G. Hays and Anneliese A. Singh, 284-285.

sheet. The participants will also note the date. The journals were collected every two weeks for analysis. The journaling prompts consisted of questions to assess how the thinking routines were used and how they have impacted the guide's touring practice. (See Table 4).<sup>77</sup>

**Table 4 Post-Shift Journal Questions**

Questions for Tour Guides: Post Shift Journal	Research Question 1	Research Question 2
<b>1. Describe your most memorable tour today in detail as it relates to the use of the thinking routine.</b>	<b>X</b>	<b>X</b>
<b>2. Did the connect, extend, challenge thinking routine improve your interaction with visitors today, why or why not?</b>	<b>X</b>	<b>X</b>
<b>3. Did the interpretation with justification thinking routine improve your interaction with visitors today, why or why not?</b>	<b>X</b>	<b>X</b>
<b>4. Did the thinking routine impact yours tours in any way today, why or why not?</b>	<b>X</b>	
<b>5. Explain in what context you used the thinking routine on your tours today. Be Specific.</b>	<b>X</b>	<b>X</b>
<b>6. Is there anything else you would like to add?</b>	<b>X</b>	<b>X</b>

\* Questions 2 and 3 will not be asked at the same time.

The journal responses were compared and contrasted to other journal responses for the same thinking routine. These findings were included in each narrative. Data from the interviews and journals were triangulated to find commonalities as well as abnormalities.

<sup>77</sup> Susan Wilks, *Critical & Creative Thinking: Strategies for Classroom Inquiry*, (Portsmouth: Heinemann, 1995), 55.

Data triangulation strengthens a study by combining methods as well as testing for consistency.<sup>78</sup>

### ***Validity and Trustworthiness***

In order to have an effect on educational theory or practice a study must be trusted. Conclusions need to be valid and true to educators and other researchers. Internal validity deals with how findings match reality. Merriam suggests that there are six basic strategies a researcher can use to ensure validity; triangulation, member checks, long-term observation, peer examination, and clarifying researcher bias.<sup>79</sup> This study used some of these methods to maintain validity. During data analysis, triangulation was used. Member checks and peer examination, or use of a research team was used in this study to check the plausibility and reliability of the study. The researcher's bias is discussed below.

### ***Role of the Researcher and Researcher Bias***

The researcher in this study took the role of data analyst and interviewer. The researcher did not engage or interact with visitors or guides while they were taking a tour of the historic site. The researcher has previously done an ethnographic case study of museum visitors and is aware of how to observe visitors without participating. The researcher also has three years of experience as a museum and historic site tour guide and was trained using Tilden's principals of interpretation. This experience provides the researcher with skills and knowledge about how a tour is conducted and what some typical visitor behaviors are, as well as how to respond to those behaviors. The researcher

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<sup>78</sup> Michael Quinn Patton, 246-248.

<sup>79</sup> Sharan B. Merriam, 169-170.

also conducted pre and post-interviews with each tour guide involved in the study. The researcher is associated with the historic site as a volunteer for the archives and a tour guide at an affiliated site.

## Chapter 4: Data Analysis and Results

### Case Study Narrative: Tour Guide 1

#### *Pre-Interview*

Tour Guide 1 is a 65-year-old female who has a strong educational background in the arts. She received a BFA in English Art and an MFA in Art. Guide 1 also has an extensive background in historic site interpretation and touring practices. Guide 1 has 14 years of experience as an interpreter and site administrator and 30 years of experience as a tour guide for the arts. She also has 10 years of experience as a guide in the historic site of this study. Guide 1 also had been trained in customer service by a leading department store. Guide 1 was the most experienced tour guide in this study, which was reflected in her pre-interview.

During the pre-interview, Guide 1 was very comfortable and confident in the interview. Guide 1 was very enthusiastic about her role as a tour guide. She was also very open to the idea of learning new things to improve her skills as a tour guide.

I think we should always be open to [change]. Change is, is, is it difficult or is it different? You know because it is your choice. Is it difficult or is it different? And you have to ask your self that...you know because it is new...but if you go-it's like riding a bike...it's difficult when you first get on...you have to learn how to feel different. So it's a learning thing and I think we should always be open to creative ways of doing it [tours].

When asked about how she currently conducts tours Guide 1 had a very clear notion of her touring practice. She felt that she needed to assess her audience first and then tailor the tour to the group's age and interests. Guide 1 said, "... By looking at the group and, and determining, I determine what the interests of the age and backgrounds of the guest and focus on what I think would be of most interest to them..." Guide 1 was also aware

of how to incorporate state education standards in her tours. Once she has determined what the interests and learning abilities of her group are, she uses scenery, objects, and storytelling on her tours. Guide 1 feels that, “If I’m not engaged they’re not engaged!” Guide 1 also made a point to say that she always tries to use good customer service on her tours.

### ***Experience with the Thinking Routines***

Guide 1 kept consistent journals through out the duration of the study. Her descriptions and comments about her experience were detailed and reflective of her experience using the thinking routines. Guide 1 began the study using the Connect, Extend, Challenge (CEC) thinking routine followed by the Interpretation with Justification thinking routine (IWJ).

### ***Post-Shift Journals: Connect, Extend, Challenge Thinking Routine***

“Young teens- I had the group sit in George Washington’s Pew.” Guide 1 asked the group to imagine themselves as a signer of the Declaration of Independence. Guide 1 then asked the teens to think about the gravity of the situation the signers were in, they were “signing their lives away” or signing their own death warrant. This allowed the teens to engage in a conversation with the guide that cause them to connect their new experience at the site with their prior knowledge about the signers of the Declaration of Independence. Guide 1, “likes to challenge students and all guests to look at history through fresh eyes.” When asked to write about if the thinking routine improved her interaction with visitors, Guide 1 felt that the thinking routine worked well when she had

enough time with the visitors. Guide 1 said, “It’s not easy with 10 minute tours.” This guide also felt that the CEC thinking routine was a, “great way to engage young adults in thinking about how history impacts their own lives.” Guide 1 also added that this thinking routine allows the guide and visitor, “to learn new information but to not just hear it but to “feel” it, experience it as their own choices as well.”

Guide 1 had another tour where she used this routine with a family from France. She used the routine to her advantage to explain Philadelphia’s connection with French people. Guide 1 claimed the routine made a “direct connect” with the visitors. The routine helped the visitors make a personal connection in which the guide was able to relay new information about immigrant life in Philadelphia. “I had to think about putting in a way to encourage dialogue. Normally, I am the only one speaking. It open’s visitors minds not to just receive information but to process it for themselves.”

As in a previous journal, Guide 1 mentioned in her preceding journal that the CEC thinking routine was helpful and effective with visitors when there was enough time. She also expressed that you need more than ten minutes to really use this thinking routine well. This comment was reoccurring in this guide’s journals. Guide 1 also felt that this routine made her think about the tour content in a different way. This guide expressed that the thinking routine makes the tour guide re-think how they convey the information to visitors and how they can make it more engaging. According to Guide 1, the thinking routine also helped her and visitors, “learn new information but also feel it and experience it as their own.”

Guide 1 mentions that, “it makes you present your story with a response from the guests with an end result.” Guide 1 felt that this routine was a little harder to use because



you need dialogue in order for the visitor to develop thoughts and responses. She said, “you have to think about how you will present the ideas to them to encourage exchange.” Guide 1 noted that children seemed to be more apt to engage her with this thinking routine. Guide 1 also took the opportunity to use this thinking routine with students on a scavenger hunt. These are very common at the site. Most of the hunts ask students to find a particular pew or grave. Guide 1 felt that the hunts didn’t teach students anything about the site. She used this thinking routine as a way for the students to dig deeper while they did the hunt. “I asked them to push beyond what they already know to find a way to relate to the individuals who sat in the seat before them...” Guide 1 felt that the thinking routine helped her find a way to engage students while they do a scavenger hunt.

***Post-Shift Journals: Interpretation with Justification Thinking Routine***

Guide 1 used objects in her tours with this thinking routine. This guide used graves (see Figure 3) that are located inside the site in the floor. Guide 1 felt that using this thinking routine was more difficult to use on tours compared to the CEC thinking routine. “It is a little harder as you need there to be dialogue with you and develop thoughts and responses.” Another factor that Guide 1 mentions is once again time. In regard to the impact of the thinking routine on her tour she said, “It does [work] when you have time to do it. I love to get them thinking about the ideas and ideals presented as a part of our historic past.” I have to think about how I approach the subject differently but it is a good thing. Guide 1 also felt that using a thinking routine made her think differently about her approach on tours. “I have to approach it like the students do with a new idea.”

Guide 1 took the opportunity to try the IWJ thinking routine with an unlikely visitor, a construction worker fixing a door. Guide 1 observed that the construction worker was reading the grave markers in the floor. Guide 1 took this opportunity to use the thinking routine. “He was very interested to learn more about them [graves] and the church in a 8 min. dialogue.” “He said he got chills thinking about all the people now in the floor and the founding fathers who also walked over them. Knowing we will all follow into death.”



**Figure 3** Graves in the floor of Christ Church.

### ***Post-Interview***

Guide 1 found the experience of using thinking routines to be positive. This guide felt that although she had more trouble with the IWJ routine, however, both routines benefited her tours. She did state that those were tours that she had ample time to engage visitors. Guide 1 said, “If I didn’t have at least ten minutes or longer with people...I don’t think it was helpful. Once I would scratch the surface...I...I needed to start another tour...you know. So... It was good while I had the time.” Guide 1 was of the opinion that these routines didn’t work well unless you have at least ten minutes to get in to a topic.

Guide 1 also felt that the routines helped her think about how to structure her tours as well as analyzing objects at the site. She expressed that the thinking routines helped her engage visitors and make them active and not just passive recipients of information.

Guide 1 said, “Giving my tours this way made me think more about how a visitor might process what I tell them... there was a lot more talking...like conversation going on.”

When asked if the thinking routines improved her knowledge and touring skills Guide 1A said,

Yes and no...I mean I felt like it made me think through a different process and I liked the change. It made me think of objects in the church a different way...I don't know about knowledge...I think it improved my knowledge of visitors' not...not content knowledge...you know what I mean...?

Guide 1 said that she would continue to use the routines. She also said that she would use the CEC thinking routine more often than the IWJ routine.

I wanted people to be more active with me on the tour so I tried to make it exciting and use information I thought would be really interesting for them. I like to put people in the time frame and make them think about being...being in someone else's shoes....you know...I...I think that is powerful for most people. I really want people to feel the history, not just hear it...you know...no one gets anything out of it that way. Feeling and engaging is so so important.

Guide 1 also gave thought to the fact that she had a direct connection with visitors more than once while using the Connect, Extend, Challenge thinking routine. Compared to the IWJ routine, Guide 1 felt that, “I didn't feel the same direct connection as I did before.

Talking about the objects was fun but it just didn't have the same effect you know...”

## Case Narrative: Tour Guide 2

### *Pre-Interview*

Guide 2 is a 24-year-old female who has an educational background in English writing and history. She also has experience giving historic and ghost tours. She also has two years of work experience at Elfreth's Alley and the Battleship New Jersey.<sup>80</sup> During the pre-interview Guide 2 was comfortable, but not always confident in her answers. Guide 2 continually had long pauses and required extra probing to get certain answers to the interview questions. Guide 2 normally likes to work with smaller groups. During her interview, Guide 2 said she needed to work on doing tours for larger groups. She claimed she was open to learning new techniques, however later in the interview this was contradicted. Guide 2 stated, "I think it [learning new techniques] might. I am open to at least trying...I think it is worth it to at least try." Guide 2 seemed to be unsure of whether she needed to use new methods or not. Although she thought her touring method needed work she wasn't sure if something new was needed. She then said that her program delivery needed work after being probed further. "I think I need to work on umm how I ask things and when I ask them. Sometimes....I ask things and or say some things that seem awkward." Guide 2 felt she was awkward on tours and that it is hard for her to begin a tour. When asked about her current touring practice Guide 2 said she gives a general history of the site and its important features. Once she begins a tour, the content is based off of a script. Guide 2 said, "...I talk about the pews some of the stuff like the

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<sup>80</sup> Elfreth's Alley is America's oldest residential street located in Philadelphia, Pennsylvania. The Battleship New Jersey is America's most decorated battleship and is located in Camden, New Jersey.

font or the chandelier. People like to know about that stuff because it is so old.” She hasn’t had experience using dialogue in tours other than for questions from visitors.

### ***Experience with the Thinking Routines***

Guide 2 kept consistent journals through out the study. Her descriptions and comments about her experience were not as detailed as dictated by the journaling instructions. However, the journals were reflective of her experience using the thinking routines. Guide 2 began the study using the Connect, Extend, Challenge (CEC) thinking routine followed by the Interpretation with Justification thinking routine (IWJ).

### ***Post-Shift Journals: Connect, Extend Challenge Thinking Routine***

Guide 2 gave a tour to a small family. The conversation that ensued was about the architecture of the site and how it connected to what they already knew about the topic. The topic was directed by the fact that the mother in the family was an architect. Guide 2 felt that the thinking routine didn’t really help her on this particular tour. “...the people I interacted with, the church was their first stop, so they didn’t really have anything to connect/relate to.”

On another tour with a family, Guide 2 mentioned that she felt awkward using the thinking routine. She felt that she was putting visitors on the spot. The researcher believes that this could be because of lack of experience. Although Guide 2 felt the thinking routine wasn’t working to her advantage, she said that it led to some interesting conversations. Although, Guide 2 felt awkward using the routine she said that using this thinking routine made her touring experience positive.

[Using the thinking routine] led to some interesting conversations, especially because unlike [prior tours] the church wasn't the first thing they saw in Philly so they had more to relate to. It [the thinking routine] definitely made it a more positive experience for me. It sparks interesting conversation and it is fun to see what people come up with.

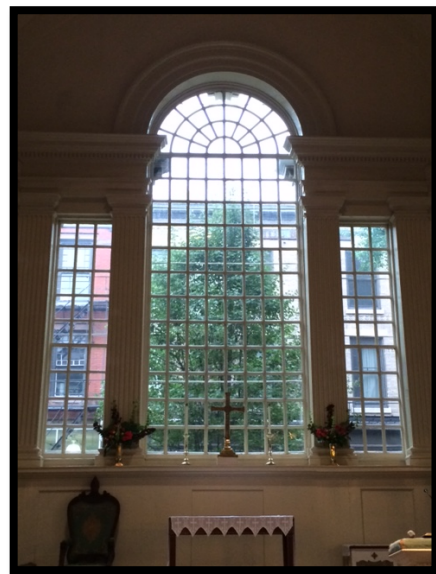
### *Post-Shift Journals: Interpretation with Justification Thinking Routine*

Guide 2 gave a tour to a man who was an architecture professor. Guide 2 felt that the tour was more successful with this routine because she improved her knowledge about architectural details in the site from the visitor. They discussed ornamental details on one of the grave markers (See Figure 4). Guide 2 felt that this tour benefited her. When asked to write about if the thinking routine improved her tour, 2 said, "Definitely! I even learned something new."

Guide 2 had another tour that focused on architecture. The thinking routine led the people on the tour to make some comparisons with prior knowledge. 2 used the windows (See Figure 5) in the building as an object to use with the thinking routine. This object wasn't the easiest to use, but 2 felt it was a neutral experience.



**Figure 4:** Detail of Bishop William White's Grave.



**Figure 5:** Palladian Window in Christ Church

### ***Post-Interview***

Guide 2 felt that she benefited from the techniques occasionally. She wasn't interested in continuing to use them. She felt that she didn't need to keep using the routines. She was really uncertain if they helped her or improved her knowledge. This was contradictory at times. Originally, Guide 2 did not feel that the thinking routines were going to benefit her, but later said that the IWJ thinking routine seemed to encourage conversation more. She also noted that she learned something from a visitor using that thinking routine.

Guide 2 also said that she felt it improved her skills slightly, but later said using the routines didn't lead her to any new understandings. Guide 2 wasn't as self-aware as the other guides and only felt the thinking routines benefited her when she learned something from visitors. Compared to Guide 1, Guide 2 never mentioned use of a different thought process when giving tours. Overall, Guide 2 felt more natural using the IWJ thinking routine compared to the CEC thinking routine.

## **Case Study Narrative: Tour Guide 3**

### ***Pre-Interview***

Guide 3 is a 25-year-old male who has a degree in Social History and Gender Studies. He has been a substitute special education teacher for two years and a tour guide for six months. Guide 3 had only worked at the site for this study four months prior to data collection. Guide 3 was very comfortable speaking about his experience. When asked about how he conducted tours prior to the study, he said that he followed the script given to him when he became a guide (See Appendix, 77). However, Guide 3 said he

modified the script to fit his teaching style. Guide 3 expressed that he likes giving themed tours based on people's interests and then tailors the script to accommodate that. He said, "I have modified it [script] to make it...I make it more where it's like, so I have like a mental map of where I'm gonna go that logically follows. If people look like they are getting bored I'll bring up something that is more interesting. I do want to keep their attention." Guide 3 expressed that he is more comfortable with larger groups, such as school groups, compared to smaller family groups. Guide 3 was confident about his touring method but wanted to improve his touring skills with smaller groups, especially very young children.

It might sound weird because I am a substitute teacher, but to be able to explain things to kids on their level...because a lot the time kids are in there [the church] with their parents- they hide behind them and they don't get really involved. So, like reaching kids would be a good thing to learn because the script that we have to memorize is not exactly kid friendly.

Guide 3 was aware that the way you give a tour to children and adults is different however, the content shouldn't be. Guide 3 also wanted to improve his knowledge about the site in particular areas, such as women's history. He was very willing to change and learn new techniques to help his touring skills. He hoped that learning thinking routines would help him in several areas as mentioned above.

### ***Experience with the Thinking Routines***

Guide 3 wrote very detailed explanations about his experience using the thinking routines. He began to blend the two thinking routines together after the first two weeks of using the routine. Guide 3 began by using the Interpretation with Justification thinking routine first, followed by the Connect, Extend, Challenge thinking routine.



***Post-Shift Journals: Interpretation with Justification Thinking Routine***

Guide 3 chose to use three different objects on his tours with the IWJ routine, a baptismal font, grave marker, and royal crest. The first tour was conducting using a baptismal font as the object (See Figure 6).

I showed a family the Penn Baptismal Font. They had two children with them. I asked what they think that this object might be used for. They did not know. I explained that the top is a lid and it takes 3 people to remove the lid. This helped them to understand that it was an object used for special occasions because if so much effort is required to remove the lid it must not be used on a daily basis.

In order to continue this line of questioning, Guide 3B continued by asking the visitors, "...what special occasions occur in a church in order to prompt them to think of past experience and knowledge." Following this experience 3B felt that his connection with the visitors improved. "I find that encouraging tourists to guess the use of an object while offering hints (such as having the hint that it takes three people to remove the lid) prompts the visitors to imagine the item in use rather than as just an artifact."



**Figure 6:** Penn Baptismal Font

The next tour Guide 3 gave was centered on some of the graves in the floor of the site.

The gravestones marking the burial places of people inside the church are a favorite point of interest for visitors. I decided to focus on asking visitors if they noticed the marble stones and what they think they are. Many assume these are memorials but do not indicate that someone has been buried in that location. When asked what she thinks these stones signify. One young woman guessed that they were simply stone with out being a grave. She had not seen graves in side churches before and this was a new concept.

When asked how the thinking routine impacted the tour 3 said, “It allowed me to gauge what visitors know so that I could appropriately explain the significance without assuming prior knowledge.”

### ***Post-Shift Journals: Blending Routines***

Guide 3 also chose to use the Coat of Arms of King William III (See Figure 7). Guide 3 felt this object would illicit information in relation to the story of the American Revolution.<sup>81</sup>



**Figure 7:** Crest of William III of England

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<sup>81</sup> At this point in the study Guide 3 began blending the CEC and IWJ thinking routines on his tours. Guide 3 expressed in his post-interview that he felt that these routines naturally fit well together on his tours and matched his teaching style.

The following excerpt is how Guide 3 described the experience.

I asked two young women if they had noticed something unusual about the coat of arms. They noticed that it was a bit beaten up and reasoned that this was because it was such an old object. I explained that the reason it looked that way was because it was in fact beaten up! Three crowns on the top were hacked off with an axe. Not just a symbolic gesture indicating the breaking away from the monarch but literally involves the crown making it a useful story to tell in describing the revolution.

When asked how the routine impacted his tour Guide 3 felt that the thinking routine helped him to explain the importance of the object and how it fits into the greater context of American history.

One of the first tours Guide 3 gave using the routine was for a small group of teenagers with a few adults.

I had them seated starting at the George Washington pew #58. I asked them: given what you know, why do you think that we know where people of historic importance had been during worship services inside the church? This was challenging because most church services have open seating.

Guide 3 felt that this routine changed how he and the visitors thought about the weekly experience of going to Church and having an assigned seat that had a monetary value. Guide 3 also felt that since his visitors had some prior knowledge, it was helpful when conducting his tour. He said, “Having this background knowledge makes it easier to encourage visitors to compare historic practices with their own contemporary experiences. They extend their experience of church to begin to imagine how this experience changes over time.”

### ***Post-Interview***

Guide 3 felt that his experience with thinking routines melded well with his personal teaching experience. He expressed that he felt the two thinking routines were

very similar and he naturally began to use them together after the first two weeks of using the IWJ routine. “I did use them together a few times because I felt like I couldn’t ask them about what they saw without propping any background knowledge they might have, cause that may lead them to just make stuff up.” Guide 3 also felt that because of his background as a classroom teacher the routines were not awkward to use on tour and felt comfortable using them on a regular basis. Although Guide 3 never felt awkward as the tour guide, Guide 3 did note that older visitors had a different reaction on tours to the use of the thinking routines. When asked how he felt after using the routines Guide 3 said, “I mean it really depended on who was the visitor... in certain cases it helped in extending the conversation... And in other cases people would just kind of give me like blank stares. Like, “ why are you asking me that [Laughs]?” Guide 3 felt this was most common with older visitors versus younger ones. He felt that many of the older visitors were of the, “umm I’m just here to see things” mentality. Guide 3 felt that his experience with the routines improved his touring skills. He said, “it pushed me to ask more questions as opposed to me just telling them things.” Guide 3 also used the word “interactive” to describe his experience with the routines. He preferred to use the Connect, Extend, Challenge thinking routine the most because, “I think that is really important...” When asked if he would continue to use the routines on tours Guide 3 said, “Yes. I mean I just do it as part of everything.”

## Case Study Narrative: Guide 4

### *Pre-Interview*

Guide 4 is a 35-year-old male who has degrees in Philosophy and International Studies. Guide 4 is also currently in seminary school. Guide 4 has been a guide for 5-6 years, all of which were at the site for this study. He was not as chatty as the other interviews, however he was very clear and concise with his answers. When asked about his current touring practice, Guide 4 has a set idea of how a tour will be conducted. He usually has visitors sit first, and then he gives them a brief overview. Guide 4 then allows visitors to ask questions, which usually creates a dialogue.

Well I usually... they will ask a question that gives me a pretty good idea of what they are interested in...I mean usually people will ask about the denomination of the Church and things about the graves... usually stuff like that.

At this point, Guide 4 claims to have a good idea of his visitor's interests and tries to give them information based on their interests. Guide 4 thought that there is always room to improve his skills and knowledge. He said, "I think that people like the way I do it. However, there is always room for change." He was very receptive to the idea of learning new things. He particularly wanted help with engaging groups composed of various ages as a whole.

I think that I could always learn new things to improve my work... Sometimes I think I get too academic with people so, it might be helpful to learn different ways of talking to people...especially families... Families are hard because you have to be able to talk in a way that makes sense for kids and adults...

### *Experience with the Thinking Routines*

Guide 4 kept the most detailed and insightful journals through out the study. His descriptions and comments explained the use of the thinking routines thoroughly. Guide 4 began the study using the Interpretation with Justification thinking routine (IWJ) followed by the Connect, Extend, Challenge (CEC) thinking routine. Guide 4 used the wide variety of subjects and objects within his tours during the study.

#### *Post-Shift Journals: Connect, Extend, Challenge Thinking Routine*

Guide 4 began using the CEC routine with a small family. While giving the tour, Guide 4 decided to use the prior knowledge of the visitors to talk about some of the site's history.

Today I used it [thinking routine] with prior knowledge about the British and the Revolutionary War. It was a small family with kids that were like middle school aged. I discussed some of the Church's history with them and then I would ask them how it connected to what they already knew and if they had other questions to ask me. I remember this because we had a long conversation and the kids were interested too.

Guide 4 felt that the Connect, Extend, Challenge thinking routine helped him to keep the engagement of the family and the children. He said, "I think that it helped me...It definitely helped keep the conversation going. I think the kids were surprised how much they actually already knew."

In the second day of touring using the CEC routine, Guide 4 used the routine on a tour with visitors that spoke a different language.

One of my tours today was interesting. I had a bus group from Canada. They all spoke French. I tried to use these questions to see what they already know about America or if I could connect some French Canadian history to the Church. It was hard to do but I found some small things to talk about.

Guide 4 reflected on this experience by explaining that the routine helped him with the language barrier.

Considering the language barrier, I think that the routine helped me find out what they knew about American history. Obviously it was still a little difficult but I think it still helped in some way.

While using the CEC routine for the third day of touring, Guide 4B had some experience with small children. Guide 4 said,

I tried to do a tour today with smaller kids. I used this to see if I could get them to talk more about what they learned in school. So I tried to connect them to things like Washington, or other things I thought they would know.

Guide 4 felt that the thinking routine helped a little with keeping the children engaged, however he felt that have something for the children to touch or see up close would have been helpful. He said, “I think it helped but, it was still hard to keep the kids engaged in a conversation. I think they needed something to do or touch for this to work better.” Guide 4 also expressed that he wasn’t certain of the impact that the routine had on the children. “I think that the impact was small if at all today. It was just harder because they were small children so I am not sure of the total impact.”

On the last day that Guide 4 used the CEC routine he had another experience with visitors from another country.

Had a couple from Germany that was really interesting to talk to. I decided to try asking the questions so that I could see what they already knew about America and its history. They knew a few things, but by asking them the questions during my tour of the Church they actually had a few very interesting questions about Quakers and religion. They also said everywhere else they went on tours people ignored them because they were foreign. We had a conversation for almost an hour.

According to Guide 4, “The routine worked really well today. I really felt like we connected with the information. The couple was really interested...It was really enjoyable and we both learned something from each other.” Because of the engagement between Guide 4 and the visitors the impact of this tour in particular was explicitly noted.

I think that the impact today was bigger than usual. This is just because we had a long conversation that was of interest to me and them. I was really surprised to have such a long conversation/tour with foreign visitors. Normally they do not engage with us [tour guides]. I think they are afraid of the language issue or they don't want to seem like they don't know anything.

### ***Post-Shift Journals: Interpretation with Justification Thinking Routine***

When using the IWJ routine for the first time Guide 4B took the opportunity to use a central object in the Church as part of his tour.

I used the routine in more of an observational context. I wanted them to find some of the unique characteristics of the chandelier...I was trying to get my group [adults] to see that the hook on that holds the chandelier is actually a snake. So I told them the history about the chandelier and then I asked them the questions. By the end of it they did point out the snake, but they thought it was a bird's head. It was a fun talk.

Guide 4 felt that the thinking routine worked well on this tour, but noted, like Guide 1, that time was a factor with using the routine.

I think the impact of this routine is better than the other. I had a decent conversation with my guests but I would of liked to have more time. I think it had an impact but it would be greater with more time.



**Figure 8:** Chandelier in Christ Church



Guide 4 continued to use more objects within the Church while using the IWJ routine. On this tour Guide 4 used the symbol of an angel.

My tour today I decided to talk about the Angels that you see in a few places in the Church. They all look similar so I think it is interesting to use as an object. I tried to get people to really look at the different angels and how they are alike and different. This really worked well with kids, they liked to tell me about what they thought about the angels.



**Figure 9:** Memorial Plaque with angel detail.

Once again on this tour Guide 4 felt that the routine was helpful, but time was a factor. “I think that the routine worked ok today. Talking about the angels may have been a stretch for the time limit I had. Next time I am going to pick a different object that can be thought through more quickly...I think it may have had an impact it is hard to say. I think the topic I chose made it more difficult.”

On the third tour with the IWJ routine, Guide 4 used an object to express ideals.

Today I used the routine to talk about the windows with a group of visitors from Boston. They had been to Old North Church and I used the routine to find out what they knew about the windows and how I could compare the Church to Old North.

The routine gave Guide 4 the change to discuss a difficult topic on his tour in an engaging way.

This time was observational and historical. I wanted to discuss the effects of the Enlightenment age on the building. So I tried to insert some history along with the observing of the windows and the clear glass...I think it had a great impact today. People seemed to really be interested and engaged.

On the final tour with the IWJ routine Guide 4 had a tour with a school group in which he decided to use a prominent object in the building to engage the group.

Today I used the routine with some school kids. I guess they were in middle school. We talked about the baptismal font. The routine helped us talk about the shape as well as what it was made of. They seemed to really like telling me about what they saw than me telling them what to look at. I found that with this particular object the routine went really well with it. It seemed to make people more interested in the font and it was fun for me to use. This was historical and observational. I wanted to see if they would figure out what the object was since it is an odd shape. I also gave the history during the tour so they realized how old the font was and its importance.

### ***Post-Interview***

Guide 4 found that using the IWJ thinking routine was more helpful on his tours. He felt that it benefited him as well as his visitors. He also mentioned that the IWJ thinking routine helped him think about objects at the site more closely.

I would say that each of the routines presented difficulties for me at first because it was new and such...but I think the interpretation one worked best for me. I got more out of people which made the tour better and...and...umm...I learned more about how the people thought through what they were seeing...

Guide 4 said he would continue to use the thinking routines on his tours. Guide 4 felt that the CEC thinking routine was better suited for school groups rather than smaller family groups. He felt the IWJ routine suited him better. The confidence of this guide allowed him to work toward using the thinking routines successfully, while less confident guides found the routines awkward.

## **Chapter 5: Conclusions and Implications for the Field**

This chapter will discuss the major conclusions about each of the four tour guides in the study. The conclusions answer the two research questions: How does training tour guides with two thinking routines (interpretation with justification and connect, extend, challenge) alter the touring skills of guides in a historic site and based on the perception of the guide, how do thinking routines improve tours at a historic site? The researcher claims that the tour guides in this study improved their touring knowledge and skills while using the two thinking routines. In the following section, each tour guide will be discussed individually and then final conclusions for the study will be discussed. The last section of this chapter will detail future research suggestions and implications for the field of museum education.

### **Conclusions**

#### ***Conclusions: Guide 1***

Guide 1 was the most experienced tour guide in this study. In her pre-interview, it was clear that Guide 1 was well versed in touring practices and already had an established way of conducting tours. During the pre-interview, Guide 1 was forthright with her opinion about learning new things. Guide 1 was adamant that learning new techniques as a tour guide was very important. During the study, Guide 1 kept consistent journals and had many insightful comments about her experience. Guide 1 indicated that the thinking routines were helpful and helped visitors be engaged in the tour. Guide 1 also noted that the thinking routines, particularly the CEC routine, helped her stay

engaged as well. Guide 1 also mentioned having direct connections and very personal experiences while using the routines that sparked a new way of thinking in how she relayed information to visitors on a tour.

Guide 1 mentioned that time was a factor while using the thinking routines. Guide 1 felt that in order to really connect with visitors and engage them in the tour, more than ten minutes was needed. Many visitors do not stay long enough to take a tour that is longer. The researcher concludes that Guide 1 was the only guide to indicate the issue of time because of her awareness of her touring practice. Guides that were less experienced did not make such observations. Guide 1 also decided that she was comfortable using the routines, but preferred the Connect, Extend, Challenge routine for her tours. Guide 1 felt that the CEC routine made a “direct connect” with visitors despite the time factor previously mentioned. The CEC routine also made Guide 1 more active in her tour, which made it more enjoyable for her and the visitors.

Based on Guide 1’s interviews and journals she had a positive experience. Guide 1’s willingness at the beginning of the study to learn new techniques made it easier for her to learn the thinking routines and incorporate them into her tours. Guide 1 furthered her touring skills of engaging visitors with the use of the thinking routines. She also learned more about how to frame information in a different way to further engage visitors. The thinking routines caused Guide 1 to consider how she relayed information to visitors in a way that she had not previously tried.

***Conclusions: Guide 2***

Guide 2 was the least experienced tour guide in this study. In her pre-interview, Guide 2 was not as self-aware when it came to her touring practice. Guide 2 was willing to try new touring techniques, however she did not share Guide 1's opinion of its importance. The researcher felt that Guide 2 was reluctant but willing to participate in the study. Part of this observation came about because of Guide 2's fear of being awkward with visitors.

During the study, Guide 2 kept journals, however they were generally vague. Guide 2 did not always use detail in her journals, but had very detailed answers in her post-interview about her experience. Guide 2 felt that she was very awkward when using the thinking routines with visitors. Her approach to using the routines made it more difficult for her to engage with visitors, however Guide 2 found that she did benefit from the routines once she got past the awkwardness in the beginning. Guide 2 felt that she increased her knowledge about the site from having conversations with visitors while using the thinking routines.

In Guide 2's post-interview she did not express that the thinking routines improved her skills, however it did improve her knowledge. Analyzing her interviews and journals the researcher concluded that Guide 2 had a positive experience. Although positive, the researcher does not think that Guide 2 was aware of the impact that the study had on her touring skills. Based on Guide 2's pre and post-interviews, improvement was seen by the researcher.

***Conclusions: Guide 3***

Guide 3 was also one of the least experienced guides in the study, however he had previous teaching experience in the classroom. In Guide 3's pre-interview, he was aware of his touring practice and what needed improvement. Prior to this study, Guide 3 wanted to work on his touring skills with small children and acquiring more knowledge about the site. During the study, Guide 3 kept detailed journals about his experience. While using the thinking routines, Guide 3 felt like the routines were natural and similar to his previous teaching style. The researcher also found that Guide 3 had a natural ability to use the routines well.

With his natural ability, Guide 3 began to blend the two thinking routines together during the study. Guide 3 felt that the routines were similar and that the opportunity to use both together happened frequently. While Guide 3 used the routines together, he did notice that many elderly visitors were less apt to engage with him and his questions. Guide 3's journals detailed examples of this experience. Using the thinking routines seemed to help Guide 3 talk and engage with small children. Guide 3 felt that he benefited from using the routines and would continue to use them. He was confident that he was incorporating the routines into his tours following the study.

***Conclusions: Guide 4***

Guide 4 had the most experience after Guide 1. Guide 4 had the most detailed data collection in the study. In the pre-interview, Guide 4 felt that his tours were good, but need to work on his communication skills when it came to academic language. While using the thinking routines, Guide 4 felt that it helped him engage with visitors better

than before. However, like Guide 1, Guide 4 also mentioned that time was an issue on tours when using the thinking routines. In his journals, Guide 4 noted that the routines also helped his tours with foreign visitors. The researcher noted that 4 generally had longer tours than the other guides. Long conversations were a common occurrence on Guide 4's tours.

Guide 4 continued to keep very detailed journals throughout the study. The use of objects and the diversity of the subject matter covered on 4's tours allowed for a rich experience. At the end of the study, Guide 4 preferred to use the IWJ routine instead of the CEC routine because of time limitations. Guide 4 felt that the IWJ routine allowed him to look at objects in the church more closely, and therefore helped him engage more with visitors. The CEC routine was better suited to for larger groups according to Guide 4.

### **Overall Conclusions**

Following the end of this study, the researcher came to the conclusion that the tour guides benefited from the use of thinking routines on their tours. Each tour guide had a unique experience in which they enhanced their knowledge of the site and improved some of their touring skills from the use of thinking routines. Based on the pre and post-interviews, it can be surmised that each guide reached all or part of their goal from the beginning of the study. Goals included how tour information was relayed to visitors using the thinking routines and communication skills. Engagement with families, children and international visitors were also tour guide goals.

After analyzing the post-interviews, two tour guides concluded that they preferred the Connect, Extend, Challenge routine, in which guides connect a visitor's prior knowledge to something new, and the other two tour guides preferred the Interpretation with Justification routine, which can be used to analyze objects or spaces. Guides preferred the CEC routine because it created a direct connection between the visitor and the tour guide. Guide 3 preferred to use both thinking routines together because he felt they naturally went together well in his tours.

The researcher also concluded that while the tour guides benefited from using these routines there was a limitation that impacted the study. Time was the main factor that affected the success of each tour. Two guides mentioned that more time (at least 10 minutes) was needed when using the IWJ routine in order to dig deeper into tour content. As mentioned previously, the site chosen for this study did not always lend itself well to the use of the IWJ routine because of time constraints.

### **Suggestions for Future Research**

In the future it would be beneficial to do this study again with a longer training period. A longer training period would allow the researcher to have more time to observe the participants using the routines before data is collected. To that end, it is also beneficial for the tour guides to have ample time to practice using the routines before data collection. Following these suggestions, it would also be beneficial to begin the practice/training period with IWJ thinking routine first. This may allow for an easier transition to learning how to incorporate thinking routines in a tour. Because the IWJ routine allows for the tour guide to rely on the use of object the transition to using



thinking routines may be easier to manage. For example, a tour guide gives a tour and uses a particular object such as an arrowhead in order to use the thinking routine technique instead of using a conceptual idea like Native American tool making. Therefore, using the IWJ routine would make it easier for tour guides to learn and practice using the thinking routine in which they could rely on an object to format their tour.

The researcher would also suggest having the study conducted at another historic site to compare experiences. One of the conclusions of this study was that the site chosen might not always lend itself well to the IWJ thinking routine because of time constraints with visitors. Therefore, the researcher suggests having the study conducted at another site to compare the data and conclusions. The researcher also suggests that other thinking routines be used to study their impact on tours. One example would be I See/I Think/I Wonder routine from Artful Thinking. Visitors would be asked to talk about something they see, something they think about what they see, and something they wonder about what they see.

Along with this, the researcher suggests that visitors be surveyed and observed using the Six Continua method created by Project Zero to assess student thinking. The Six Continua method is a rubric system that scores thinking on a scale of 1- 4, with one being the lowest and four being the highest (See Appendix page 141). Key words used to describe the low end of the spectrum on the rubric are: obvious, fuzzy, simplistic, one-dimensional, restricted, and tangential. Key phrases used to describe the high end of the spectrum on the rubric are: beyond the given, clear & focused, elaborated, multi-dimensional, generative, and essence capturing.

### **Applicability to the Field**

Inquiry-based teaching methods are now an integral part of the field of museum education. Science museums and art museums, in particular, use inquiry techniques to promote critical thinking during programs and tours. Historic sites, however, have yet to reach their maximum potential when it comes to the use of inquiry-based teaching. An increased use of inquiry-based teaching methods in historic sites would be beneficial to the tour guides, visitors, and the future of the historic site. While the practice of using thinking routines in other sites would be beneficial, there are important factors to consider. Before integrating inquiry-based teaching strategies, such as thinking routines, the site or museum should consider visitor motivations and expectations of their visit. Questions to consider might include; what does our audience expect on their visit/tour and why are they visiting our site/museum? Besides considering the visitors, it is also important to consider what the type of site/museum that is considering implementing new teaching strategies. As mentioned previously, there is a lot of diversity in they type of historic site. Whether a house, battlefield, or park, etc. the site needs to decide whether inquiry-based teaching supports their mission and promotes their future interpretation goals. Another important factor to consider is resources. Site administrators should consider whether they have the monetary and personnel resources to train tour guides.

As asserted in this study, art museum techniques can be applied in historic sites. The connections between art, science, history, etc. provide museums and sites with a unique opportunity to teach subject matter while encouraging analytical thinking skills. If a site or museum decides to implement teaching techniques, like thinking routines, the length of tours in relation to the level of engagement on each tour should be considered.

Can educators and tour guides promote critical thinking and teach about a particular subject matter in a constrained time frame? Can the tour be successful this way in terms of engagement? These are questions that museum educators and tour guides should seek to answer when considering different teaching techniques that may be associated with another type of institution.

The researcher also recommends that historic sites and museums continue to foster the willingness to learn new techniques and material in their employees. Routine training and professional development can accomplish this. Without the willingness to learn new ways of teaching a site or museum cannot continue to successfully educate the public because of generational differences and the fast-paced society we live in. As the American education system changes, museums and historic sites need to change as well to compensate for the gap between formal and informal education.

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## Appendix I



### **Sample Tour Information**

Welcome to Christ Church, established in 1695; Christ Church was founded as the first parish of the Church of England in the colony of Pennsylvania. It remains, as we were an active church in a changing city. The present building was built between 1727 and 1744. This is little information about the original church completed in 1696.

The 200-foot steeple was completed in 1754, making this the tallest building in the 12 colonies for 56 years. Known throughout the world as Philadelphia Steeple, this was a landmark used by ships coming into the Port of Philadelphia. Benjamin Franklin helped to raise funds to build the steeple by managing 3 lotteries. There are 11 bells in the steeple, 8 of them original to 1754. These bells were cast in London at Whitechapel, where the Liberty Bell was cast. The bells rang out with the Liberty Bell when the Declaration of Independence was first read to the public on July 8, 1776.

Christ Church is known as the Nation's Church. Many famous Revolutionary era leaders worshiped here. 15 of the 56 signers of the Declaration of Independence were members of the Church. Seven signers of the Declaration and four signers of the Constitution are buried on Christ Church property. Signers included Benjamin Rush, Robert Morris, Benjamin Franklin, Francis Hopkinson, George Ross, and Joseph Hewes.

In the back of the Church is the Curtis Memorial Organ. The case dates to 1834, the instrument to 1935. The pipes were brought from the home of Cyrus Curtis, publisher of the Saturday Evening Post, upon his death.

Also in the back of the Church is the oldest and most treasured item in the Church, the Penn Baptismal Font. William Penn, the founder of Pennsylvania, was baptized from this font in 1644 at All Hallows Barking by the Tower of London. The font was a gift to the Church from All Hallows in 1697. It is believed to be of early 15<sup>th</sup> century origin.

The chandelier in the center aisle dates to 1744. It is one of the oldest large chandeliers in America. Its 24 candles are lit for evening services and special occasions. It has witnessed many memorable events. It was lit when Sally Franklin, daughter of Benjamin Franklin, was wed to Richard Bache on October 29, 1767.

The graves in the aisle date from the time this was the Church of England. It was an early Christian custom to bury important people within the Church. Two of the most well known people are John Penn, grandson of William Penn, and Bishop William White. Jonathon Folwell, who made the rising sun chair in Independence Hall, made the pulpit in front of the church, called a wineglass pulpit.

### **Appendix II**

### Post-Shift Journal Instrument

**Date:**

**Guide Number:**

**Following your shift, fill out the questions below with as much detail as possible. If you need more space, write the question number on the back and continue writing.**

1. Describe your most memorable tour today in detail as it relates to the use of the thinking routine.
  
  
  
  
  
  
  
  
  
  
2. Did the Connect, Extend, Challenge thinking routine improve your interaction with visitors today, why or why not?
  
  
  
  
  
  
  
  
  
  
3. Did the thinking routine impact your tours in any way today, why or why not?
  
  
  
  
  
  
  
  
  
  
4. Explain in what context you used the thinking routine on your tours today. Be Specific.
  
  
  
  
  
  
  
  
  
  
5. Is there anything else you would like to add?

### **Post-Shift Journal Instrument**

**Date:**                      **Guide Number:**

**Following your shift, fill out the questions below with as much detail as possible. If you need more space, write the question number on the back and continue writing.**

1. Describe your most memorable tour today in detail as it relates to the use of the thinking routine.
  
2. Did the Interpretation with Justification thinking routine improve your interaction with visitors today, why or why not?
  
3. Did the thinking routine impact your tours in any way today, why or why not?
  
4. Explain in what context you used the thinking routine on your tours today. Be Specific.
  
5. Is there anything else you would like to add?

### Training Information Packet

1. Use your assigned routine for two weeks during your tours/talks.
  2. Use them with children and adults.
  3. Be sure to fill out the journaling sheet at the end of each day or when it is convenient. It must be done the day you give the tours!
  4. After two weeks you will be emailed to remind you to change routines.
- Thinking Routine 1:

**Connect:** How are the ideas and information presented connected to what you already knew?

**Extend:** What new ideas did you get that extended or pushed your thinking in new directions?

**Challenge:** What is still challenging or confusing for you to get your mind around?

#### **What kind of thinking does this routine encourage?**

The routine helps students make connections between new ideas and prior knowledge. It also encourages them to take stock of ongoing questions, puzzles and difficulties as they reflect on what they are learning.

#### **When and Where can it be used?**

The natural place to use the Connect-Extend-Challenge routine is after students have learned something new. It doesn't matter how much they have learned – it can be a lesson's worth, or a unit's worth. The routine is broadly applicable: Use it after students have explored a work of art, or anything else in the curriculum. Try it as a reflection during a lesson, after a longer project, or when completing a unit of study. Try using it after another routine!

#### **What are some tips for starting and using this routine?**

This routine works well with the whole class, in small groups or individually. Keep a visible record of students' ideas. If you are working in a group, ask students to share some of their thoughts and collect a list of ideas in each of the three categories. Or have students write their individual responses on post-it notes and add them to a class chart. Keep students' visible thinking alive over time: Continually add new ideas to the lists and revisit the ideas and questions on the chart as students' understanding around a topic develops.

\* Do not use on children that look under 11 or 12.

## **Thinking Routine 2:**

**Interpretation:** What is going on?

**Justification:** What makes you say that?

### **What kind of thinking does this routine encourage?**

This routine helps students describe what they see or know and asks them to build explanations. It promotes evidential reasoning (evidence-based reasoning) and because it invites students to share their interpretations, it encourages students to understand alternatives and multiple perspectives.

### **When and where can I use it?**

Because the basic questions in this routine are flexible, it is useful when looking at objects such as works of art or historical artifacts, but it can also be used to explore a poem, make scientific observations and hypothesis, or investigate more conceptual ideas (i.e., democracy). The routine can be adapted for use with almost any subject and may also be useful for gathering information on students' general concepts when introducing a new topic.

### **What are some tips for starting and using this routine?**

In most cases, the routine takes the shape of a whole class or group conversation around an object or topic, but can also be used in small groups or by individuals. When first introducing the routine, the teacher may scaffold students by continually asking the follow-up questions after a student gives an interpretation. Over time students may begin to automatically support their interpretations with evidence without even being asked, and eventually students will begin to internalize the routine.

When using this routine in a group conversation it may be necessary to think of alternative forms of documentation that do not interfere with the flow of the discussion. One option is to record class discussions using video or audio. Listening and noting students' use of language of thinking can help you see their development. Students' words and language can serve as a form of documentation that helps create a rubric for what makes a good interpretation or for what constitutes good reasoning.

Another option is to make a chart or keep an ongoing list of explanations posted in the classroom. As interpretations develop, note changes and have further discussion about these new explanations. These lists can also invite further inquiry and searches for evidence. Other options for both group and individual work include students documenting their own interpretations through sketches, drawings, models, and writing, all of which can be displayed and revisited in the classroom.

\*Can be used for all ages over 5.

## **Appendix IV**

## Data

### Contact Summary Sheet Pre-Interview

Interviewer: SGH                      Interviewee: 1A                      Gender: Female  
 Contact Date: 6/17/14  
 Place of Interview: Harding Room, Neighborhood House

1. What were the main issues or themes that stuck out to you in this contact?
  - Touring method/practice changes with each tour. Tailored to what the group dynamic is like.
  - Extremely willing to try new things and thinks that it is very important to this line of work.
  - Takes curriculum or interests into consideration on tours.
  - Engages visitors with objects and uses enthusiasm on tours.
  - Always practices customer service.
2. What discrepancies, if any, did you note in the interviewee's responses?
  - None
3. Anything else that stuck out as salient, interesting, or important in this contact?
  - Very aware of touring practice and what needs improvement.
  - Was very enthusiastic about her work.
  - Very experienced and it shows
  - Friendly and easy to chat with, showed that even in the interview she expressed her touring skills.
4. How does this compare to other data collections?
  - 1A was the most talkative.
  - 1A is the most experienced.
  - 1A was more forth coming and open with information.
  - 1A and 3B have similar thoughts on learning new things.

#### Researcher's Notes:

-Guide 1A seemed semi-confident about answering the question about how her tours were conducted before this study began. She mentions trying to engage in visitor's interests, while noting their age and background. She also mentioned she sometimes asks visitors questions, however, her body language (casual shrugs) suggests that she may not do that in reality.

-Guide 1A was very animated and had strong body language when responding to the question about if she would be comfortable learning and using new techniques on her tours. She was very adamant that as a tour guide learning and change are necessary. She

also mentioned that tour guides need to be animated and fun, but also know their group well.

-Guide 1A educational background; BFA in English Art, MFA in Art. Worked at the Physick House Historic Site for 14 years as an interpreter, belongs to seven different touring groups, also does tours for the Mural Arts Program and the Pennsylvania Academy of Fine Arts. She has also worked at the site for this study for over ten years.

**Transcription by SGH**

**Duration: 30:00**

SGH: And how long have you been a guide here?

1A: So long, I have no clue.

SGH: Really...

1A: No, I can't remember dates.

SGH: Want to take a guess?

1A: ...

SGH: I may be able to look it up...[laughs]

1A: Yeah you can. I don't know. To tell you the truth it all just blends in. I just can't keep it all together. So it has been many years. Umm...I really don't know. It doesn't..See you know it doesn't matter to me. None of that stuff matters to me you know what I mean.

SGH: Yes.

1A: It doesn't, time has no relevancy to me...

SGH: It's more about the experience?

1A: Well, no I kind of live in the bigger picture.....You know time is just a detail.

SGH: Umm...I wish I felt that way about it.

1A: [Laughs] No it's not about time controlling me, its about me being in time.

SGH: That's one way to look at it. Ok, so lets see...So now I'm just going to ask about like, the different ways like, what your touring practice is like, is there like a method that you, I don't know if method is the right word per say.

1A: Can you give me an example.

SGH: Yeah, I mean is, is there a particular way that you like to give your tours, in general?

1A: It changes, it changes with each tour I ...

SGH: Yeah, as it should.

1a: I, I... find [laughs together] It's true. I you know, I don't want to say analyze but I you know, what's another word for that. Umm by looking at the group and, and determining, I determine umm what the interests might be of the age...and backgrounds of the guest... and focus... on what I think would be of most interest to them... as well as curriculum requirements for schools.

SGH: Yeah, yah...

1A: You know that is a requirement I understand them...

SGH: Do you ask... do you ask questions? Do you like to pose questions on your tours or do you just...

1A: I do, but its not...It doesn't always resound. Sometimes you get no response.

SGH: Yeah, depends on the group.

1A: So I you know, I build into it...uh I first build in till I know their engaged...

SGH: Mummm...

1A: And then I start to you know, so there is some type of connection, to build a connection.



SGH: Yeah...

1A: And then I start asking questions. So you just you know right (Snap/clap of hands) not sit down and start peppering them with questions their not going to respond too.

SGH: Yeah....well yeah exactly there's like an art to it.

1A: Um hum.

SGH: Really there is.

1A: You have to engage them first. And so you know there is a time... element involved...

SGH: Yeah...

1A: You know to know that you have...engaged their interests and then you engage them...

SGH: Ummm... Well there are definitely...I feel like especially in the Church there are always certain topics that I always know kids will ask... they will always...their hands go up...

1A: Umm Humm.

SGH: ... as soon as you say it. I don't know it that happens to you [Both Laugh] there is like a trend with... like what fascinates people.

1A: Well it depends...Different ages things will fascinate them. Kids are always fascinated by the graves, but the adults might not even notice them.

SGH: True...

1A: They will be looking at something else that is interesting to an adult that the children might ...There floor level (Yeah that's what they see) so they might...they see that first. And it's unusual and it's not something they have seen before.

SGH: Really...

1A: Adults have seen it in other countries. So there's a very different thing, you know, about...where...how old and culturally, where their from.

SGH: Yeah... So how do you feel about adding these new things, like what do you think about it?

1A: I think....

SGH: ...adding new things in general...

1A: No, I think, I think we should always be open to...

SGH/1A: Change [said together]

1A: Change is, is, is it difficult or is it different?

SGH: Yeah.

1A: You know because it's your choice. Is it difficult or is it just different?

...And you have to ask yourself that...you know because it is new...[long pause] But if you go- it's like riding a bike...It's difficult when you first get on.

SGH: Yeah.

1A: But...it-it's just-you have to learn...how to feel different.

SGH: Yeah [in agreement]

1A: So it's a-it's a learning thing. And I think we should always be open to...creative ways of doing [it].

SGH: Especially in touring...people change, you have to change your tour.

1A: Constantly...you can't-doing the same thing

SGH: I think it's a little scary a lot of historic sites are kind of stuck in the 1980s [laughs] in terms of like educational practice and theory. Like they, are stuck in their old

like...this is how I give a tour...I tell you about the furniture and the- this and that. And that's it.

1A: I have to have fun. If I don't enjoy my tour...I'm not happy...I have to enjoy the people and exchange. [Long pause]

SGH: And that is what it's about.

1A: Umm hum...So but- They will under- They will feel my enthusiasm...and-and build on it. [Pause] That's important. [Pause] If I'm not engaged...they will never engage.

SGH: Yeah, exactly. [Pause]

1A: So when you hear somebody giving just (factsmeal)...it's like [makes snoring noises].

SGH: [Laughs]

1A: It could be interesting...

SGH: Sure...

1A: But, it's not engaging. It's like you know...going to some of these college...workshops [SGH: Lectures] Lectures...Right [SGH:Yeah]...They have all this information and their not engaging you and their just putting you to sleep.

SGH: Umm hum...[Pause]

1A: They are not taught all the time how to...deliver...

SGH: Yeah, my professor, actually, for education stuff...She-I just took a class in educational programming and part of that was learning how to write up a tour outline [1A: Umm hum...] and how to give tours [1A: Umm hum...] and do- she has this cart of like dollar store toys [1A: Umm hum...] like from the dollar store and so it's all these different like aquatic animals, safari animals, tubes of cowboys and Indians, like random

things [1A: Umm hum...] and we have to pick three objects and then give a tour about it to our class.

1A: YEAH! [Loud shriek] That's so fun!

SGH: It sounds like fun, but it's actually really hard, she gives you like ten minutes. [1A: Umm Hum...] Yeah- She's like sometimes groups just show up and you gotta give them a tour, so you better be able to...

1A: Yeah, but you don't know that much about aquatic animals.

SGH: That's why we always pick the ones we like.

1A: Yeah, of course.

SGH: I always pick the uhh little doll furniture, which was the 18<sup>th</sup> century house...[1A: OHHH!] And [Laughs] it's hard to pick things that I thought I would know something about. [1A: Umm hum...] So it sounded good. [Pause] I think our last tour I had... what was my- oh I did seashells...that was a bit of a stretch for me. [1A: Ummm...] These three seashells that were different shapes[bang in background]

1A: Different colors?

SGH: Yes [Garbled]

1A: You know what I would have done...[laughs] I would have gone "ok , I'm Ariel and I'm at the bottom of the sea, WELCOME to my world!"

SGH: [Laughs] I think I had like eight...I think she assigned us an age group. [1A: Uh huh...] I think I had like seventh grade [1A: Uh huh...] Ummm. I'd- We did kindergarten once at the Academy...we did ummm... we had to pick... our teacher assigned us an age group and we had to stand in front of one of the dioramas [1A: OH! (cute)...] and give a talk [Yeah] I had like first grade.

1A: Well remember Mrs. Doubtfire and the animals [Yes] [Animal noises] I always think that, that is sort of like...kids love that kind of stuff you know [Yeah] and you know the animal [Long pause] and family relationships [garbled]

SGH: But these weren't actual children it was just my class. [I know but...] [Garbled]  
Which is fine ...

1A: I would have had just as much fun with them. That's when they say that whole thing with Mrs. Doubtfire, I think that's a wonderful way...to send- show you that clip...in a teaching class [Yeah] of him you know playing with the dinosaurs [Yeah] and the guys watching him and saying oh my god that is exactly how we want people to present them. You know so they'll get it...

SGH: She also had us watch the video on umm... [lip smack] Disney's visitor services [Oh[surprised] Umm that's the rules for visitor services, cause Disney is apparently...

1A: ...Wrote the book on it.

SGH: Yeah their the best in the world and so we watched the little video...[Long Pause]  
Some people I think need [in laughter] to watch that film...[laughter] it was just- it is very you know...always smile you know...diffuse the situation...you know [Umm hum...] Don't....you know... certainly no yelling at the customer [laughs] You know don't get irritated [Umm hum...] there are just some days where you can't ...

1A: No, everybody should...in-in customer service- you must do that...I was trained by Neman Marcus customer service. Literally they wrote a book and we had to read the book and we were trained in customer service and retail so...there is an art.

SGH: There is and that stuff carries over and- into our line of work because we got [Talking at same time/Garbled] We have to be umm the ones serving the public.

1A: Absolutely.

SGH: So, before we finish tell me about your education and background...

1A: Well I got a BFA in English Art, MFA in Art at Oxford. Then I worked and lived at the Physick House Historic Site for 14 years as an interpreter... Now I belong to seven different touring groups, and I also do tours for the Mural Arts Program and the Pennsylvania Academy of Fine Arts...

## **Post-Shift Journal**

Guide Number: 1A

### **1. Describe your most memorable tour today in detail as it relates to the use of the thinking routine.**

1-CEC- A student tour group from California. Young teens-towards end of day. I asked them to imagine sitting in their seats as the signers of the Declaration who had signed their lives away or a death warrant.

2-CEC- French family had no idea about the strong French connection besides La Fayette. They were very engaged with enthusiasm as the new information opened their minds to the “real” people working together or welcomed as exiles from riots in Hispanola and France. Create a new life or an “American” life.

3-CEC- Students on a scavenger hunt. Looking around but not learning much from it. Sat them in the G.W. Pew for a photo to engage them personally with him. Before they just hit and ran.

1-IWJ- Graves in the floor were highlighted to students among other things to a tour group to use as an object to think about. It makes you present your story with a response from the guests with and end result.

2-IWJ- Construction worker fixing church door. Was reading the grave markers in the floor. Asked what they were. Who, what, where, when sort of thing. He was very interested to learn more about them and the church in a 8min. dialogue.

### **2. Did the Connect, Extend, Challenge thinking routine improve your interaction with visitors today, why or why not?**

1-CEC- I like to challenge student and all guests to look at history through fresh eyes and unexpected information. I feel it worked well when you have time to express new ideas. It is no easy with a 10 min. group tour. I think it does because you do “connect” and feel the guests engage in the new ideas.

2-CEC- Yes, They connect with you and the new ideas and you feel and understand through shared cultures from the past to our own shared experience between us right now. A direct Connect. Yes, it makes a personal connection through “new” information for them.

3-CEC- Yes, they learned many new facts but I asked them to sit up and act like a president and follow his rules of civility which he wrote at 14, for the rest of their lives like him. They responded and could relate to a young G.W. with dreams and goals like themselves. They connected with me, they can use their imagination to picture themselves as a young G.W. growing into a future president.

1-IWJ- It is a little harder as you need there to be dialogue with you and develop thoughts and responses. You have to think about how you will present the ideas to them to encourage exchange. It does when you have time to do it. I love to get them thinking about the ideas and ideals presented as a part of our historic past.

2-IWJ- Yes, he said he got chills thinking about all the people now in the floor and the founding fathers who also walked over them. Knowing we will all follow into death.

### **3. Did the thinking routine impact your tours in any way today, why or why not?**

1-CEC- It is a great way to engage young adults in thinking about how history impacts their own lives.

2-CEC- I had to think about putting it like a way to encourage dialogue as in a tour-I am often the only speaker.

3-CEC- It really does if you have enough time to engage guest in a new idea with time to process that information in a new way.

1-IWJ- I have to think about how I approach the subject differently but it is a good thing. I have to approach it like the students do with a new idea.

2-IWJ- Yes and no. Younger people easily give a flip answer until you keep them in multiple questions to engage them.

**4. Explain in what context you used the thinking routine on your tours today. Be Specific.**

1-CEC- To learn new information but to not just hear it but to “feel” it, experience it as their own choices as well.

2-CEC- To illuminate exciting knowledge and make them to look at it through a different lens. Open their minds not just to receive information but to process it themselves and THINK about it ads above information.

3-CEC- I ask them to push beyond what they already know to find a way to relate to the individuals who sat in the seat before them and how to alleal the new information in their own lives.

1-IWJ- Students were asked what they were-Why are they here? Who are the people? Do you want to walk on them? Why?

2-IWJ- Getting guests to tell me their thoughts on what they think about an object in more depth and hopefully how it relates to their own experience.

**5. Is there anything else you would like to add?**

2-CEC- It was very different from speaking about art or artifacts. It is all about the thought process.

2-IWJ- This technique needs more time to flesh out but it is also very effective as a tool to connect with the past.

**Contact Summary Sheet  
Post-Interview**

Interviewer: SGH                      Interviewee: 1A                      Gender: Female

Contact Date: 8/5/14

Place of Interview: Harding Room, Neighborhood House

5. What were the main issues or themes that stuck out to you in this contact?
  - 1A had a fulfilling experience.
  - She felt that the routines helped her process her tour information in a new way that helped her channel what visitors were thinking.
  - Positive experience.
  - Still really willing to continue using the routines
  - Time was an issue.
  - Like the CEC better than IWJ
  - “Direct Connect” –Insightful comments
6. What discrepancies, if any, did you note in the interviewee’s responses?



- None.
- 7. Anything else that stuck out as salient, interesting, or important in this contact?
  - It seems that 1A had a lot of fun using the routines and found that they helped her give a more engaging tour that people enjoyed.
- 8. How does this compare to other data collections?
  - Second post interview.
  - Researcher stuck to the proscribed questions more in this interview than the others.

Researcher's Notes:

-Same confidence in the interview.

-She was really excited to tell the researcher about her experience.

-Body language and inflection in voice made it seem that 1A gained a lot from the experience.

**Transcription by Researcher**

**Duration: 14:09**

SGH: So...I would like to begin with you telling me about how it went and if you think the routines helped your tours?

1A: Well...I think that the routines were helpful. I think that I like the connecting one better.

SGH: ...Is there particular reason you like that one better?

1A: I liked that I could really get through to people....you know...

SGH: Yeah. Lets talk about that in detail in a minute. So lets switch gear real quick...was the experience as you expected?

1A: [Pause] Yes...Umm I mean it was somewhat what I expected...I guess I expected that it would be helpful, but I didn't account for the time issues that happened.

SGH: So time was an issue?

1A: Yes it was. If I didn't have at least ten minutes or longer with people...I don't think it was helpful. Once I would scratch the surface...I...I needed to start another tour...you know. So... It was good while I had the time.

SGH: With the time issue in mind, do you think that the routines helped you or the visitor more?

1A: I...I guess it helped both when I think about it. Giving my tours this way made me think more about how a visitor might process what I tell them...you know...

SGH: Then where questions or comments from visitors different... while use used the routines?

1A: Umm... I think comments were...there was a lot more talking...like conversation going on.

SGH: Was it comfortable?

1A: I ...I think so...I mean ...I was comfortable with it [laughs].

SGH: Right. So...what about touring skills and knowledge... Did the routines help your knowledge at all or your touring skills?

1A: Yes and no...I mean I felt like it made me think through a different process and I liked the change. It made me think of objects in the church a different way...I don't know about knowledge...I think it improved my knowledge of visitors' not...not content knowledge...you know what I mean...?

SGH: Yes...

SGH: So...tell me more about how you used them?

1A: Well tried to use them as much as possible .... I wanted people to be more active with me on the tour so I tried to make it exciting and use information I thought would be really interesting for them. I like to put people in the time frame and make them think about being...being in someone else's shoes....you know...I...I think that is powerful for most people.

SGH: I agree...you mentioned in one of the journals that you did that.

1A: Right...I really want people to feel the history, not just hear it...you know...no one gets anything out of it that way. Feeling and engaging is so so important.

SGH: So, which routine did you like using the most during this experience?

1A: Well I think that the first one was the best...

SGH: The connect, extend, challenge?

1A: Yes...[Pause]

SGH: Why is that? Was it easier to use or something else?

1A: I...I guess I found it easier to use in the time that I had. I felt like...like I got more out of it and the people on the tour did too...you know...

SGH: Yeah...you mentioned in one of your journals that there was a “direct connect.”

Can you tell me more about that? Like...some more details.

1A: Right! That is exactly what I mean...the direct connect...the direct connection with the visitor and I...I felt it on more than one tour.

SGH: So besides time...what was it about the other routine you didn't like or found difficult?

1A: Well I like the idea and it worked well with a bit more time...I guess...umm...I guess I just didn't connect with it as well...

SGH: Didn't connect how?

1A: Well...I didn't feel the same direct connection as I did before. Talking about the objects was fun but it just didn't have the same effect you know...But I did like to use the other one...

SGH: Like how?

1A: Umm...I guess I like to use it because of how I get to use it...I like that I can use it with objects or to talk about difficult things.

SGH: Like what?

1A: Like the graves in the floor...I find sometimes...umm that they are difficult for people to understand the custom or to be comfortable around.

SGH: So do you think will you continue to use the routines on your tours?

1A: I think I will. I enjoyed using them, especially the first one...I think I will keep at it and see where it takes me...Like I have told you before...change is good and it is important for tours...I wouldn't be a good tour guide if I didn't...try to learn new things...you know it's soooo important to do that...not enough people do that...

SGH: Yeah...I agree. So is there anything else you want to tell me or talk about?

1A: Ummm...just that this was fun and a really interesting experience for me. I am all about having fun while working.

**Contact Summary Sheet  
Pre-Interview**

Interviewer: SGH                      Interviewee: 2A                      Gender: Female  
Contact Date: 6/16/14  
Place of Interview: Harding Room, Neighborhood House

9. What were the main issues or themes that stuck out to you in this contact?

- Likes to work with mainly small groups. Doesn't seem like she is willing to try very large ones.
- Gives a general history of the site. Lets people come to her first.
- Tries to talk about what interests the visitor
- Seems to be unsure about trying new methods- claims to at least try.
- Program delivery needs work. She thinks she is awkward with some visitors. It seems to me that she feels awkward about how to approach visitors when they first arrive. This may be why she waits for them to have a question before she says anything or begins a tour.
- She has little experience in historic site touring. Not formally trained.

10. What discrepancies, if any, did you note in the interviewee's responses?

- Unsure about using new methods. It seems like she doesn't think she needs to improve much, only when pressed more with probing questions is that somewhat admitted.
- When asked about what needs improvement she thinks there isn't much. She has to ponder an answer. Finally decides that she needs to work on information delivery.

11. Anything else that stuck out as salient, interesting, or important in this contact?

- 2A seems to not be as open to change. This might impact how she does in the rest of the study.
- 2A was surprisingly comfortable mentioning that she thinks her program delivery is awkward, however, she was uncomfortable to admit she needed to work on anything in particular with her touring practice and knowledge.

12. How does this compare to other data collections?

- Compared to 1A, 2B is very inexperienced. 1A expressed much more interest in change and learning.
- Compared to 3B, 2B wasn't as descriptive or forthcoming with information about her current touring practice.
- Overall, 2B seems to be the least likely to acknowledge that her tours need improvement of any kind.

Researcher's Notes:

- Guide 2A was very comfortable in the interview. She had open body language and was able to comfortably and confidently answer the questions.
- Discussion of the current touring methods she mentioned giving general information about the early Church, Neil's Commercial (go see the giftshop), have the visitors sit in different pews, discuss the founding fathers.
- 2A usually works with small groups.
- Thinks learning new things is positive.
- Said she works better with smaller groups-needs improvement with larger groups.
- Likes to tailor the tours to individual groups.
- Experience: BA in English writing and History. Experience with ghost tours, Elfreth's Alley, and Physick House. Only a guide at the Church for four months at the start of this study. Guide experience in total three years.

**Transcription by SGH**  
**Duration 13:25**

SGH: Ok so we are going to talk a little bit about how you currently conduct you tours in the Church. Tell me a little about that...

2A: Umm...well I usually let people look around and I-I wait a little bit to see if they have questions. Or sometimes I will show them Ben or Washington's pew and then start talking about a few things in the Church...

SGH: Like what? Give me some examples...

2A: [Long Pause] Well I talk about what kind of church it is and some of the history. The usual....like this is an Episcopal church that was Church of England...Umm...I talk about the pews some of the stuff like the font or the chandelier. People like to hear about that stuff because it is soooo old.

SGH: Ok so do you try to....make the tour follow your visitors interests? Like how do you tailor you tours to visitors? Or do you not generally do that?

2A: I usually try to find out what they are interested in...umm....sometimes I try to find out their interests through their questions or I will ask what they are interested in. Usually

it is ...umm...I usually try to pick one thing like a person or something in the Church that matches their interests. Most people like to talk about how long the church has been open and still has services...or they ask about the font and stuff like that. Oh I-I also give Neil's commercial after....go to the gifts shop and such. We need the money.

SGH: That is true...So you will be learning some new techniques to use on your tours. How do you feel about learning new things like this? Do you think it's good or will help in some way?

2A: I think...I think it might. I am open to at least umm trying...I think it is worth it to at least try. You have to do that at the very least.

SGH: Right...With that being said do you think that your current way of giving tours is working or could it use some improvement, do you think?

2A: I think that I could...umm...use some work. I am kind of awkward sometimes. So, I think that I need to work on umm how I ask things and when I ask them. Sometimes...I-I ask things and or say some things that seem awkward. So yeah I think that I need some improvement even though I have done this for a while.

SGH: So you think that your method or the information delivery needs work?

2A: Mostly, I just want to try and be a little less awkward.... Or something like that.

SGH: Ok so lets just talk about your experience and education real quick...

2A: Ok I went to a small college and got a degree in English writing and history. After school I worked at Elfreth's Alley and the Battleship New Jersey. I did tours and helped do a ghost tour once for them. Umm... so I still work for the battleship but I work in the gift shop...then I also work here. That has been for a few months... Like four months.

## Post-Shift Journal Transcription

Guide Number: 2B

### **1. Describe your most memorable tour today in detail as it relates to the use of the thinking routine.**

1-CEC- A family of four from Seattle. They mostly thought about how what they learned was all connected in terms of architecture-the wife was an architect.

2-CEC- A family of three from Richmond. It was a bit awkward as mom was sort of put on the spot by dad and daughter. Like high school all over again.

1-IWJ- I gave a tour to a gentleman who was an architecture professor/ enthusiast.

2-IWJ- A family with a bunch of older kids who had lots of questions.

3-IWJ- An older couple whom focused mostly on the architecture.

4-IWJ- A couple one from Minnesota the other from Ca.

### **2. Did the Connect, Extend, Challenge thinking/ Interpretation with Justification routine improve your interaction with visitors today, why or why not?**

1-CEC- Not necessarily, but only because for a lot of the people I interacted with, the Church was their first stop, so they didn't really have anything to connect/relate to.

2-CEC- It led to some interesting conversations, especially because unlike the family from Seattle, Christ Church wasn't the first thing they saw in Philly so they had more to relate to.

1-IWJ- Definitely! I even learned something new. I learned that the architecture of the building is technically Palladian and it kinda stuck in the gentleman's craw to call it "Georgian."

2-IWJ- Definitely! It improved in that it led the kids to open up more and ask questions of their own.

3-IWJ- Sort of this particular memorable tour was a little more awkward.

4-IWJ- Not necessarily they were perfectly nice but it didn't really alter the conversation at all.



**3. Did the thinking routine impact your tours in any way today, why or why not?**

1-CEC-See #2

2-CEC- It definitely made it a more positive experience for me. It sparks interesting conversation and it is fun to see what people come up with.

1-IWJ- I think it impacted the tour positively. It is always awesome when event the guide learns something new!

2-IWJ- I think so-as aforementioned it opened up more conversation.

3-IWJ-Not Answered.

4-IWJ- Not necessarily it didn't seem to affect it positively or negatively.

**4. Explain in what context you used the thinking routine on your tours today. Be Specific.**

1-CEC- Mostly in just trying to relate it to everything else they might have seen. The founding fathers at independence hall worshipped here, etc.

2-CEC- We spoke about the Church and the other historical places they visited and I asked how their tours related to the other places and what they knew.

1-IWJ- We spoke about Bishop White's grave because he was very interested in the detail then about the architecture.

2-IWJ- I decided to give them the "spiel" first and then ask.

3-IWJ- Mostly we talked about the architecture and its similarity to old north.

4-IWJ- We spoke about the windows and they asked why they are clear. I took the opportunity to use the routine they explained.

**5. Is there anything else you would like to add?**

**Contact Summary Sheet**  
**Post-Interview**

Interviewer: SGH                      Interviewee: 2A                      Gender: Female  
Contact Date: 8/4/14  
Place of Interview: Harding Room, Neighborhood House

1. What were the main issues or themes that stuck out to you in this contact?
2. What discrepancies, if any, did you note in the interviewee's responses?
3. Anything else that stuck out as salient, interesting, or important in this contact?
4. How does this compare to other data collections?

**Researcher's Notes:**

- 2A used quite a bit of hand motions in the conversation.
- Once again seemed very confident in her answers.
- The conversation was friendlier than the pre-interview.
- Interviewer rephrased the questions where the conversation allowed.
- 

**Transcription**  
**Duration 27:53**

SGH: Ok...I am actually ready...for once[Background noise] [Laughs] I'm making sure this thing is working because...the button didn't get pressed properly...ok I think it's fine. Ok so the first question is do you... did you think that using these thinking routines like improved your tours in any way or...did it help you at all?

2A: [Long pause] Not....[Brief pause]Really...and I don't mean that like no, not at all, I just [Pause] It didn't really improve them but it wasn't a bad thing either... you know what I mean for the most part?

SGH: Yeah...I think...Did it, ok, maybe not but lets just kind of break it a part a little...Did it improve it more for the visitor or for you? Is it separate?

2A: It's possible more for the visitor...

SGH: Ok...

2A: I mean...I don't read their minds...but, I'd say that maybe for the visitor yeah...ummm for me[Pause] I've found that for the most part ...you know...there are one or two times where I like learned something or whatever...but on the whole I think[Long Pause]...that they didn't [Long Pause]...I don't really know how to put this into words...they didn't[Long pause]...Just make it...like a giant magical improvement or anything...

SGH: Well yeah...and what I mean...well it wasn't really an expectation...

2A: Right...

SGH: But a little improvement is still something...

2A: Right...Yeah and there is that, you are right...ummm so, at times yes there were you know definite, you know improvements. Ummm...but on the whole[ Long Pause] on the whole I'd say...I guess yes...because there was a small improvement.

SGH: So...can you give me an example...Can you remember anything?

2A: Ummm...[Pause] Sure...Like today...ummm...

SGH: We're not gonna do today we are gonna do earlier first...

2A: Ok the first one...I spoke with a gentleman who was an architecture professor{Reference Journal 7/21} I forget where...

SGH: And this was using the Connect, Extend, Challenge routine?

2A: Right. Ummm...the first one I did for the second part of your thing...ummm he was an architecture professor from...somewhere...umm and he was into Bishop William White...William White's grave...So we were talking about William White's grave and all the fancy things that are all around it...Ummm and then we started talking about the architecture and I'm like [Garbled....amazing architecture]

and a bunch of people had always asked me what type of architecture was in the Church, but I never really [Pause] sort of new. I sort of knew it was Georgian...

SGH: Yeah...Sort of Georgian [Laughs]

2A: So I asked him you know, what kind of architecture do you think is in here {Conversation started by looking at the Windows} ...[Pause] and he said will technically it's Palladian...most people probably say Georgian, but that's not really a thing... So technically it's Palladian. I said ok but for the regular tours I say Georgian.

SGH: Georgian is like a period not a style...

2A: Right. Exactly. Ummm... and he said you know Georgian is a period...and I said for the regular tours should I say Palladian. He said just say Georgian...[laughs] But technically it's Palladian. Ummm...so that day I learned that the architecture is technically Palladian...

SGH: Cause of the windows...

2A: Right...

SGH: Which is....which stems of off...pretty much all architectures stems from the Greeks and Romans and their architecture.

2A: Right...[Long Pause]

SGH: So but, like which...so what did you say to him...to use the routine?[Pause]

2A: [sigh] Oh I remember ummm...we...Ummm...We were talking about...he your know started on his own at William White's grave and you know he asked me... He asked me something about...the detail on the edge...and I used that sort of as the opportunity...you know what do you think about it kind of thing...how does it connect to

what your already knew about architecture since you already know so much. And of course he knew some things because he was the architecture professor.

SGH: Yeah...but that creates more dialogue...

2A: Right...and in the end it did create more dialogue. [Pause]

SGH: So in that instance it really did benefit you...because your visitor taught you something.

2A: Right I learned more about the architecture.

SGH: It isn't always necessarily meant to teach the visitor...

2A: Right...

SGH: But it makes you think as well and that is kind of what we are trying to get at.

2A: Oh ok well then....[laughs]

SGH: Ummm that's part of the idea.

2A: Right...

SGH: Like I've said these are originally designed for ummm for children in art museums, but what no one has ever really looked at is what does that do for the person asking the questions? What are you learning...

2A: Right...what does it do for the guide or the teacher...

SGH: So like how comfortable were you using these umm routines... I'm sure it was uncomfortable at first.

2A: Sometimes it was awkward...because sometimes...I mean like that day with the architecture gentleman it was really easy cause like he gave me the perfect Segway right away. But...sometimes it would be a little more awkward...just because...in the flow of the conversation you sorta had to stick it{reference to CEC}... in there a little bit more

awkwardly. Umm...but usually... you'd find...I'd find somewhere to sort of stick in and we'd sorta chat about it. A lot of the time you do get umm... like you said...you know more dialogue [SGH: Which is the purpose] but on the whole... Right

There were defiantly times were it was a little awkward...then again I'm and awkward person so you know...[laughs]

SGH: So you think it had something to do like with your experience?

2A: Yeah...I just think that for me sometimes I had umm some trouble sticking into the conversation...

SGH: So which one was more comfortable?

2A: Probably the second one.

SGH: Interpretation with Justification? That's the one I would have guessed...[Longer Pause] Where there any like questions or comments from visitors umm...that were different from when you weren't using these? Posing these questions from when you were.

2A: Umm.

SGH: So that's kind of hitting at before you started doing this umm...using the thinking routines did you end up getting different questions or comments from people when you were using them?

2A: Not really...I think [long pause] for the most part I think that...not even for the most part...pretty much entirely I think umm...the conversations that I've had with the questions were all really similar...umm not that your having the same conversation with people over an over again...but they were all sort of...

SGH: Similar how?

2A: Like...[long pause] a lot of the time people are gonna ask the same questions...they are all gonna ask where Benjamin Franklin sat and the presidents umm...and even if you have a conversation and you ask the IWJ questions In the in a lot of the time they would still sort of be focused on Washington and Ben Franklin or the singers of the declaration Ummm....so I think...

SGH: So it didn't really seem to direct them into something deeper than what we talk about on the surface of tours?

2A: y-y-yeah

SGH: Can you think of any times people were...like between the two of them...so you said the second one was more comfortable for you. Do you think they learned more or talked to you...was the dialogue more free and open using that one?

2A: I think for that one...it seemed that for the second one a lot of the people acted a lot less like kids in a high school classroom. You know when the teacher asks a question and everyone stares.

SGH: Right, Do you think in those instances they were taken aback by you asking the question or were they really not sure what to do?

2A: Probably a little of both...and this is mostly with adults.

SGH: Did you find any differences between children and adults or families and single adults?

2A: Not really...it goes back to the school analogy.

SGH: What about with the second one, did you notice a difference? Where adults ok with that one?

2A: Yeah, it was a lot less...put on the spot...it was more natural [Long Pause]

SGH: I know we have talked about this a little bit... but in terms of what you have learned from this...did it improve any of your knowledge or touring skills?

2A: Other than the architecture [Long Pause] I don't really think so...Umm...

SGH: What about more than factual information? What about your touring skills?

2A: I mean...[Long Pause] I want to say no...just because I have been doing this for so long. I'm not saying this experience didn't do anything...I just think for me ...umm...because I have been doing various types of tours for quite some time it didn't necessarily lead me to any new...understanding...[Long Pause]

SGH: So do you think...would you use these in the future?

2A: Maybe...if the situation arises...if the situation warranted it. Ummm...uh...In part because...you know as we've discussed...for me sticking things in there is a bit more awkward...maybe if I did it more it would obviously be more helpful to me.

SGH: Most guides that use these techniques are trained quite a bit longer than the training you got. So there might be a difference.

2A: I think the difference is in the setting and the training.

SGH: So do you think that it is the site that is the issue instead of the routines themselves?

2A: I defiantly think part of it is the site...umm...In part because-I mean you get this everywhere... But in part because a lot of people come in here [Long Pause] I don't want to say because they thing they already know...a lot of them have an idea of what they want to see and what they thing they know, which is the founding fathers and Ben Franklin and such. 8 out of 10 people that walk in that Church think it's Catholic...which is fine...but clearly it's not...and I think with sort of site everybody comes in and they



have set things they want to do...they want to know where Franklin is at, they want to know where Washington is... They want to know if you still have services...they want to know what type of church it is if they already don't think it's Catholic. You know even at Elfred's Alley a lot of the time people show up there and they know nothing, so its you know a little bit more of a clean slate kind of thing...umm I can't really speak to the Battleship, since I don't give tours there.

SGH: Ok, so was using either of these different than you expected? I got the feeling in the beginning you felt it was kind of awkward.

2A: I'm an awkward person and I know that and its ok.

SGH: But was there anything...umm...was there anything that you weren't expecting to happen that happened?

2A: Not really, It pretty much went about the way I thought it was going to. I know I would be awkward with these.

SGH: So lets get a little more specific...with the second one did you try to use it on any objects?

2A: Yeah, so the windows I used a lot...a lot of people ask why the windows aren't stained glass. I ask them well what do you see or why do you think they didn't have stained glass and why. Most people said it was because they couldn't afford it... seems logical...

SGH: And this is where you have the opportunity to get into a deeper discussion about the real reason for clear glass, which is the enlightenment. People have a hard time getting past the superficial things. Did you ever use the font?

2A: No... but I did use the architecture and Wm. White's grave...like the hat and the detail around the edge.

SGH: So it seems that the professor we have been talking about may have been intrigued with the border on the grave and was getting past what he already know about architecture. So can you think of other specific things, even things that didn't work?

2A: So the size of the president's pew gets brought up a lot. A lot of people think it is bigger because it was for the president and that is not how it is...but they were all redone in 1884 and they all used to be double pews.

SGH: So how do you get to that? How do you get people to that answer?

2A: So I would explain they were replaced and then ask why did they think the pews were all so big. Some times people would look at me strange. But we would end up talking about who came to Church, like your family and who all made up a family at the time.

SGH: So with the first one that you said wasn't very comfortable to use...was it always people weren't sure how to answer?

2A: I think it was awkward and they weren't sure how to answer. I think they were not expecting me to ask them a question.

SGH: Did you get any responses?

2A: There was that family from Richmond. The mom talked the whole time and the dad and the daughter listened. She and I actually had a decent conversation and then the daughter joined in. That was using the first thing.

SGH: So what was the most memorable tour?

2A: The older couple with high school aged kids...we had a really in depth conversation about architecture and I used the questions to build on our talk. So the questions were directed at the group...The kids were really interested in that stuff.

SGH: That is really interesting, since research suggests teens are not easily engaged this way. So is there anything else you can think of?

2A: No I think we covered it pretty well.

### **Contact Summary Sheet Pre-Interview**

Interviewer: SGH                      Interviewee: 3B              Gender: Male  
 Contact Date: 6/17/14  
 Place of Interview: Harding Room, Neighborhood House

13. What were the main issues or themes that stuck out to you in this contact?

- Very detailed about the content of his tours.
- Social history is important to discuss on the tour
- Talking to children and conveying the information in an appropriate way needs improvement.
- Wants to gain more knowledge about the site for tours.
- Likes larger groups despite teaching background.
- Likes to give thematic tours.
- Not just interested in facts, but interpretation

14. What discrepancies, if any, did you note in the interviewee's responses?

- None that were noticed.

15. Anything else that stuck out as salient, interesting, or important in this contact?

- 3B is aware of what his weak points are and is very willing to try new things to improve.
- Only guide to mention thematic tours.
- 3B was aware that interpretation for adults and children are different. Aligns with Tilden.
- Wants to have active engagement on tours.

16. How does this compare to other data collections?

- Compared to 2B that collection was very detailed and informative. Not much extra probing was needed.
- Compared to 1A, 3B is of a similar thought process.

Researcher's Notes:

- Comfortable with the interview and excited to learn the routines.
- Comfortable with the tour script. Modified for his tours.
- Confident about the method. Wants to learn more information and do more themed tours.
- Wants more experience with how to work with children.
- Experience: Degree in Social History and Gender Studies. Substitute teacher for special education for 2 years. Guide at Church for four months at the start of this study.

**Transcription by SGH**  
**Duration 10:56**

SGH: So the first thing we are going to talk about is how you do your tours now in the Church? Like how you give a tour currently...

3B: Well...I usually give a modified version of our tour script...

SGH: Is this script the one you get when you first start?

3B: It is but I have modified it to make it umm...so I don't do it in the exact order...I make it more where it's like, so I have like a mental map of where I'm gonna go that logically follows...and if people look like they are getting bored I'll bring up something that is more interesting. [Laughs] I do want to keep their attention.

SGH: So do you like doing the factual presentation sort of stuff or...

3B: I do, I miss doing it...Sometimes...

SGH: You don't like smaller groups?

3B: The day goes by faster [laughs] It's nice to get an applause. You don't get that from smaller groups...But the good thing about group tours of course is that there's a lot of give and take...they share their experiences with you...you know umm...sometimes they can relate what they know from their life or what they know from history...and I've had some interesting questions like people ask me what's the women's history of the Church or the black history of the Church...

SGH: Which I'm sure you're happy with...

3B: Yeah...Yeah...[laughs]...yeah so that's always interesting...but I don't know much of the women's history of the Church...usually I just talk about Mary Andrews...

SGH: Ok...so how do you feel about the way you give tours now...like do you like the way you do it or is there something you would change?

3B: I mean I think I've got the methods-I'm pretty good in terms of how I approach it. I just would like umm...more knowledge...on the Church... and umm...I learn gradually over time and listen to others give tours...and that's really helpful. [Pause]

I like making some sort of theme like...religious liberty umm...like Philadelphia being William Penn's whole experiment. Other people I think talk more about the War.

SGH: Yea...It's good to have a theme that helps people...you know...like connect more...

3B: Then it's just not a collection of facts.

SGH: Well...and it's not so much of the same of what you're going to get everywhere else. So there is nothing...like that you think needs improving...?

3B: umm...I mean I think the biggest improvement would be to learn more information about the Church that would be the biggest improvement...

SGH: What about how you would convey that information?

3B: it'd be helpful to...I mean this is... it sound weird because I am a substitute teacher, but to be able to explain things to kids on their level... umm because a lot of the time the kids are in there with their parents- they hide behind them and they don't get really involved. [Laughs] So, like reaching that kids would be a good thing to learn because the script that we have to memorize is not exactly kid friendly. [Laughs]

SGH: Well that is one of the things that hopefully this will help with.

3B: Yeah...I think so.

SGH: You might find that one of these routines in particular will work best with kids.

3B: So for example you have to explain some things to kids that adults just know...like for example what a Quaker is...[laughs] you can't just say oh William Penn was a Quaker...

SGH: So you can use some of these types of questions to help them understand based on what they are seeing in the Church. I think it will be interesting for you to see what I child sees first versus what an adult sees first.

3B: Yeah.

SGH: And that will change how you interpret the information to different age groups. So now let's just cover your background. So you substitute teach special ed. But your degree is in history...

3B: Social history and women and gender studies.

SGH: Has any of that come into your touring?

3B: Not in particular no...I do make it a point to talk about Yellow fever and Absalom Jones. I think some guides focus on the material history but they can use that to talk about social history. And you know local social history is all about objects...that's how I see it at least. So like a focus on family life, gender, race, social institutions...you know even like medical history stuff like that...

SGH: Yeah...So this will be something where you will have to judge how much time you have with a group and if it would be beneficial to ask these questions.

3B: I can usually gauge when a group isn't going to be very social... some people will say I am not really into history but I'm just in here because I hear it is an important site.

SGH: Have you tried asking what they are interested in?

3B: sometimes.

SGH: Well once you learn more about the people that went there you can general find a connection to anything that is interesting to people.

### **Post-Shift Journal Transcription**

Guide Number: 3B

\*Guide 3B began using the IWJ routine and then mixed the IWJ routine with the CEC routine.

#### **1. Describe your most memorable tour today in detail as it relates to the use of the thinking routine.**

1 - I had a church youth group come in for a tour. There was about 3 adults and about 8 teenagers. I had them seated starting at the George Washington pew #58. I asked them: given what you know, why do you think that we know where people of historic importance had been during worship services inside the church? This was challenging because most church services have open seating. I explained that this was not always the case and explained that we know where someone was in the church because of our pew rental records.

2 - I showed a family the Penn Baptismal Font. They had two children with them. I asked what they think that this object might be used for. They did not know. I explained that the top is a lid and it takes 3 people to remove the lid. This helped them to understand that it was an object used for special occasions because if so much effort is required to remove the lid it must not be used on a daily basis.

3 - The grave stones marking the burial places of people inside the church are a favorite point of interest for visitors. I decided to focus on asking visitors if they noticed the marble stones and what they think they are. Many assume these are memorials but do not indicate that someone has been buried in that location. When asked what she thinks these stones signify. One young woman guess that they were simply stone with out being a grave. She had not seen graves in side churches before and this was a new concept.

4 - The coat of arms of King William III is an item in the church that can be used to tell a story about the American Revolution. I asked tow young women if they had noticed something unusual about the coat of arms. They noticed that it was a bit beaten up and reasoned that this was because it was such an old object. I explained that the reason it looked that way was because it was in fact beaten up! Three crowns on the top were hacked off with an axe. Not just a symbolic gesture indicating the breaking away



from the monarch but literally involves the crown making it a useful story to tell in describing the revolution.

**2. Did the Connect, Extend, Challenge thinking/ Interpretation with Justification routine improve your interaction with visitors today, why or why not?**

1 - I feel that it helped visitors to understand that social institutions like a church may change practices over time. There was a time when pews were bought and rented at Christ Church. This is no longer the case and it is not the case in most other churches today. It challenged visitors to think about how the weekly experience at church may not have been conducted the same way in a different time period. I also expected that the pew rental records were very useful to historians as it let them know who attended services and where they did within the church.

2 - I asked them what special occasions occur in a church in order to prompt them to think of past experience and knowledge. They guessed correctly that this was a baptismal font. I explained that this item is still used for the sacrament of baptism which makes it one of the oldest religious items still used in the U.S. It did improve my interaction with the visitors. Visitors seemed to enjoy guessing at the object's use rather than being told its use.

3 - Yes. It allowed me to gauge what visitors know so that I could appropriately explain the significance without assuming prior knowledge. Many visitors are unfamiliar with the practice of burying people within the foundation of a church. Yes because it allowed me to explain a misconception and to explain why the true reason behind the object's beaten up appearance is useful in understanding the importance of church as a site that is important for understanding the American Revolutionary War history.

**3. Did the thinking routine impact your tours in any way today, why or why not?**

1 - Yes it was particularly helpful that my visitors had prior knowledge about churches and worship services. Having this background knowledge makes it easier to encourage visitors to compare historic practices with their own contemporary experiences. They extend their experience of church to begin to imagine how this experience changes over time.

2 - Yes, I find that encouraging tourists to guess the use of an object while offering hints (such as having the hint that it takes three people to remove the lid) prompts the visitors to imagine the item in use rather than as just an artifact.

3 - Yes because it allowed me to check for understanding and to present in a way that was appropriate to visitor's prior knowledge.

**4. Explain in what context you used the thinking routine on your tours today. Be Specific.**

2 - Today I practiced the cec routine on the penn baptismal font, because it is an object of great importance (the oldest item in the church) and folks often don't know what it is at first glance.

3 - European visitors and other people who have visited Europe are accustomed to the practice in which people are buried inside a church. US citizens on the other hand are surprised by this old practice, as there are few churches in the us where people are buried within the foundation of the church.

**5. Is there anything else you would like to add?**

2 - In this specific case tourist may not have the prior knowledge of Christianity to be able to make an informed guess at what the object is and was used for.

**Contact Summary Sheet  
Post-Interview**

Interviewer: SGH                      Interviewee: 3B                      Gender: Male  
Contact Date: 8/4/14  
Place of Interview: Harding Room, Neighborhood House

**1. What were the main issues or themes that stuck out to you in this contact?**

- Ease of use
- Generational Differences [old vs. young visitors]
- Improvement of skills
- Impact of prior teaching experience.

**2. What discrepancies, if any, did you note in the interviewee's responses?**

- No salient discrepancies.

**3. Anything else that stuck out as salient, interesting, or important in this contact?**

- Guide 3A was very comfortable with using the routines.
- 3A did use the routines together during the study, however this doesn't affect the data collection.

#### 4. How does this compare to other data collections?

-This data collection was unique and played off of what the researcher learned from previous collections.

#### Researcher's Notes:

-Guide 3A was very comfortable and worth coming with the questions asked in the interview.

-There were several points 3A made about his experience that are helpful writing points.

**Transcription**  
**Duration 10:40**

SGH: So... I have read your stuff (journals)...

3A: Ok...

SGH: You actually had a great amount of detail and variety in your journals....

3A: Oh really.....

SGH: Which was also helpful...in terms of writing [the case study].

3A: Like objects ?

SGH: Yeah ....umm....and I think at one point at least the way your wrote the journal you actually blended the two [routines] together.

3A: What do you mean?

SGH: Like the two um thinking routines...

3A: Yeah I might... it's hard .....the two were so similar in some ways....

SGH: To you...but to others it may be different.

3A: To me it is just kind of like...you know what it is, it is my background in education....

SGH: Yeah...because I feel like they are very similar as well.

3A: Yeah....

SGH: So...I guess I just wanted to ask like...how you...how it went. Did you feel like it helped you and that it umm....was it comfortable to use or was it kind of like weird? At first?

3A: I mean it really depended on who was the visitor...umm...[short pause] in certain cases it helped in umm... extending the conversation...

SGH: Yeah...

3A: And in other cases people would just kind of give me like blank stares. Like, “why are you asking me that?” [laughs] kinda ...you know what I mean...

SGH: Yes...

3A: Like, like ....

SGH: Was that with a particular age group of visitors?

3A: Older people...

SGH: Yeah I figured....but I didn't want to assume....

3A: They would be like, “umm I'm just here to see things.” [laughs]

SGH: Well yeah....they are of the generation where you tell them and they sit there and they listen because that's how school was for them.

3A: That's exactly why....

SGH: But now school is so much different...

3A: Now there is more, “and what do you think about that?”

SGH: Right. Right. So it was pretty comfortable to use, it wasn't like awkward or weird or like I don't know...

3A: No, I think part of it might have been because of my background again.

SGH: It was easier?

3A: Yeah...umm but I mean it helps because it's more fun for me too, because I am not just reciting facts. [laughs] You know what I mean...

SGH: Did it make you think about some things...like think about the way you talk to people differently, like the way you do the tour?

3A: Yeah because it really helped me to think about.... Umm...anticipating what background knowledge they have already.

SGH: Yeah which is really hard to do.

3A: Yeah, because you don't want to stereo type either.

SGH: Well you had mentioned before when I asked you how you were giving tours , you had mentioned that you had like ...the information script but you had like a mental map thing...

3A: Right

SGH: ...That you went through...an so did this stuff like add to that or did it change it?  
[Pause]

SGH: It added to it?

3A: It did umm...it added to it...in that umm...it pushed me to ask more questions as apposed to me just telling them things, you know what I mean....

SGH: Right.

3A: ...As opposed to....having it more interactive as opposed to uh uh...

SGH: This is this...This is that sort of thing

3A: Yeah, reading the script to them...sometimes it's hard though at the end of the day your just tired....[laughs] and you tired of hearing yourself talk about the same crap over and over.

SGH: Right...you had also mentioned before that you wanted to like work better with smaller kids...

3A: Yeah I have been....

SGH: Did you use it at all on smaller kids?

3A: The thing is this time of year there's let kids ...yeah.

SGH: I don't know on the weekends there's some...

3A: I'm working on weekdays...

SGH: So you didn't get a chance to use them with kids?

3A: Not really, not a whole lot with younger kids. I'm told they come back at the end of September, because the beginning of September is too early to have a field trip.

SGH: Umm....so what about knowledge about the Church? I know you used it with stuff you already know and stuff on tours but like, there was another instance where someone actually learned something from the visitor.

3A: Another person? Oh cool...I have in the past...

SGH: But not with this?

3A: No. But I defiantly have yeah. Because some people come in and they are like experts on Church architecture [laughs] and they tell me things and I use them later in tours.

SGH: That seems to be a trend...umm so...

3A: And some people are just really well versed in American history...

SGH: So was it like...was using them different than you expected or did it, did it just go the way you kinda thought it would?

3A: It kind of went the way I thought it would...

SGH: Yeah...

3A: It's very familiar to me in terms of like... there are definitely some guides who can use more of these kind of questions [laughs].

SGH: So which one did you prefer to use? It seemed...

3A: The connecting prior knowledge one, because I think that is really important...

SGH: It seemed in your journals that they started to blend together.

3A: I did use them together a few times because I felt like I couldn't ask them about what they saw without propping any background knowledge they might have, cause that may lead them to just make stuff up.

SGH: Yeah, but that is the point of it, you want to see what they are thinking and how you can keep that going. So it also sounded to me from what you wrote that you were already doing that before, just unconsciously doing some of it...

3A: Yeah I was. And that's my background...yeah.

SGH: Just not as consciously, it came through in the writing, I could tell did this but didn't realize it was an actual thing.

3A: That's why writing it was almost painful cause this is just what I do [laughs].

SGH: So obviously you are going to continue to use it because it was more natural to you.

3A: Yes. I mean I just do it as part of everything.

**Contact Summary Sheet  
Pre-Interview**

Interviewer: SGH                      Interviewee: 4B                      Gender: Male  
Contact Date: 6/16/14  
Place of Interview: Harding Room, Neighborhood House

**17. What were the main issues or themes that stuck out to you in this contact?**

- Has a very clear and concise understanding of his tours.
- Seems to have a very good handle on balancing information and questions.
- Wants to learn how to engage people but not be too academic in topic and speech.
- Wants to work on how to engage families.

**18. What discrepancies, if any, did you note in the interviewee's responses?**

- None.

**19. Anything else that stuck out as salient, interesting, or important in this contact?**

- Has a really clear idea of what needs improvement and seems very open to trying new things.

**20. How does this compare to other data collections?**

- 4A is very confident and has the clearest idea of his touring practice and what needs improvement next to 1A.
- Experience is easily discerned between the guides in the pre interviews. 1A and 4A seem to have the clearest picture of their touring practice, possibly because of their experience.
- 3B also has a clear understanding compared to 2B.

**Researcher Notes:**

-Very comfortable in the interview.  
-Gave really clear and concise answers.  
-4A has experience as a guide for 5-6 years and has three degrees in Philosophy and international studies.  
-Very intelligent answers.  
-Interview was very calm and concise. Chatting did not really occur like in other interviews.



**Transcription by SGH**  
**Duration 10:45**

SGH: So we will start by talking about your current way of giving tours... Tell me a little bit about that...[Pause]

4A: Umm...well I usually start by having them choose where they would like to sit...I will umm...try to point out various pews like Franklin, Washington, or Hopkinson. Once they sit down if they don't have any questions up front I will start with a brief history of the Church... I usually make a few points about the founding of the Church and the types of people who attended Church here. After that I umm... usually take some questions or I will see what they are interested in and then point some of those things out...

SGH: That was my next question...So how do you respond to your visitor's interests?

4A: Well I usually they will ask a question that gives me a pretty good idea of what they are interested in...I mean usually people will ask about the denomination of the Church and things about the graves... usually stuff like that.

SGH: So how do you feel about the way you give your tours now?

4A: Umm...I think that people like the way I do it. However, there is always room for change. Let's put it this way...no one has said they don't like my tours. [Laughs]

SGH: So do you think that there is room for improvement on your tours...like would you be interested or feel comfortable learning some new touring techniques?

4A: Welllll...I think that I could always learn new things to improve my work...

Sometimes I think I get too academic with people so, it might be helpful to learn different ways of talking to people...especially families... Families are hard because you have to be able to talk in a way that makes sense for kids and adults...[Pause]

SGH: What do you mean by academic?

4A: Like I may get on tangents that are more academic or like harder to understand if you don't know all the information prior to the tour... I need to work on that...

SGH: Is that all? Are there other things you want to improve?

4A: Maybe how I engage people. I think...I think that it is always hard to engage everyone with everything... Maybe some of this will help?

SGH: it might but that depends on how you use it. I think you may be surprised once you get the hang of it... Is there anything else? Oh lets talk about your education and experience...

4A: Well I have degrees in philosophy and international studies... I also am currently in seminary school... Currently I work at Temple with their international student center.

SGH: How long have you been giving tours?

4A: Umm... probably five or six years...That has all been here.

### **Post Shift Journal Transcription**

Guide Number: 4B

#### **1. Describe your most memorable tour today in detail as it relates to the use of the thinking routine.**

1-CEC-Today I used it with prior knowledge about the British and the Revolutionary War. It was a small family with kids that were like middle school aged. I discussed some of the Church's history with them and then I would ask them how it connected to what they already knew and if they had other questions to ask me. I remember this because we had a long conversation and the kids were interested too.

2-CEC- One of my tours today was interesting. I had a bus group from Canada. They all spoke French. I tried the use these questions to see what they already know about America or if I could connect some French Canadian history to the Church. It was hard to do but I found some small things to talk about.

3-CEC- I tried to do a tour today with smaller kids. I used this to see if I could get them to talk more about what they learned in school. So I tried to connect them to things like Washington, or other things I thought they would know.

4-CEC- Had a couple from Germany that was really interesting to talk too. I decided to try asking the questions so that I could see what they already knew about America and its history. They knew a few things, but by asking them the questions during my tour of the Church they actually had a few very interesting questions about Quakers and religion. They also said everywhere else they went on tours people ignored them because they were foreign. We had a conversation for almost an hour.

1-IWJ-I used this today to talk about the chandelier. I was trying to get my group [adults] to see that the hook on that holds the chandelier is actually a snake. So I told them the history about the chandelier and then I asked them the questions. By the end of it they did point out the snake, but they thought it was a birds head. It was a fun talk.

2-IWJ- My tour today I decided to talk about the Angels that you see in a few places in the Church. They all look similar so I think it is interesting to use as an object. I tried to get people to really look at the different angels and how they are alike and different. This really worked well with kids, they liked to tell me about what they thought about the angels.

3-IWJ- Today I used the routine to talk about the windows with a group of visitors from Boston. They had been to Old North Church and I used the routine to find out what they knew about the windows and how I could compare the Church to Old North.

4-IWJ- Today I used the routine with some school kids. I guess they were in middle school. We talked about the baptismal font. The routine helped us talk about the shape as well as what it was made of. They seemed to really like telling me about what they saw than me telling them what to look at.

## **2. Did the Connect, Extend, Challenge thinking/ Interpretation with Justification routine improve your interaction with visitors today, why or why not?**

1-CEC- I think that it helped me. The family seemed remain interested and it was nice to have a conversation with visitors of different ages. It definitely helped keep the conversation going. I think the kids were surprised how much they actually already knew.

2-CEC- Considering the language barrier, I think that the routine helped me find out what they knew about American history. Obviously it was still a little difficult but I think it still helped in some way.

3- CEC- I think it helped but, it was still hard to keep the kids engaged in a conversation. I think they needed something to do or touch for this to work better.

4-CEC- The routine worked really well today. I really felt like we connected with the information. The couple was really interested and we had a nice conversation that lasted a while. It was really enjoyable and we both learned something from each other.

1-IWJ- I think this worked well with my tour. It was good to use with the chandelier. Most people miss some of the symbolism and this helped me point it out.

2-IWJ- I think that the routine worked ok today. Talking about the angels may have been a stretch for the time limit I had. Next time I am going to pick a different object that can be thought through more quickly.

3-IWJ- I think that the routine was pretty helpful today. I felt like it helped the conversation and got me to engage with my group.

4-IWJ- I found that with this particular object the routine went really well with it. It seemed to make people more interested in the font and it was fun for me to use.

### **3. Did the thinking routine impact your tours in any way today, why or why not?**

1-CEC- Yes the routine really helped me engage people's prior knowledge.

2-CEC- I felt that today the routine helped me talk to people that spoke a different language. It helped me figure out where they were and what I needed to tell them.

3-CEC- I think that the impact was small if at all today. It was just harder because they were small children so I am not sure of the total impact.

4-CEC-I think that the impact today was bigger than usual. This is just because we had a long conversation that was of interest to me and them.

1-IWJ-I think the impact of this routine is better than the other. I had a decent conversation with my guests but I would of liked to have more time. I think it had an impact but it would be greater with more time.

2-IWJ- I think it may have had an impact it is hard to say. I think the topic I chose made it more difficult.

3-IWJ-I think it had a great impact today. People seemed to really be interested and engaged.

4-IWJ-Because of the object I chose, the font, I think that the impact was greater on this tour. The font was a great example and I found that it was easy for people to learn from and about.

**4. Explain in what context you used the thinking routine on your tours today. Be Specific.**

1-CEC- I mostly used the routine in a historical context. Like about the war and the Church's history and how it aligns together.

2-CEC-Once again I used it in the context of history however; it was a little different because of the language barrier. I tried to explain some connections to French Canadian history and the Church. I am not sure if this worked well.

3-CEC-I tried to talk to the kids about Washington and little facts about that time period I thought the kids might have heard in school.

4-CEC-This time was purely historical and cultural so that I could explain American history and customs in a way that may connect to what they already may have known.

1-IWJ-I used the routine in more of an observational context. I wanted them to find some of the unique characteristics of the chandelier.

2-IWJ-I tried to use it in an observational way again with the images of angels. I thought it would be fun for the kids. So we went thought the Church to find all the angels that looked alike.

3-IWJ-This time was observational and historical. I wanted to discuss the effects of the Enlightenment age on the building. So I tried to insert some history along with the observing of the windows and the clear glass.

4-IWJ-This was historical and observational. I wanted to see if they would figure out what the object was since it is an odd shape. I also gave the history during the tour so they realized how old the font was and its importance.

**5. Is there anything else you would like to add?**

4-CEC- I was really surprised to have such a long conversation/tour with foreign visitors. Normally they do not engage with us [tour guides]. I think they are afraid of the language issue or they don't want to seem like they don't know anything.

### **Contact Summary Sheet Post-Interview**

Interviewer: SGH                      Interviewee: 4A                      Gender: Male  
Contact Date: 7/16/14  
Place of Interview: Harding Room, Neighborhood House

- 1. What were the main issues or themes that stuck out to you in this contact?**
  - The IWJ routine was his favorite.
  - Found that the IWJ was easier to use on short and long tours.
  - Helped him learn to speak in a less academic manner.
  - Learned how to look at things differently when giving a tour.
- 2. What discrepancies, if any, did you note in the interviewee's responses?**
  - None
- 3. Anything else that stuck out as salient, interesting, or important in this contact?**
  - This guide had the most detailed journals and responses. He really reflected on his experience.
- 4. How does this compare to other data collections?**
  - This was the final data collection. Compared to others it was comfortable and routine.

**Researcher Notes:**

-None to report.

### **Transcription by SGH Duration 16:23**

SGH: So the first thing I want to ask about is if you think the routines improved your tours in any way?

4A: Oh I...I absolutely do...Especially the Interpretation one. I think that one worked really well. It really helped people connect with what I was saying and some of the objects in the Church.

SGH: For example...[Pause]

4A: Umm....for example the font...most people naturally ask what it is so with kids especially I would ask them to look at it closely first and see what they thought before I gave too much information. It was kind of fun for families too...They umm...they liked it because I guess it was sort of like a game to them...in a way...

SGH: So were you comfortable using the routines on your tours then?

4A: Well...I think so...the interpretation one was easy to start with. I found that that one was easy to incorporate on a tour short or long...The second one the connecting one wasn't as easy to insert in a talk however I found myself still being able to use it often at the end of a tour or even at the end of talking about...about a particular topic.

SGH: So do you think that these routines were more beneficial for your improvement or for the visitors to learn from?

4A: Umm....well I- I think that the visitors defiantly benefited from them and I think that I did as well. It seems to me like it helped me talk in more of laymen's terms and not get so caught up in academic speech.

SGH: Right...I agree...were the questions or comments you got from visitors different than before you started using the routines?

4A: Well it I think that there were defiantly the same questions being asked however some people asked new more detailed questions, like...why was the font shaped a particular way? Why was it so tall and big? Those sorts of things... Attention to detail was greater in my opinion.

SGH: Were they any other examples you remember? I think you mentioned in your journals that you were asked about the pews?

4A: Oh right...I was asked about their size and if they were replaced...I found that by asking people to sit in a particular one then I could use the interpretation routine to make them think about why they would have been larger at the time.

SGH: So you prefaced the routine with information?

4A: Yeah...I told them that the pews were originally all the larger size, then I asked them to take a seat in Washington's pew...once they sat down I would ask them to think about the reasons that the pew was so large. So the whole what do you see when you sit here. Why do you think it was so large...and so on...

SGH: So what did that take you then in your conversation? Like how in depth did the conversation go or did it?

4A: Umm...right...from what I remember it lasted for maybe ten minutes talking about the pew that is...So that is a long time for one particular thing when most people only stay for....that long to begin with...but yes I would say it was pretty in depth considering the topic. Pews aren't the most exciting thing to talk about you know...

SGH: Oh I know out of everything people always seem to pick the least exciting things to talk about...so do you feel like you learned any new knowledge or information about the site from this experience?

4A: I feel like I learned more about how to look at things differently in the site. Like the font for example... I never really considered the shape. Usually I just talked about its practical use. So I guess the symbolism was something I hadn't fully explored yet before this.

SGH: Well that's good...so tell me some more about how you used the thinking routines...Like examples...



4A: Well I have mentioned objects so...

SGH: What about the connection routine?

4A: Right...umm...well like I said it was a bit harder to do. However...I used it mostly after talking about a specific person like Franklin...that way they could see what they already knew and what they learned from me. [Pause] Sometimes I would ask it at the end, people weren't as responsive to that one but maybe I was doing it at the wrong time...

SGH: So was using the routines different than you expected?

4A: Yes in a way. I thought it was an interesting idea but I wasn't...I wasn't sure how I would...or when I would use it...So I was surprised that once I practiced a little it came more naturally to me so that most likely made a difference to people as well...

SGH: Oh it defiantly would....So how would you compare your experience with the two routines?

4A: I would say that each of the routines presented difficulties for me at first because it was new and such...but I think the interpretation one worked best for me. I got more out of people which made the tour better and...and...umm...I learned more about how the people thought through what they were seeing...

SGH: So overall do you think that your knowledge and...or your touring skills improved after using these routines?

4A: [Pause] I guess...I guess I think that my knowledge of how visitors think and how to bring out more conversation improved. So yes I guess it did. [Laughs]

SGH: So would you continue to use these...in your tours?

4A: Yes! I think that I will most certainly use the interpretation one. I think the other one would be better used on one of our school tours...so I will have to try that out in the fall.

## Appendix V

### Six Continua to Assess Thinking

