

**G**OODMAN RESEARCH GROUP, INC.  
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# **Evaluation of *Lives in Science* *Library Resource Kits***

*Submitted to*  
WGBH Educational Print and Outreach

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## EXECUTIVE SUMMARY

Goodman Research Group, Inc. (GRG) conducted an external evaluation of the *Lives in Science Library Resource Kits* for WGBH Educational Print and Outreach. The kits, which WGBH developed and distributed to librarians nationwide, accompany the NOVA *Lives in Science* series. Each of the four specials in the series profiles a scientist—Galileo (*Galileo’s Battle for the Heavens*, 2002), Archimedes (*Infinite Secrets*, 2003), Newton (*Newton’s Dark Secrets*, 2005), and Percy Julian (*Forgotten Genius*, 2007). In 2003, GRG conducted summative evaluation among public and school librarians of the *Galileo’s Battle for the Heavens Library Resource Kit*. In 2007, GRG conducted summative evaluation of all four kits, with a particular focus on the most recent kit, *Forgotten Genius* (featuring chemist and civil rights activist Percy Julian).

The full evaluation report describes GRG’s assessment of how public librarians used and rated the usefulness of the kits’ components, the *Lives in Science* specials and Web sites, and similar educational resources. GRG also evaluated librarians’ opinions of the kits and the perceived interest of the kits among library patrons. The evaluation provided recommendations for future kits.

## METHODS

GRG used a multi-method approach to evaluate the *Lives in Science Library Resource Kits*:

- 162 public librarians completed a web-based survey that focused primarily on the *Forgotten Genius* kit (This number represents 22% of the 736 who were invited to participate, based on information from WGBH that the librarians had received *Forgotten Genius* kits);
- A subset of 36 librarians who had indicated using two or more of the *Lives in Science* kits completed a second web-based survey that focused on all four kits; and
- 13 of the 36 librarians participated in follow-up telephone interviews regarding their use and opinions of the kits and suggestions for future library outreach programming.

## KEY FINDINGS

### Overall Use of Kits

- Between one-third and one-half of librarians used each of the four kits. *Newton’s Dark Secrets* was the kit used by the highest percentage of librarians; *Infinite Secrets* was used by the lowest percentage.
- Librarians used the kits most frequently with young adults and adults.
- Roughly 70% of librarians of librarians plan to use the kits in the future.

## **Use and Usefulness of Kit Components, TV Specials, and Web Sites**

- Librarians were most likely to use the kits to create displays and distribute handouts. Thus, the bookmarks, posters, and handouts were used most frequently and rated as most useful.
- Librarians were far less likely to coordinate events or hold activity sessions, thus fewer librarians used the kits (or specific components) for such programs.
- Those librarians who had used a particular component tended to rate it as more useful than did librarians who had not used that component.
- Librarians would like to use the NOVA specials in conjunction with the kits, yet very few librarians own copies of the specials. About a half to two-thirds of librarians plan to obtain the specials in the future.
- Very few of the librarians used the *Lives in Science* Web sites. Even though the Web site links were printed on the bookmarks, posters, handouts, and tables of contents, many librarians reported they did not know about the Web site or did not have time to use it.

## **Librarians' Opinions of the Kits**

- 95% of librarians reported that the kits met or exceeded their expectations. They were pleased with the kits' contents and organization and believe the kits have quite a long shelf-life.
- Librarians were particularly excited that the kits are delivered to them for free.
- On average, librarians want to receive kits 9-10 weeks prior to a NOVA broadcast.
- For the majority of librarians, their own interest in the featured scientists, in the topics covered, and in conducting future science outreach increased as a result of using the kits.
- Librarians suggested the future kits might contain activities aimed at very young children. They hope that kits will continue to contain display materials.

## **Use of Other Educational Resources**

- Although one-third of librarians had used other similar educational materials in their libraries, only two had previously used science-related materials.
- Over half of librarians rated the *Lives in Science* kits as better than other similar resources.

## **Patrons' Perceived Interest in Kit Components**

- Librarians perceived that the kits were quite useful in generating interest among patrons in the NOVA specials.
- Many librarians reported that the kits helped patrons to learn about and engage with science.
- Patrons seemed most excited by the poster and bookmark components and least interested in the events and activity sessions.
- Over 70% of librarians believed that the kits effected moderate to extreme gains in interest in terms of the topics and scientists featured.

## KEY RECOMMENDATIONS

All of the evaluation results illustrate that public librarians used and positively rated the *Lives in Science Library Resource Kits*. In addition to the positive feedback about the kits, librarians provided suggestions for future revisions, and GRG considered the entire evaluation in making recommendations to WGBH for future outreach materials.

### Tailoring Future Outreach Materials

Regarding the components, format, and presentation of future materials, GRG recommends that WGBH consider the following:

- Continue to make display materials visually appealing and easily readable.
- Continue to offer materials (bibliographies, handouts such as the scientist profiles, bookmarks, and display sheets) that librarians may use to create displays.
- Invest fewer resources in creating activities and suggesting programming events. If activities are included, consider adding more activities for young children.

### Encouraging Use of Future Outreach Materials

GRG recommends that WGBH consider the following to encourage use of future outreach materials:

- Notify librarians in advance of ship dates that materials will be arriving, so librarians can have extra lead-time to prepare displays and other programming.
- Continue to offer materials free-of-charge to librarians, and consider including a DVD (post-broadcast), as many librarians would like to use DVDs but few libraries owned the *Lives in Science* specials (although many librarians said they did plan to order them in the future).
- Highlight components of outreach materials that connect with themes in the calendar year or special events (as was done with connecting the *Forgotten Genius* kit to Black History Month).

## INTRODUCTION

In 2002, WGBH Educational Print and Outreach developed and distributed a library resource kit to accompany *Galileo's Battle for the Heavens*, the first of four NOVA specials to profile a scientist as part of the *Lives in Science* series. In 2003, Goodman Research Group Inc. (GRG) conducted external evaluation of the *Galileo's Battle for the Heavens Library Resource Kit*, focusing on obtaining feedback to inform the development of materials for subsequent kits. Of the 1,646 librarians invited to participate in that evaluation, approximately half (49%) responded to the online survey. Two-thirds of respondents (66%) were public librarians and the remaining third were school librarians.

The *Galileo's Battle for the Heavens Library Resource Kit* evaluation report described librarians' use of the kit, their general impressions of the kit, and their perceptions of the usefulness of individual kit components. Based on these data, GRG drew conclusions about librarians' overall use of and satisfaction with the Galileo kit, and we provided recommendations for future *Lives in Science* kits.

In 2007, GRG resumed our evaluation of the outreach efforts for the *Lives in Science* project by conducting an evaluation of the fourth and final library resource kit that accompanied the program *Forgotten Genius*, profiling chemist Percy Julian. As in the previous portion of the evaluation, GRG gathered data from the librarians who received the *Forgotten Genius Library Resource Kit*, focusing on the "impact and effectiveness of these activities and resources in increasing the awareness of Percy Julian's life and research" among library patrons.

In addition to an extensive assessment of the *Forgotten Genius* kit, GRG conducted an evaluation of all four *Lives in Science* library resource kits (Percy Julian, Newton, Archimedes, and Galileo kits). Public librarians were surveyed for this round of evaluation activities.

Evaluation research questions were explored specifically for the *Forgotten Genius* kit as well as comparatively across all four kits:

- In what ways did librarians use the kits (overall, as well as the specific components)?
- How useful and effective were the kits and associated activities to librarians?
- How interesting were the kits and associated activities to library patrons?
- What were librarians' perceptions of what their patrons learned from the kits?
- How might WGBH alter future kits (including content of kits, timing of kit mailings) to be more effective?

## METHODS

GRG developed an online survey to administer to public librarians who had received a *Forgotten Genius Library Resource Kit*. The survey was designed to measure the following:

- when the kit was used
- with whom the kit was used
- which components were used and how they were used
- opinions of the kit
- use of past *Lives in Science* kits
- basic demographic information about the librarians and their libraries

WGBH provided GRG with a list of 736 librarians to whom WGBH mailed a *Forgotten Genius Library Resource Kit*. GRG sent these librarians an email inviting them to complete a survey about the kit. The email explained that, as an incentive, the first 50 librarians to return a completed survey would receive the *Forgotten Genius* TV program on DVD.

Of the 735 librarians who were emailed, 92 emails bounced back as the result of an incorrect email address. Of the remaining 643 librarians who we can assume received the email invitation, 39 replied and indicated they could not complete the survey. Thirty-three did not recall receiving or using the kit and three had changed jobs or given the kit to others. In total, 162 librarians completed the *Forgotten Genius* survey for a response rate of 22%.

Subsequently, all librarians who indicated on the *Forgotten Genius* survey that they had used two or more *Lives in Science Library Resource Kits* in the past were sent an email by GRG inviting them to participate in additional research. They were told that the second part of the study involved reviewing all four *Lives in Science Library Resource Kits* and completing a Web-based survey about them (hereafter referred to as the *Lives in Science* survey).

Because much information had already been collected about the *Forgotten Genius Library Resource Kit*, the *Lives in Science* survey primarily collected data about the other three kits (*Newton's Dark Secrets*, *Infinite Secrets* (Archimedes), and *Galileo's Battle for the Heavens*). The survey asked librarians about their past use of the kit components, the *Lives in Science* TV specials, and the accompanying Web sites, as well as how useful they perceived these products or their components to be. The survey also collected information about librarians' overall reactions to the kits and their influence on the librarians.

As librarians expressed interest in participating in the study, they were mailed the four kits and a few days later, emailed a link to the survey. Librarians who did not respond were then emailed up to five times and reminded to complete the online survey. Librarians were told they would receive a \$50 honorarium and all four *Lives in Science* DVDs upon completing the survey. In total, 42 librarians agreed to participate in the study and 36 completed the survey, for a response rate of 86%. In addition, GRG interviewed 13 of the 36 librarians in order to further understand their use and opinions of the *Lives in Science* kits.



## RESULTS

Of the 162 librarians who took the *Forgotten Genius* survey, only those 82 librarians who have used the *Forgotten Genius* kit were asked detailed questions about it. Since the survey asked librarians to recall specific information about the *Forgotten Genius* kit, those 80 librarians who had not used the kit were not asked questions about it. However, all 162 librarians described whether and how they had used the other three *Lives in Science* kits, and their general use of the kits is described. When details about the other three *Lives in Science* kits are presented, results are from the subset of 36 librarians who completed the second survey about the other three kits. For most sections, the results are presented as percentages; however, for components that were used by few librarians, results are presented as numbers.

## PROFILE OF LIBRARIANS AND LIBRARIES

The overall sample of 162 librarians includes those who work in 36 different states, with the greatest number working in Illinois (30%), Wisconsin (9%), Texas (8%), and Michigan (6%). We suspect that the reason that so many Illinois librarians may have responded is that Percy Julian spent much of his life in that state.

Just under half the libraries (46%) are located in a rural location, while 37% are suburban and the remaining 17% are urban. It may be an artifact of the research that those librarians in rural or under-resourced locations were the ones to respond to the survey, yet in interviews that included both rural and urban librarians, those from rural locations also were the librarians most eager to use many portions of the kits. In interviews, librarians from urban locations noted that there are competing demands on their patrons' interest, while rural librarians remarked that the kits were particularly welcome and needed, as patrons did not have easy access to museums or other programming venues.

One hundred forty-five librarians provided their job title. Titles were coded based position and the department in which the librarian works:\*

- Library Director or Director of a department (28%)
- General Librarian or General Adult Librarian (26%)
- Children's or Young Adults' Librarian (24%)
- Head Librarian, Manager, or Supervisor (21%)
- Reference Librarian (8%)
- Other title (2%)

\*Percentages total more than 100% because some librarians have more than one title/position.



## OVERALL USE OF THE KITS

### Highlights (from *Forgotten Genius* survey data)

- 55% of the 162 librarians reported using at least one of the kits.
- Roughly half of the librarians used the *Forgotten Genius*, *Newton's Dark Secrets*, and *Galileo's Battle for the Heavens* kits. One-third of librarians used the *Infinite Secrets* kit.
- The *Forgotten Genius* kit was most often used with young adults or adults.

### Use of the *Forgotten Genius* Kit

Just over half the librarians (51%, n=82) have used the *Forgotten Genius Library Resource Kit*. One quarter have not yet used the kit but plan to, while the remaining 24% do not plan to use the kit. The 24% who do not plan to use it were asked to explain why not (data describing actual usage are presented later in this report). Of the 36 who provided an explanation, 19 (53%) described resource-based constraints (time, staff, or space), as enumerated below:

- 12 do not have time,
- 11 are not interested in the kit or do not think it would be appropriate or interesting to their patrons,
- 5 do not have space for a display,
- 4 do not have the staff to implement the kit,
- 4 forgot about the kit,
- 3 gave it to someone else to use, and
- 2 changed jobs and can no longer use the kit.

### Use of the Other Three *Lives in Science* Kits

All 162 librarians indicated whether or not they used the other three *Lives in Science Library Resource Kits*, and if so, how they have used them. (Librarians' responses to this question on the *Forgotten Genius* survey allowed GRG to invite librarians who had used at least two kits to participate in the *Lives in Science* survey.) As shown in Table 1, approximately half of librarians received and used either *Newton's Dark Secrets* or *Galileo's Battle for the Heavens*, while a third received and used the *Infinite Secrets Library Resource Kit*. As expected, more librarians did not remember receiving the oldest two kits.

Table 1  
Receipt and Use of Kits

	I have received and used this kit.	I have received but did NOT use this kit.	I did not receive this kit.	I do not remember.
<i>Forgotten Genius</i> (Percy Julian, 2007)	51%	24%	25%	N/A
<i>Newton's Dark Secrets</i> (2005)	55%	14%	15%	16%
<i>Infinite Secrets</i> (Archimedes, 2003)	31%	9%	27%	33%
<i>Galileo's Battle for the Heavens</i> (2002)	46%	5%	20%	28%

N=162

It was most common for librarians to report having used two kits in the past. Of the 162 librarians, 22 had used all four kits, 30 had used three of the four kits, 43 had used two kits, and 32 had used one kit. Finally, 35 of the 162 librarians had not used any of the kits, so they were not asked further questions about kit use (their data appear only in the profile of librarians and libraries).

### With Whom the Kits Were Used

*The Forgotten Genius kit was used primarily with young adults and adults.*

Librarians who indicated having used the kits were asked to select the age group(s) with which they used each kit. As shown in Table 2 below, the *Forgotten Genius* kit was used primarily with young adults and adults. Very few librarians recalled the age levels of the audiences with whom they used the other three kits (those data are in Appendix A).

Table 2  
Ages of Audiences for the *Forgotten Genius Library Resource Kit*

Librarians	
Children ages 4-12	30 (37%)
Young Adults ages 13-18	46 (56%)
Adults older than 18	45 (55%)
Other	8 (10%)

N=82

### USE AND USEFULNESS OF KIT COMPONENTS

The following section describes the use and usefulness of the four *Lives in Science Library Resource* kits. On both surveys, participants were asked to describe their use of the kits (overall and individually for each component). On the *Forgotten Genius* survey, only those librarians who used the kit (n=82) were asked to rate the usefulness of the kit and its components. However, on the *Lives in Science* survey, all 36 librarians were asked to rate the components of the other

three kits, regardless of whether or not they had used them. Librarians were sent all four kits in advance of taking the *Lives in Science* survey, so they could have the kits in front of them while taking that survey.

A finding across both surveys – and further echoed during interviews – is that the vast majority of librarians create displays using the kit materials and/or provide handouts (bookmarks, reproducible handouts) for their patrons. Fewer librarians conduct “active” programming, such as coordinating an event or holding activity sessions.

### Highlights

*Program Ideas and Tips:* Library Display Ideas was the sub-component used most, across all four kits. (*Forgotten Genius* and *Lives in Science* survey)

*Bibliography:* Nearly all librarians rated the bibliographies positively (*Lives in Science* survey, N=36). Librarians primarily used the bibliographies to aid in creating displays and to guide library material acquisition. (*Forgotten Genius* survey and *Lives in Science* survey)

*Kit Activities:* The “Percy Julian and His Work” coloring sheet was the activity used by the highest percentage of librarians (85%, *Forgotten Genius* survey, N=82). Between 8 (22%) and 16 (44%) librarians reported using a Newton, Archimedes, or Galileo activity. (*Lives in Science* survey, N=36)

*Display Sheets:* Four-fifths (n=65) of *Forgotten Genius* users used at least one display sheet, with the majority using African American Scientist and the fewest using Natural vs. Synthetic (*Forgotten Genius* survey). Between 70% and 80% of *Lives in Science* survey respondents used one of the display sheets from *Newton’s Dark Secrets*, and roughly 50% used one of the sheets from *Infinite Secrets*. (*Lives in Science* survey)

*Bookmarks and Poster:* The bookmarks and color poster were the most often-used components of each of the four kits. Librarians distributed an average of 133 of their 200 bookmarks to patrons, and 94% of librarians displayed the color poster. (*Forgotten Genius* and *Lives in Science* surveys)

*Modifications to Kits:* Two-thirds of librarians have no plans to modify the kits. (*Forgotten Genius* survey). Ten librarians suggested materials to add, while four suggested materials to omit. (*Lives in Science* survey)

## General Use of Kit Components

All 162 librarians who participated in the evaluation indicated whether and how they used all four kits. On average, librarians used six different components of the *Forgotten Genius Library Resource Kit*. Most librarians distributed the bookmarks and displayed the poster, while over four-fifths used the Program Ideas and Tips component, Bibliography, or the Who Was Percy Julian? reproducible handout. The fewest librarians conducted an activity.

*100% of librarians distributed the Forgotten Genius bookmarks..... Of the 13 librarians interviewed, 100% created displays and left handouts for their patrons.*

These trends were relatively consistent for the other three kits, as well, as many librarians distributed the bookmarks or displayed the large color posters. About half the librarians used the bibliography or hung up or distributed the display sheets from the other three kits. Fewer librarians used the Program Ideas and Tips section or conducted activity sessions with the other three kits. Interview data further supported these findings. Of the 13 librarians interviewed, 100% created displays and left handouts for their patrons. Only three of those librarians also conducted an activity or program.

Table 3  
Overall Use of Kit Components

	<i>Forgotten Genius</i> N=82	<i>Newton's Dark Secrets</i> N=89	<i>Infinite Secrets</i> N=50	<i>Galileo's Battle for the Heavens</i> N=75
Distributed bookmarks	100%	89%	86%	79%
Displayed the large color poster	94%	80%	78%	72%
Used the bibliography	80%	60%	50%	49%
Hung up or distributed the display sheets	79%	54%	48%	51%
Used the "Who Was Percy Julian/Newton/Archimedes/Galileo?" reproducible handout	82%	46%	42%	43%
Used the "Program Ideas and Tips" section	82%	39%	26%	27%
Conducted (or distributed to other to conduct) one or more of the activities	33%	30%	28%	21%
I do not remember which activities I conducted with this kit.	--	7%	10%	15%

N=50–89; Percentages may total more than 100% because respondents could choose more than one response.

In the interviews, participants described their overall use of the kits. For 12 of the 14 librarians interviewed, their use was the same across all kits. Consistent with findings from both surveys, librarians most often reported using the kits to create displays. These displays often are aimed at a variety of age levels, and they tend to contain the following kit elements: color poster, display sheets, bookmarks, bibliography, and books/videos from the library's collection.

### *Who Was Percy Julian? Reproducible Handout*

Over four-fifths (82%) of librarians used the Who Was Percy Julian? reproducible handout. As shown in Table 4, of these 67 librarians, most display this handout in the library and about half distribute it to patrons. Those who use this handout in some other way explained that they give it to teachers and other educators or plan to use it with summer programs and discussion groups.

*82% of librarians used the Who Was Percy Julian? reproducible handout...most displayed it in the library.*

Table 4  
Use of Who Was Percy Julian?

	% librarians
Displayed in the library	84%
Distributed to patrons	49%
Used it myself as a reference	31%
Other	7%

N=67; Percentages may total more than 100% because respondents could choose more than one response.

### **Program Ideas and Tips: *Forgotten Genius***

On the *Forgotten Genius* survey, participants reported, in detail, their use of each sub-component within the Program Ideas and Tips section. Those results are presented below.

#### *Programs and Events*

One-third of librarians (33%) have used a program or event from the *Forgotten Genius Library Resource Kit*. Children's programs and events were used by the greatest number of librarians, specifically creating a picture board (n=11) and organizing a story time video presentation (n=9). See Appendix A for detailed table.

Librarians who have used at least one activity from the Programs and Events section of the *Forgotten Genius Library Resource Kit* explained their experiences with them and mentioned that the activities are useful, patrons enjoy the programs, and they plan to use some activities in the future.

*Because we are located in Illinois, the Percy Julian topic was very useful. We plan to use the materials in the future for more "Mad Science Club" activities, Illinois History, Black History Month, and Inventor's Month.*

*Everyone seemed to enjoy the programs. We held them in February with other events of famous Black Americans.*

*Librarians who did not conduct activity sessions or hold events commented that they lacked the time and resources to do so.*

*I plan on utilizing the program and event ideas during our Get a Clue Summer Reading Program.*

Librarians who created their own program or event (n=8) described holding an adult discussion group, having a Black History Celebration, and using the materials for their 3<sup>rd</sup>-5<sup>th</sup> grade adventure club.

Similar to other kit components, the 55 librarians (66%) who did not use any activities explained that they do not have the resources (including space and time) to conduct an activity.

### *Activities Using Library Resources*

About two-fifths of librarians have used one of the suggested Activities Using Library Resources. The most popular activities are creating bookmarks or resource posters for adults and children and using library display ideas for children. See Appendix A for a detailed table.

Librarians who have used one or more of these activities described their experiences with them and commented that the displays are easy to create and popular with patrons and that the activities raise awareness of Percy Julian.

*The children enjoyed the activities very much. None of them knew about Percy Julian before the programs.*

*These activities worked to raise awareness about science and specifically Percy Julian.*

*The display materials were very good and easy to adapt to a display in my library, especially the bookmarks and posters.*

Librarians who conducted some other activity described providing handouts, preparing a bibliography, creating a bulletin board, and conducting an “I AM” exercise with children.

Similar to the previous sections, librarians who did not use any activities commented that they lacked the time and resources to do so.

### *Library Display Ideas*

Library Display Ideas is the sub-component of Program Ideas and Tips used by the most librarians; it was used by 67 of the 82 librarians (82%). Of these 67 librarians, 60% of librarians created displays on Percy Julian’s life and work and just over one-third created displays on science activities or civil rights milestones (see Table 5). A small number created a display not included in the library resource kit and described them as being for Black History Month. The display included non-*Forgotten Genius* books, posters, and bookmarks.

Table 5  
Use of Library Display Ideas

	% librarians
Display on Percy Julian's life and work	60%
Display on science activities	36%
Display of civil rights milestones	36%
Display of pioneering scientists of color	33%
Display on chemistry's benefits	31%
Display of science fair projects	24%
Created other display not listed on sheet	13%
Display of local civil rights events and activities	10%
Display of Did you know? about the work of scientists of color	10%
Display on A new generation of scientists	9%

N=67; Percentages may total more than 100% because respondents could choose more than one response.

Fourteen of the seventeen librarians who explained their experiences with the display ideas mentioned that the displays prompted patrons to check out books related to Percy Julian. They noted receiving positive comments about the materials. The remaining three librarians said that patrons did not seem to notice the displays or that they do not have the resources to fully support the displays.

Six of the 15 librarians who did not use a display idea explained that they did not have the time or space to create a display, while the other nine librarians did not provide an explanation.

### Program Ideas and Tips: Other Three Kits

*Across all kits, Library Display Ideas was the most commonly used sub-component within Program Ideas and Tips.*

Seventeen users of *Newton's Dark Secrets* reported using at least one sub-component of the Program Ideas and Tips section. Fourteen (14) *Infinite Secrets* users and 16 *Galileo's Battle for the Heavens* users reported using this component. Across all kits, Library Display Ideas was the most commonly used sub-component within Program Ideas and Tips (82% of *Forgotten Genius* users reported using this component). This result reinforces the theme of librarians using the kits to create displays.



Table 6  
Use and Ratings of Program Ideas and Tips Sub-Components

	Newton			Archimedes			Galileo		
	Mean (Avg.)	# Who Used	Moderately Very or, Extremely useful	Avg.	# Who Used	Moderately, Very, or Extremely useful	Avg.	# Who Used	Moderately, Very, or Extremely useful
Programs and Events	3.64	8	22 (79%)	3.33	5	22 (73%)	3.47	3	22 (73%)
Activities Using Library Resources	3.54	7	19 (68%)	3.48	7	24 (77%)	--	--	--
Library Display Ideas	4.00	17	28 (88%)	4.06	14	29 (91%)	3.88	16	29 (91%)
Resources for Programs and Events	3.71	7	23 (82%)	3.65	7	26 (84%)	3.87	11	26 (87%)

N=28–32. *Galileo's Battle for the Heavens* did not include a section on Activities Using Library Resources.

Librarians described how they used the Program Ideas and Tips component of the other three kits. There were no differences across kits in how this component was used. Librarians provided 56 responses (21 for Newton, 16 for Archimedes, 19 for Galileo, and some responses were coded into more than one category):

*“The library display ideas gave several good ideas that we used in our overall library display.”*  
-Librarian

- 39 used the component as part of their displays,
- 12 gathered ideas for future use of the kits,
- 8 used it to plan program activities,
- 4 left copies for patrons to take,
- 3 gave it to another library staff member or a teacher, and
- 2 used it to visit Web sites.

Representative descriptions are provided below:

*We use the display ideas to add interest to our displays. We use the resources for programs and events to teach our staff about Web sites they may want to use with customers. (Archimedes)*

*I used the Activities [Using Library Resources] handout for ideas. I used the programs and events to gather additional information from museums and astronomical societies. I used the display handout for ideas and created a display and the resources for programs for contacts/guest speaker. (Newton)*

*The library resource activities were given to our Children's Room staff to incorporate into their programming. The library display ideas gave several good ideas that we used in our overall library display. The*

*resources for programs and events was a great reproducible tool for us to have in conjunction with the display material. (Archimedes)*

*The library and events page will be useful to us for future programs. The display ideas gave us added resources that added good touches in creating a display. The resource material was extremely useful as handouts on the display itself. (Galileo)*

## **Bibliography**

*Librarians welcomed the bibliography and used it both for their own reference in building library collections and as a handout for patrons.*

Across all kits, librarians welcomed the bibliography and used it both for their own reference in building library collections and as a handout for patrons. Of the 82 *Forgotten Genius* users, 66 (80%) have used the bibliography. Of the 66 librarians who used the *Forgotten Genius* bibliography, two-thirds displayed it in the library and approximately two-fifths distributed it to patrons or used it for their own reference, as shown in Table 7.

Table 7  
Use of the *Forgotten Genius* Bibliography

	% librarians
Displayed in library	67%
Distributed to patrons	41%
Used it for my own reference	39%
Other	6%

N=66, Percentages may total more than 100% because respondents could choose more than one response.

Those who used the *Forgotten Genius* bibliography in some “other” way mentioned comparing the resources on the bibliography to those at the library and using it to purchase materials, distributing it to other libraries, and using it to create a “pathfinder” handout (a reference sheet, similar to a bibliography, that lists key resources and provides guidance for researching a particular subject or discipline).

Regarding the other three kits, 24 librarians reported using the *Newton’s Dark Secrets* bibliography and 17 each reported using the *Infinite Secrets* and *Galileo’s Battle for the Heavens* bibliographies. The bibliography and all of its components received very high ratings from librarians. See Table 8 for a description of use and ratings of the components of the other three bibliographies.

Table 8  
Use and Ratings of Bibliographies

	# Who Used Component	Moderately, Very or Extremely useful
<i>Newton's Dark Secrets</i>		
Newton's Life and Works (n=32) <b>Mean=4.19</b>	24	32 (100%)
Calculus, Physics, and Astronomy (n=31) <b>Mean=3.94</b>	19	29 (94%)
History of Science and Mathematics (n=30) <b>Mean=4.1</b>	20	28 (93%)
<i>Infinite Secrets</i>		
Archimedes (n=29) <b>Mean=4.21</b>	16	29 (100%)
Math and Mathematicians (n=31) <b>Mean=4.19</b>	17	31 (100%)
Ancient Machines and Inventions (n=30) <b>Mean=4.17</b>	14	29 (97%)
History of Books and Bookmaking (n=31) <b>Mean=4.19</b>	16	29 (94%)
<i>Galileo's Battle for the Heavens</i>		
Galileo (n=27) <b>Mean=4.15</b>	15	25 (93%)
Before and After Galileo: Selected Scientists (n=28) <b>Mean=4.14</b>	16	27 (96%)
16 <sup>th</sup> and 17 <sup>th</sup> Century Italy (n=27) <b>Mean=4.04</b>	15	25 (93%)
Astronomy (n=28) <b>Mean=4.18</b>	17	26 (93%)
Careers (n=28) <b>Mean=4.07</b>	16	25 (89%)
N=27-32		

Of the 69 responses (25 for Newton, 22 each for Archimedes and Galileo, with some responses coded into more than one category) describing the ways librarians used the bibliographies:

- 26 referenced how the bibliographies were used to add books to a display,
- 24 used bibliographies to guide purchase or inter-library loan of new library materials,
- 12 placed the bibliographies in displays,
- 12 distributed copies of the bibliographies to patrons,
- 3 used the *Lives in Science* bibliographies to help them create their own bibliographies, and
- 2 used bibliographies to recommend books to patrons.

The *Galileo's Battle for the Heavens* bibliography was the one distributed most to patrons, and many librarians commented on the usefulness of the "Careers" section, but there were no other significant differences across kits on how the bibliographies were used.

*Our displays have been very popular and I have used the bibliography to broaden the materials we display. I have also made photocopies for customers who want to learn more. (Newton)*

*Good list of resources - we could check and create a booklist off of the resources to accent titles we own. Liked the list for Webpages too. Career sites and ideas also very helpful. (Galileo)*

## **Kit Activities**

All of the kits contained activities aimed at a variety of age levels. In the *Forgotten Genius* kit, they were separated into science and social studies activities. Twenty-seven of the 82 *Forgotten Genius* kit users (33%) had used at least one activity. Most librarians (23 of 27) had used the “Percy Julian and His Work” coloring sheet or “Who Am I?” About one-half used each of the other activities, as shown in Table 9.

Table 9  
Use of *Forgotten Genius* Social Studies (Soc.) and Science (Sci.) Activities

	% who used
“Percy Julian and His Work” coloring sheet (Sci.)	85%
“Who Am I?” (Soc.)	67%
“The Innovators Gallery” (Soc.)	56%
“Ready, Set, Sort!” (Sci.)	56%
“Changing States” (Sci.)	56%
“Find Percy Julian” (Soc.)	52%
“Seeing is Believing” (Sci.)	52%
“Unmix it up” (Sci.)	52%
“Soggy Science, Shaken Beans” (Sci.)	44%

N=27

*The activities were very well rated by all librarians.*

Those librarians who observed the activities rated their patrons’ level of interest in each activity. For each social studies and science activity, most librarians thought patrons were somewhat to very interested in the activity. Using a scale from 1 (*Not at all interested*) to 5 (*Extremely interested*), librarians indicated that patrons were most interested in “Seeing is Believing,” rating it as 3.50 on average, and least interested in “Find Percy Julian,” which was rated slightly lower at 2.86. For detailed ratings, see Appendix A.

Regarding the Newton, Archimedes, and Galileo activities in the other three kits (data are from the *Lives in Science* survey, N=36), the Newton activities were used by the most librarians and also were rated as more useful than the Galileo and Archimedes activities. While fewer librarians conducted activities than created displays, the activities were very well rated by all librarians. Over 75%

of librarians rated all activities as moderately, very, or extremely useful; between eight and 16 librarians reported having used these activities.

Table 10  
Use and Ratings of Newton, Archimedes, and Galileo Activities

	# Who Used Component	% Who Rated Moderately, Very or, Extremely useful
<i>Newton's Dark Secrets</i>		
Newton's Discovery (n=28) <b>Mean=4.14</b>	16	27 (96%)
Catch a Rainbow (n=28) <b>Mean=3.96</b>	13	25 (89%)
Parachute Play (n=28) <b>Mean=3.93</b>	11	25 (89%)
Light's Mysteries (n=28) <b>Mean=3.93</b>	9	25 (89%)
Marble on the Move (n=27) <b>Mean=3.85</b>	9	23 (85%)
Who Am I? (n=28) <b>Mean=3.96</b>	11	25 (89%)
<i>Infinite Secrets</i>		
New Shapes from Old (n=29) <b>Mean=3.72</b>	10	24 (83%)
All About Archimedes (n=30) <b>Mean=3.77</b>	9	25 (83%)
Eureka! (n=29) <b>Mean=3.62</b>	8	23 (79%)
All the Grains of Sand (n=29) <b>Mean=3.59</b>	8	22 (76%)
<i>Galileo's Battle for the Heavens</i>		
In the Swing of Things (n=31) <b>Mean=3.52</b>	8	24 (77%)
The Tick Tock of a Water Clock (n=31) <b>Mean=3.74</b>	8	25 (81%)

N=27–31; n values in table rows refer to the number of participants who answered the corresponding question.

#### *How Kit Activities Were Used*

Librarians were asked how they had used any of the social studies or science activities. As shown below in Table 11, just under half of the *Forgotten Genius* users conducted the activities themselves. One-third gave the activities to teachers, and one quarter used them in some other way, including giving them to parents or other librarians, using them in displays, or providing them for children to use.

Table 11  
Use of Percy Julian Social Studies and Science Activities

	% of librarians
I just conducted the activities myself.	48%
I invited a local scientist or other community member to conduct the activities.	0%
I gave the activities to teachers.	33%
Other	26%

N=27

In an open-ended format, librarians described how they have used or might use (in the future) the Newton, Archimedes, and Galileo activities. They provided 47 descriptions (22 for Newton, 14 for Archimedes, and 11 for Galileo, and some responses were coded into more than one category):

- 26 librarians distribute copies of the activity sheets to patrons,
- 10 librarians place the activity sheets in displays,
- 9 librarians conducted an activity, and seven of those were with the *Newton's Dark Secrets* kit,
- 9 librarians give the activity sheets to another staff member or school teacher, and
- 8 librarians plan to use the activity sheets in the future.

*“I used the idea for Catch a Rainbow, but modified it by using a prism in our theater.”*

*-Librarian*

Representative descriptions are provided below.

*I made photocopies of coloring sheet, incorporated parachute idea into story time. (Newton)*

*I used the idea for Catch a Rainbow, but modified it by using a prism in our theater. (Newton)*

*Planning to use shapes in a book discussion this summer - Chasing Vermeer - using various geometric shapes in a hands on math/shape program - tanagrams, etc. (Archimedes)*

*We photocopy these materials and provide them for customers to take home. We did create a very basic water clock for a science demonstration for children in the summer. We reproduced the handout and gave it to children then as well. (Galileo)*

## Display Sheets

The three newer kits contained display sheets (*Galileo's Battle for the Heavens* did not), and across all kits, many librarians reported using the display sheets and finding them useful. Four-fifths (n=65) of *Forgotten Genius* users used at least one display sheet, with the majority using African American Scientist and the fewest using Natural vs. Synthetic. Twenty-two librarians used one of the

display sheets from *Newton's Dark Secrets*, and 17 librarians used an *Infinite Secrets* display sheet. The display sheets are quite highly rated by all librarians.

Table 12  
Use and Ratings of Display Sheets

	#, % Who Used Component	% Who Rated Moderately, Very or, Extremely useful
<i>Forgotten Genius</i> (n=65; data from <i>Forgotten Genius</i> survey)		
African American Scientist	54 (83%)	n/a
Chemistry and Stuff around Us	35 (54%)	n/a
Plant Medicines	31 (48%)	n/a
I'm a Chemist	31 (48%)	n/a
Natural vs. Synthetic	25 (38%)	n/a
<i>Newton's Dark Secrets</i> (data from <i>Lives in Science</i> survey)		
Newton's Apple (n=31) <b>Mean=4.10</b>	22 (70%)	28 (90%)
The Better to See Stars With (n=30) <b>Mean=4.17</b>	22 (73%)	27 (90%)
Rainbow of Light (n=30) <b>Mean=4.23</b>	24 (80%)	27 (90%)
The Philosopher's Stone (n=31) <b>Mean=4.10</b>	22 (71%)	28 (90%)
<i>Infinite Secrets</i> (data from <i>Lives in Science</i> survey)		
Archimedes (n=29) <b>Mean=4.28</b>	15 (52%)	28 (96%)
History of the Book (n=30) <b>Mean=4.50</b>	17 (57%)	29 (97%)
Shapes in Nature (n=28) <b>Mean=4.39</b>	14 (50%)	27 (96%)
Ancient Machines (n=29) <b>Mean=4.45</b>	15 (52%)	28 (96%)

N=28–31 (*Lives in Science* survey), 65 (*Forgotten Genius* survey), Percentages may total more than 100% because respondents could choose more than one response.

### *Comparing Newton's Dark Secrets and Forgotten Genius Display Sheets*

WGBH was interested in whether librarians preferred the display sheets from *Newton's Dark Secrets* or those from *Forgotten Genius* (Percy Julian). Thirteen (36%) librarians prefer the *Newton's Dark Secrets* display sheets, 12 (33%) prefer those from the *Forgotten Genius* kit, and 11 librarians (31%) have no preference.

Those who prefer the sheets from *Newton's Dark Secrets* described them as more eye-catching, easier to read (both in terms of content and based on visual appearance), and easier to understand. They prefer the simpler layout with a single block of text, and they liked having less text on the page.

*The Newton sheets are "single focus" information displays. The "Forgotten Genius" set has a lot of information, but one must study them*



*to determine the message/information. The Newton set is clear and to the point getting the information across well.*

*Newton's Dark Secrets display sheets are less complicated and more eye-catching. The students commented on the Newton sheets more than the Julian sheets.*

*Unfortunately, most people won't read all of the information on the Forgotten Genius display sheets. The Newton's Dark Secrets are more on target with the amount of reading to put on each poster. Brief and to the point, mostly facts with an attention getting picture, title or first line.*

Librarians who prefer the *Forgotten Genius* display sheets like that the sheets are glossy and more colorful, that the text is laid out in several smaller blocks, that the sheets appear more modern, that they hold more information, and that students seem to relate better to them.

*I like the Forgotten Genius display sheets because they show children in the graphics and they tended to get the children excited about what was coming next in the program.*

*I like the glossy paper and the bright colors, they draw your attention. I also like the arrangement of the information in small groupings, it provides a lot of facts in a small area and it reminds me of museum displays.*

*I think kids will find the "Chemistry and Stuff Around Us," interesting because its things they use everyday. "I'm a chemist" is useful because students are always looking for career information.*

The 11 librarians who have no preference find both sets of display sheets useful and usable.

### *How Display Sheets Were Used*

As shown in Table 13, most librarians (86%) who used the *Forgotten Genius* sheets displayed them in the library.

Table 13  
Use of Display Sheets

	% librarians
Displayed in library	86%
Used them myself as a reference	20%
Photocopied and distributed to patrons	24%
Other	5%

N=65, Percentages may total more than 100% because respondents could choose more than one response.

In the *Lives in Science* survey (N=36), librarians described how they used the display sheets from the other three kits. Librarians find the sheets easy to use with patrons of all ages. There were 47 responses (27 for Newton, 20 for Archimedes, and some responses contained more than one category):

- 45 librarians placed the sheets within displays,
- 6 distributed photocopies,
- 5 used them in conjunction with an activity,
- 4 used the sheets to promote the NOVA program,
- 2 gave the sheets to another staff member or school teacher, and
- 2 plan to use them in the future.

*I read them, wanted to make a bulletin board with them. Will use them this summer. Love the Philosopher's stone - ties in with Harry Potter.* (Newton)

*The information provided was very good - not too much on one page, but just enough for the patron to realize the diversity and the contributions of mathematicians. This material was used in the adult display, however, young adults and some children can easily understand the material.* (Archimedes)

*Made coloring copies for story time and read book about scientists geared toward preschoolers.* (Archimedes)

*I used all of the display sheets to promote the program. I set up a display with books, a prism, a telescope, and an apple.* (Newton)

## **Bookmarks and Poster**

Librarians distributed to patrons anywhere from ten to 200 bookmarks of the 200 total they received from WGBH in the *Forgotten Genius* kit; the average was 133. In addition, nearly all librarians (94%) displayed the poster in the library.

*Popularity of the bookmarks and color poster has persisted over four years.... 94% displayed the poster in the library*

*Prominently displayed poster for walk-ins and agency staff to see. Gave away bookmarks in our library and the adjacent state library.*

*Bookmarks and posters and display sheets made it easy to promote science and the program.*

Popularity of the bookmarks and color poster has persisted over four years. In GRG's 2003 evaluation of the *Galileo's Battle for the Heavens* kit, the bookmarks and poster were the two most often-used components.

## **Modifications to the Kits**

A majority of librarians (n=54, 66%) did not modify the resources in the *Forgotten Genius* kit and will not do so in the future. Five librarians had

modified at least one *Forgotten Genius Library Resource Kit* component, while an additional 23 (28%) said they might modify it in the future.

Those who had modified the resources or indicated they might in the future (n=28) were asked to describe how they did or planned to do this, and 16 provided a response.

- 6 would add more information or add their own materials to create displays or a library-specific bibliography,
- 5 would adjust the literacy or comprehension level of the materials to appeal to a different audience, such as children or adults,
- 3 had other plans such as creating a stand for the bookmarks, integrating the resources into other programs, photocopying materials and modifying the materials based on who is presenting them, and
- 2 would condense the materials to better fit into a display or handout for patrons.

### **Materials to Omit or Add**

In the *Lives in Science* survey, librarians were asked whether there were any materials they would recommend adding to or omitting from the kits. Ten librarians (28%) recommended adding materials. Four requested more age-specific items (either for very young children or for adults), while three requested the DVD of the program or a DVD containing program clips. One librarian suggested each of the following additions: materials for the disability community, materials promoting other NOVA and WGBH programs, and materials focusing on current issues in science careers.

Only four (11%) librarians recommended omitting various materials. Their suggestions are included below. It is interesting that one librarian requested fewer bookmarks. This is in contrast to many other librarians who noted that their patrons took all 200 bookmarks.

*Ten librarians recommended adding materials....*

*Four librarians recommended omitting various materials.*

*Reduce the sources - make less paper work. I don't always read through the entire kit very easily. Have an index page - possibly age marked.*

*Resources for programs and events. Librarians should be able to figure this out on their own.*

*The science activities seem more suitable for a school than a public library--not really the type of programming most libraries do.*

*Fewer bookmarks - that would save you some money (and a few trees).*

## USE OF OTHER EDUCATIONAL RESOURCES

### Highlights

- One-third of respondents to the *Lives in Science* survey reported using other educational resources similar to the kits.
- Over half of librarians rated the *Lives in Science* kits as somewhat or significantly better than other educational resources. (*Lives in Science* survey)

Librarians described whether or not they have used other educational resources similar to the kits. Of the 36 librarians who took the *Lives in Science* survey, 11 have used similar educational resources (31%), though only two librarians (6%) reported receiving science outreach materials.

Materials received included the following, from the sources indicated below:

1. *Books (source unclear)*
2. *Bicycle Safety, Stranger Safety, Halloween Safety and Internet Safety programs from our local police department.*
3. *Kits for special stamps from the U.S. Postal Service*
4. *Illinois provides some kits on topics for science, not as good as this. Our library puts together kits for schools, not as good as this.*
5. *History channel kit on D-Day*
6. *History Channel does something that is similar to NOVA. JFK and the Pyramids are two that come to mind.*
7. *Activities pertaining to the Lewis and Clark Expedition celebration both online and from a book. We also did a program found online tied to the Benjamin Franklin 300th celebration. We are also putting together activities pertaining to the Jamestown 400 Celebration.*
8. *Horatio Hornblower (source unclear)*
9. *We will be using materials from NASA's Lunar and Planetary institute for "The Sky's the Limit."*
10. *Walden media kits were released for Charlotte's Web film.*
11. *Videos from the National Video Resource Center; Technology and Revolution from Alfred P. Sloan. Health-related pamphlets from the National Institutes of Health.*

Librarians who have used other resources were asked how the kits compare to the other resources, indicating their ratings on a scale from 1(*These kits are significantly worse than other resources*) to 5(*These kits are significantly better than other resources*). The average rating was 3.06, indicating that the 36 librarians participating in the *Lives in Science* survey believe the kits to be about the same as or slightly better than other resources. Twenty librarians (56%) rated the kits as somewhat or significantly better than other resources. Of the 19 librarians who provided an explanation for how they believe the kits compare to other educational resources, 16 (84%) praised the *Lives in Science* kits.

*NOVA kits have much more variety, longer shelf-life.*

*“These kits are one of the best science resources I have.” -Librarian*

*These kits are incredibly well selected and cover so many different formats for different ways of learning.*

*These kits are one of the best science resources I have as a resource. Topics and ideas are clearly presented. Resources to present programs are minimal which is a huge asset to us.*

Only two librarians said the kits are about the same in quality as other resources, and only one librarian preferred other resources, saying “*We were able to use what we needed from the other educational resources.*” (*Lives in Science* survey)

## USE OF THE *LIVES IN SCIENCE* NOVA SPECIALS

### Highlights

- Less than 15% of librarians reported that their libraries own the *Lives in Science* NOVA specials. (*Forgotten Genius* survey)
- Roughly 60% of librarians surveyed in the *Lives in Science* survey plan to use the specials in the future (all participants in that survey received DVDs of all four specials).
- 94% of librarians believe it is *moderately, very* or *extremely* important to use the kits and specials in conjunction with one another. (*Lives in Science* survey)
- On average, librarians would like to receive kits between nine and ten weeks prior to a special’s airdate. (*Forgotten Genius* survey)

### Library Ownership of NOVA Specials

Librarians who have used the *Forgotten Genius Library Resource Kit* (n=82), indicated whether their library owns a copy of this NOVA special. At the end of the survey, all respondents (N=162) were asked about their library’s ownership of the three older NOVA TV specials. *Forgotten Genius* was owned by the lowest number of libraries, while *Newton’s Dark Secrets* and *Galileo’s Battle for*

*the Heavens*, the oldest special, was owned by the most libraries (See Table 14). In addition, 28% of librarians who indicated they have used the *Forgotten Genius Library Resource Kit* (n=82) have watched this TV special.

Between 4% and 12% libraries own the NOVA Lives in Science specials.

Table 14  
Library Ownership of NOVA Specials

	Library owns the NOVA special
<i>Forgotten Genius</i> n=80	3 (4%)
<i>Newton's Dark Secrets</i> n=162	20 (12%)
<i>Infinite Secrets</i> n=162	7 (4%)
<i>Galileo's Battle for the Heavens</i> n=162	19 (12%)

N= 80–162

A subset of librarians (the 82 who have used the *Forgotten Genius* kit and the 36 who took the *Lives in Science* survey) was asked if they planned to purchase the *Lives in Science* NOVA specials that their library did not already own. Nearly 50% of librarians plan to obtain each of the specials; the highest percentage of librarians (64%) planned to purchase *Infinite Secrets*.

Table 15  
Future Plans to Purchase *Lives in Science* Specials

	Library does not own it but plans to obtain it	Library does not own or plan to obtain the NOVA special
<i>Forgotten Genius</i> n=82	41 (51%)	36 (45%)
<i>Newton's Dark Secrets</i> n=36	17 (47%)	10 (28%)
<i>Infinite Secrets</i> n=36	23 (64%)	7 (19%)
<i>Galileo's Battle for the Heavens</i> n=36	17 (47%)	7 (19%)

N= 36–82

Of those who did not purchase *Forgotten Genius*, most (n=12) indicated they are not in charge of purchasing. Nine librarians do not have the funds available for this purchase and seven said it was not appropriate for their library or audience due to the target age group or lack of patron interest.

Librarians who have no plans to obtain the other *Lives in Science* programs explained why that was the case:

- 11 librarians described financial constraints,
- 4 noted that they were not the person in charge of purchasing videos,
- 3 indicated that their library does not have a DVD player, and
- 3 said that the special already is available via an inter-library consortium.

### Use of NOVA Specials in Library Programs

Most of the 162 librarians did not use NOVA specials in their library programs, as shown in Table 16.

Table 16  
Use of NOVA Specials in Library Programs

	Used the NOVA special
<i>Forgotten Genius</i> n=82	6 (7%)
<i>Newton's Dark Secrets</i> N=162	9 (6%)
<i>Infinite Secrets</i> N=162	3 (2%)
<i>Galileo's Battle for the Heavens</i> N=162	7 (4%)
N=35-162	

Librarians who used *Forgotten Genius* as part of library programs were asked to explain how they did so. They indicated that they used the TV special in their collections and as part of displays, specifically for Black History Month. Even though many librarians had not yet used the NOVA specials as part of library programming, many said they had plans to do so in the future. Just over one-third of *Forgotten Genius* respondents and roughly 60% of the *Lives in Science* respondents had plans to use the specials in the future. (All *Lives in Science* participants received copies of all four DVDs after completing the survey.) Their responses are presented in Table 17.

Table 17  
Future Plans to Use NOVA Specials in Library Programs

	Has not used special, but plans to use	Has not used and does not plan to use special
<i>Forgotten Genius</i> n=82	29 (35%)	47 (57%)
<i>Newton's Dark Secrets</i> n=36	22 (61%)	12 (33%)
<i>Infinite Secrets</i> n=36	21 (58%)	13 (36%)
<i>Galileo's Battle for the Heavens</i> n=36	23 (64%)	11 (30%)

N= 36 (*Lives in Science* survey); N = 82 (*Forgotten Genius* survey)

## Receipt and Use of Kits In Relation to Program Airdates

Nearly everyone believes it is either moderately, very, or extremely important to use the kits and the specials in conjunction with one another.

### Current Use of Kit in Conjunction with NOVA TV Specials

On the *Lives In Science* survey, only five librarians reported when, in relation to the specials' airdates, they used the kits. Those who did respond were fairly evenly divided between using the kit before the special's original airdate and using the kit both before and after the airdates.

All librarians were asked, on the *Lives In Science* survey, how important they believe it is to use the kits in conjunction with the NOVA TV specials. Nearly everyone believes it is either moderately (39%), very (25%), or extremely important (30%) to use the kits and the specials in conjunction with one another.



The mean rating was 3.81 on a scale from 1(*Not at all important*) to 5(*Extremely important*).

### *Preference for Receipt of Future Kits*

*On average, librarians want to receive materials between nine and ten weeks before a broadcast.*

In the *Forgotten Genius Library Resource Kit*, the program airdate was printed on all of the kit's materials except for the display sheets. When asked their preference for having the airdate printed on outreach materials, nearly two thirds either would like the airdate to be printed on those items to be posted or handed out, such as the poster, bookmarks, reproducible handouts, and display sheets (39%) or want the airdate printed on everything (25%); 17 percent want it printed on as few items as possible, and one-fifth (20%) have no preference.

When librarians were asked how far in advance they would like to receive materials pertaining to an upcoming broadcast program, they indicated they would like the materials anywhere from three weeks to more than 20 weeks before the program broadcast. The average was between nine and ten weeks before a broadcast (mean=9.44 weeks). Over half (59%) want the materials to arrive sometime between three and eight weeks in advance, with the most common request (22%) being to receive the materials eight weeks in advance.

### **Future Use of *Lives in Science* Specials**

Of those 41 librarians who do not plan to use the *Forgotten Genius* NOVA special as part of programming in the future:

- 17 do not have the resources to do so, including not having funds, staff, time, space, or the technology to show the program,
- 10 explained that the specials do not align with their patrons' interests, or age level, or with other library programming,
- 8 did not record or purchase the show, and
- 6 are not responsible for planning that type of library programming.

Participants who did not plan to use the other three NOVA specials (12 did not plan to use *Newton's Dark Secrets*, 13 did not plan to use *Infinite Secrets*, and 11 did not plan to use *Galileo's Battle for the Heavens*) voiced the same reasons as they did regarding the *Forgotten Genius* special.

- 10 expressed that they do not use videos in library programs,
- 6 librarians voiced resource-based (budget, staff time) constraints,
- 6 did not give a reason beyond the fact that they had no plans to use the specials in the future.

## USE OF THE WEB SITES

### Highlights

- Between 6% and 20% of librarians have used the *Lives in Science* Web sites. (*Forgotten Genius* and *Lives in Science* surveys)
- The most common reasons for not visiting the Web sites were lack of awareness of the Web sites and lack of time to visit the sites. (*Forgotten Genius* and *Lives in Science* surveys)

On both surveys, librarians were asked about their use of the Web sites. Sixteen of the 82 librarians (20%) have used the *Forgotten Genius* Web site, and smaller percentages have used the *Newton’s Dark Secrets* (14%), *Infinite Secrets* (6%), or *Galileo’s Battle for the Heavens* (6%) Web sites. When asked what areas of the Web site they visited, four librarians on the *Forgotten Genius* survey could not remember and two provided a general positive comment about the Web site rather than listing the areas they visited. The remaining librarians visited a variety of areas and noted visiting “all of them,” “information on Percy Julian’s life,” and the TV schedule, Program Ideas and Tips section and the Display Sheets section. On the *Lives in Science* survey, only two participants described the areas of the Web site they visited. They included those sections with illustrations (and other things they could print out for displays), as well as the sections of the Web sites that included animations.

Table 18  
Use of *Lives In Science* Web sites

	Used Web site
<i>Forgotten Genius</i> (N=82) ( <a href="http://www.pbs.org/wgbh/nova/julian/">http://www.pbs.org/wgbh/nova/julian/</a> )	16 (20%)
<i>Newton’s Dark Secrets</i> (N=36) ( <a href="http://www.pbs.org/nova/newton">www.pbs.org/nova/newton</a> )	5 (14%)
<i>Infinite Secrets</i> (N=34) ( <a href="http://www.pbs.org/nova/archimedes">www.pbs.org/nova/archimedes</a> )	2 (6%)
<i>Galileo’s Battle for the Heavens</i> (N=36) ( <a href="http://www.pbs.org/nova/galileo">www.pbs.org/nova/galileo</a> )	2 (6%)

N=34–36

During the interviews, a few librarians independently mentioned the Web sites, and those who did praised the sites. One librarian noted that she plans to include the Web link to the *Lives in Science* Web sites on her library’s Web site. She said that she does not link to very many external sites, but she was so impressed by the kits and programs that she is delighted to advertise the Web sites to her patrons.

Of the librarians who did not visit the Web sites, most indicated that they did not have time or were not aware of the Web site.

Table 19  
Why Librarians Did Not Visit the *Lives in Science* Web sites

	Julian: # and % librarians N=66	Newton: # and % librarians N=32	Archimedes: # and % librarians N=33	Galileo: # and % librarians N=34
I was not aware of the site.	13 (20%)	12 (38%)	13 (39%)	17 (50%)
I did not have time.	38 (58%)	14 (44%)	11 (33%)	12 (35%)
I did not find the site useful.	0	0	0	0
I experienced technical difficulties.	0	0	1 (3%)	1 (3%)
Other	11 (17%)	6 (19%)	8 (24%)	4 (12%)

N=32–66, Percentages may total more than 100% because respondents could choose more than one response.

Librarians who provided some “other” reason for not visiting the Web site mentioned that they do not need information from the site, they do not think patrons will be interested in this information, and the Web site is not relevant to their library.

## LIBRARIANS’ OPINIONS OF THE KITS

### Highlights

- Between 70% and 90% of librarians surveyed reported moderate to extreme increases in their own interest in the scientists and topics featured in the kits as well as in conducting future science outreach in their libraries. (*Lives in Science* survey)
- The color poster and bookmarks received the highest average usefulness ratings across each of the four kits. (*Forgotten Genius* survey and *Lives in Science* survey)
- Across both surveys and interviews, librarians rated as most useful the kit components that could be used in displays.
- Librarians were pleased with the organization of the *Forgotten Genius* kit, and 95% of librarians reported that the kit met or exceeded their expectations. (*Forgotten Genius* survey)
- Roughly 70% of librarians plan to use the kits in the future, and a majority of librarians interviewed believe that the kits have an extensive shelf-life. (*Lives in Science* survey and interviews)
- When asked for their suggestions for future outreach projects, librarians generally did not have suggestions on format but provided a wide range of topic suggestions, from architecture to history. (*Lives in Science* survey and interviews)

70% of librarians felt that the contents of the library resource kits prepared them to use the materials very or extremely well.

Most librarians (70%) felt that the contents of the various library resource kits prepared them to use the materials *very* or *extremely well*. No librarians indicated the contents did not prepare them at all. Librarians also rated whether their own level of interest increased as a result of their experiences with the *Lives in Science* kits, as described in Table 20. Librarians became particularly interested in the topics featured in the various kits as well as in the lives and work of Galileo and Newton.

Table 20  
Increases in Librarians' Interest

Librarians' Interest in:	Mean	Increased Moderately, Very much, or Extremely
The life and work of Galileo (n=36)	3.47	32 (89%)
The life and work of Archimedes (n=36)	3.36	28 (78%)
The life and work of Newton (n=36)	3.47	32 (89%)
The life and work of Julian (n=36)	3.36	28 (78%)
The topics featured in the kits (n=36)	3.56	28 (82%)
Conducting science outreach events and activities for patrons (n=36)	3.08	25 (69%)

N=34-36

### Usefulness of the Kits

Librarians rated the usefulness of each kit component. For the *Forgotten Genius* kit, only librarians who have used the kit (n=82) were asked to provide usefulness ratings. For the other three kits, all librarians (n=36 from the *Lives in Science* survey) were asked to rate the usefulness kit components, regardless of whether or not they had used them. If they had not used a component, they were asked to base their answer on their impressions they had of each kit as they reviewed it. For all ratings, librarians used a scale from 1 (*Not at all useful*) to 5 (*Extremely useful*).

#### *Forgotten Genius Kit*

The bookmarks and poster were both used by the greatest number of librarians and found to be the most useful, with the majority of librarians rating each as *extremely useful*. Many librarians rated components as useful, even though they do not use them. As shown in Table 21, all components were rated above the mid-point of the scale; components that were used by more librarians were rated higher, on average, than components that were used by fewer librarians.

Table 21  
Usefulness of *Forgotten Genius* Kit Components

		Somewhat, Very or Extremely Useful
Bookmarks (n=77)	<b>Mean=4.51</b>	99%
The Poster (n=75)	<b>Mean=4.31</b>	96%
Bibliography (n=61)	<b>Mean=4.10</b>	90%
Who Was Percy Julian? Reproducible Handout (n=53)	<b>Mean=3.83</b>	92%
Display Sheets (n=59)	<b>Mean=3.76</b>	89%
Program Ideas and Tips (n=45)	<b>Mean=3.56</b>	89%
Science Activities (n=40)	<b>Mean=3.43</b>	80%
Social Studies Activities (n=37)	<b>Mean=3.30</b>	76%

N=37-77

*Other Three Kits: Newton, Archimedes, and Galileo*

*Librarians who used a component, on average, rated it higher than did librarians who had not used that component*

As continues to be echoed throughout these results, librarians rated the color poster and bookmarks extremely highly. They were overwhelmingly positive about the usefulness of all major kit components, and librarians provided usefulness ratings for these three kits regardless of whether or not they had used kit components in the past. Across all kits, there were no pronounced differences in usefulness ratings between those who had used versus not used a particular component. However, there was a trend whereby librarians who used a component, on average, rated it higher than did librarians who had not used that component. Tables 22 through 24 display the numbers who had used the components and the percent who found them *moderately, very, or extremely useful*. (The means for users versus non-users are displayed in the Appendix.)

Table 22  
Usefulness of *Newton's Dark Secrets* Components

	# Who Had Previously Used Component	Moderately, Very, or Extremely useful
Color Poster (n= 34) <b>Mean=4.50</b>	23	34 (100)%
Bookmarks (n= 34) <b>Mean=4.47</b>	25	33 (97)%
Bibliography (n= 33) <b>Mean=4.18</b>	20	31 (94)%
Display Sheets (n=31) <b>Mean=4.00</b>	18	29 (94)%
Who Was Sir Isaac Newton? handout (n=34 ) <b>Mean=3.91</b>	21	30 (88)%
Newton Activities (n= 31) <b>Mean=3.77</b>	11	26 (84)%
Program Ideas and Tips (n=31) <b>Mean=3.52</b>	10	25 (81)%

N=31–34

Table 23  
Usefulness of *Infinite Secrets* Components

	# Who Had Previously Used Component	Moderately, Very, or Extremely useful
Color Poster (n=31) <b>Mean=4.55</b>	20	31 (100)%
Bookmarks (n= 32) <b>Mean=4.53</b>	22	31 (97)%
Display Sheets (n=30) <b>Mean=4.17</b>	16	28 (90)%
Bibliography (n= 29) <b>Mean=4.10</b>	20	28 (97)%
Who Was Archimedes? Handout (n=32) <b>Mean=4.06</b>	15	30 (94)%
Famous Mathematicians handout (n=32) <b>Mean=4.03</b>	15	29 (91)%
Archimedes Activities (n=30) <b>Mean=3.83</b>	8	27 (90)%
Archimedes and the Palimpsest handout (n=31) <b>Mean=3.71</b>	14	27 (87)%
Science lesson (n=27) <b>Mean=3.41</b>	4	21 (78)%
Program Ideas and Tips (n=30) <b>Mean=3.53</b>	8	24 (80)%

N=27–32

*These positive ratings echo GRG's 2003 evaluation of the Galileo's Battle for the Heavens kit. The librarians in that evaluation rated quite highly the kit's content, format, ease of use, and appropriateness for the library population.*

Table 24  
Usefulness of *Galileo's Battle for the Heavens* Components

		# Who Had Previously Used Component	Moderately, Very, or Extremely useful
Bookmarks (n=34)	<b>Mean=4.56</b>	25	32 (94%)
Color Poster (n=32)	<b>Mean=4.50</b>	26	31 (97%)
Who Was Galileo Galilei? Handout (n=32)	<b>Mean=4.25</b>	19	30 (94%)
Bibliography (n=30)	<b>Mean=4.23</b>	20	29 (97%)
Scientists Today handout (n=31)	<b>Mean=4.13</b>	15	29 (94%)
Galileo Activities (n=31)	<b>Mean=3.65</b>	11	25 (81%)
Program Ideas and Tips (n=29)	<b>Mean=3.59</b>	10	22 (76%)
Science lesson (n=29)	<b>Mean=3.41</b>	8	22 (76%)

N=29–34

These positive ratings echo GRG's findings from the 2003 evaluation of the *Galileo's Battle for the Heavens* kit. The 300 public librarians in that evaluation rated quite highly the kit's content, format, ease of use, and appropriateness for the library population.

### Content and Organization of the *Forgotten Genius* Kit

*Most librarians indicated that the number of materials, the content, the format, and ease of use are very good or excellent.*

Librarians rated several aspects of the *Forgotten Genius Library Resource Kit*, using a five-point scale from 1(*Poor*) to 5(*Excellent*). (These more detailed questions were not asked about the other three kits.) Most librarians indicated that the number of materials, the content, the format (as a folder), and ease of use are *very good* or *excellent*. As mentioned above in librarians' comments about the kit components, some librarians do not think the materials are appropriate for their library, with one-fifth (21%) rating the appropriateness as *poor* or *fair*. They further explained that their patrons are not interested in Percy Julian or in evening programming.



Table 25  
Opinions of Kit Content and Organization

	Poor	Fair	Good	Very Good	Excellent
The amount of materials in the library resource kit <b>Mean=4.29</b>	0%	0%	18%	34%	47%
Library resource kit content <b>Mean=4.23</b>	0%	0%	21%	35%	44%
Library resource kit format as a folder <b>Mean=4.22</b>	0%	0%	14%	49%	36%
The ease with which the library resource kit could be used <b>Mean=4.08</b>	0%	1%	26%	36%	36%
The appropriateness of the materials in the library resource kit for your audience <b>Mean=3.60</b>	4%	17%	22%	31%	27%

N=76-78

### Fulfillment of Expectations for the *Forgotten Genius Kit*

Six in ten librarians (61%) indicated that the *Forgotten Genius Library Resource Kit* met their expectations, while 34% said it exceeded their expectations. Only 4% said the kit did not meet their expectations.

When asked to explain their response, those who said the kit exceeded their expectations commented that the kit contains more information and ideas than they expected.

*“It gave the staff so many ideas and made our jobs easier by doing all the research and preparation. More in-depth than what we normally have time to provide.”*

*-Librarian*

*I did not expect so much information in the materials.*

*I was able to find more than enough info for my display and I think the activities and programs would be very good to do if I was able in my small library.*

*It gave the staff so many ideas and made our jobs easier by doing all the research and preparation. More in-depth than what we normally have time to provide. Lots of options.*

Of those who said it met their expectations, 15 provided an explanation for their response. Of these, six gave a general positive comment about the kit, four thought it was good, but they did not like parts or parts were not suitable for their audience, and three mentioned that they expected this kit to be just as good as past kits they had received. The remaining librarians want another resource to hand out.

*The information was good and we had a lot of people ask about Mr. Percy so it was a good discussion starter.*

*The kit was organized very well. The information given can easily be adapted.*

*I have received these kits in the past. They are more suitable for a school library than a public one.*

*The library resource kit seemed well planned, but generated little use in our rural, largely White, county population.*

*We know any NOVA materials are top-quality.*

Of the three librarians who said the kit did not meet their expectations, one thought the materials would be overwhelming, but implied that they were not. Another wrote that it was “*hard to promote when the kids couldn’t get a book to use for a report*” and the third noted that it was “*mainly for older students.*” (Forgotten Genius survey)

## **General Reactions and Suggestions for Improvement**

### *Forgotten Genius*

Both on surveys and in interviews, librarians had the opportunity to provide additional comments about the kits. Fifty-three (53) librarians commented in an open-ended format on what they particularly like about the *Forgotten Genius* kit (some responses were coded into more than one category).

- 21 like that the kit is comprehensive and high quality, which makes it easy to use at their library,
- 17 like the books and/or poster
- 5 librarians provided a general, positive comment or liked the content (Percy Julian),
- 3 like the reproducible materials,
- 3 like the bibliography,
- 3 enjoy the variety of materials for different age groups, and
- 3 like the ease of acquiring the kit (it was delivered to them free).

*“It was so thorough, and provided me a path to use for program planning.”  
-Librarian*

*Everything was there that I needed to create a display in the library.*

*It was so thorough, and provided me a path to use for program planning.*

*The variety of information provided for all age groups. Some of the material for children and young adults was passed along to the Children’s librarians.*

*I liked the fact that it spotlighted a person that has contributed a lot to science, but is not very well known.*

Only 15 librarians had suggestions for improving the *Forgotten Genius* kit. Four want more or different posters and bookmarks and three each want the kits sent sooner or want some materials for younger kids or people with lower literacy levels. Five provided some other suggestion, including adding word searches or crossword puzzles, video streaming the NOVA special as it airs, putting the resources from several programs on CD-ROM, including multiple people in each kit, and making the resources more colorful.

*More variety of the posters/bookmarks to get the word out. I did receive plenty, but they all looked the same.*

*Provide both a large and smaller size poster.*

*I'd love it if there would possible be an early learning/literacy preschool segment more focused on.*

*Get them out sooner. Or maybe notification that they kit will be arriving a few months before the fact.*

Additionally, 26 librarians provided a comment. Of these, most were a general, positive comment about the kit, while five librarians pointed out that they would like to receive the kits as far in advance as possible before the program's airdate.

### *Impressions of Other Three Kits*

On the *Forgotten Genius* survey, all librarians were asked to describe their use of the other three kits and their impression of these kits, in an open-ended format. Of the 162 librarians who took the survey, 43 librarians provided a wide variety of responses. Table 26 shows that one-third of the responses were general, positive comments about the other three kits, and about one-quarter referred to distribution of the bookmarks. Many librarians also mentioned that they liked and/used the poster, display ideas and reproducible materials.

Table 26  
Use and Impressions of the Other Three Kits

	% of Responses
General positive comment	33%
Distributed bookmarks	26%
Liked/used poster	12%
Not appropriate for audience/no interest	12%
Gave to teachers	9%
Liked/used display ideas	7%
Liked/used reproducible materials	7%
Purchased/watched TV special	7%

N=43, Percentages may total more than 100% because some responses fell into more than one category.

*All I remember is that the kits were well put together and patrons watched the programs who didn't know about them until they saw your promos in the library.*

*I remember the kits being very well done with lots of information to choose from.*

*The kits are great. I did put up the posters and put out the bookmarks.*

*We have used parts or all of the kits in the library. We always pass out the bookmarks and make the information available to the public. Since we are located in a Vocational School I also have passed on the information about these programs to the teachers.*

*They were too difficult to use in entirety for the ages of children I work with, but I used as much of the materials that I could.*

*“I found these to be such a help for a small library. They gave us displays and ideas that normally would not be available here.”  
-Librarian*

Additionally, on the *Lives in Science* survey and during interviews, librarians provided general comments about the kits. Quotations are presented below.

*Kits help us out a lot. They give us a motivation to do something about these programs. They help us create public awareness of the program and of the materials we already have. On our own we don't create the displays. We have this, we should do something with it. It's a great thing. It brings an awareness to us that something is going on and that we should do something. It's always fun when we get one. It's like getting a present. (Interview)*

*I appreciate that you made these fine materials available to our library. They were very well organized and researched. Thank you. (Lives in Science survey)*

*I found these to be such a help for a small library. They gave us displays and ideas that normally would not be available here. They provided a format for what we might be able to do on a small scale in our own vicinity. (Lives in Science survey)*

*Thank you so much for making the kits available to us. Many small communities do not have the funding to do much programming, let alone expand their resources. Education and related fields too often are at the bottom of the budget priority list. Everything we can do to expose our patrons to a wider world of thought and experience is important. Keep up the good work. (Lives in Science survey)*

*The kits are wonderful as a library resource for our patrons and our staff. Solid tips and techniques are given to ensure a quality presentation. NOVA has done a great job and it is much appreciated. (Lives in Science survey)*

## Projected Future Use of Kits

### *Future Use of the Forgotten Genius Kit*

Of those 39 librarians who had not used the *Forgotten Genius* kit but planned to, 14 knew when they will use it. The remaining 25 librarians were unsure when they will use the kit. All planned to use it some time between April 2007 and November 2007.

When asked how they planned to use the kit, 18 librarians commented on the components they planned to use and the audience for them:

- 7 plan to create a display,
- 7 plan to use components of the kits with teens or children and of those, 3 planned to specifically use them with children from schools, and
- 5 plan to distribute the bookmarks.

### *Future Use of Other Three Lives in Science Kits*

Librarians also indicated how likely they would be to use the other three kits in the future (either again or for the first time; see Table 27).

Table 27  
Projected Future Use of Kits

	Mean	Moderately, Very, or Extremely Likely
<i>Newton's Dark Secrets</i> (n=36)	3.36	24 (67%)
<i>Infinite Secrets</i> (n=35)	3.34	25 (71%)
<i>Galileo's Battle for the Heavens</i> (n=36)	3.25	24 (67%)

N=35-36

Those librarians who reported being *moderately*, *very*, or *extremely likely* to use a kit in the future were asked to describe how they might use the kit(s). There were 70 responses (24 Newton, 24 Archimedes, 22 Galileo), and some responses were coded into more than one category.

- 41 responses focused on plans to conduct library programs and activities, sometimes in conjunction with a summer reading program or science fair event at school,
- 35 responses referred to plans to create displays,
- 81 responses focused on plans to use the kits as a resource for research in their library collections, and
- 5 responses referred to plans to use the *Forgotten Genius* kit in conjunction with Black History Month.

*If I get (borrow) the video, I will use it in conjunction with 2007 Summer Reading program "Get a Clue @ the Library."* (Newton and Archimedes)

*We have programs for the different age levels. I hope to put together a series of programs after school and one Saturday around the time students are preparing science fair projects using the different kits for both inspiration and information. (Newton)*

*“None of us in the children's room are science oriented. After looking at the kits, it's like, ‘Oh, we could do this!’ Without the kits, how would you even think of it?”*  
-Librarian

*I am planning some science programs for fall 2007 and we will use this one. We plan to make a telescope and this kit would be an excellent addition to the telescope program! (Galileo)*

*Programming. Displays and informative table. For students as a resource - possibly with science fair projects. (Archimedes)*

In the interviews, several librarians described how the kits inspired future library science programming. They spoke about having more ideas about how to better set up displays and conduct programs. One librarian realized that she could contact local scientists to come to the library as speakers for science events. One librarian, when noting that the kits increased her interest enormously, exclaimed, *“None of us in the children's room are science oriented. After looking at the kits, it's like, ‘Oh, we could do this!’ Without the kits, how would you even think of it?”* (Interview)

Other librarians described that they are more interested in conducting science programming with the kits; however, they likely will not follow through on this interest. They cited concerns including staff time and budget constraints and a lack of interest in science among their patrons. One librarian described her frustrations saying, *“science doesn't really work with us in this library, and I don't know why...health workshops in the past weren't really well attended... we display a lot of materials, but people don't attend science-related programming. Patrons get their books and go; they don't stay for programming”* (Interview). Two librarians who were interviewed commented that the activity suggestions seemed more appropriate for school teachers rather than librarians.

Librarians who indicated that they were only *somewhat* or *not at all likely* to use a kit in the future were asked what might encourage them to use that kit. There were 30 responses (11 Newton, 9 Archimedes, 10 Galileo), and some responses were coded into more than one category.

- 10 librarians indicated that having the DVD would encourage them to conduct programs with the kit,
- 8 wanted fresh copies of handouts and bookmarks,
- 7 librarians wished they had more time or money allowing them to conduct programs,
- 7 librarians noted that a program or event tie-in (such as a summer reading theme or school event) would prompt them to use the kits, and
- 4 librarians would use the kits if school teachers expressed interest in them.

*There would have to be a major tie in with something happening that I would be able to promote. (Newton)*

*Availability of the DVD. (Galileo)*

*Frankly, with the added poster and display materials that are fresh and clean, I'm likely to use it if I run out of other ideas and need a quick display. It will go into my file cabinet of display ideas for the future. Without the "fresh" kit, it is unlikely I would re-use what remains of the previous materials. (Newton)*

*We would use these kits if we had more time and felt we would have a fairly good response in attendance for the programs. (Archimedes)*

### *Factors Prompting Projected Future Use of a Kit*

On the *Lives in Science* survey, librarians reported what would encourage them to use a kit soon after receiving it. Of the 33 librarians who responded (some responses were coded into more than one category):

- 18 said they would use a kit if it arrives at a date near the airdate of the NOVA program (although on the *Forgotten Genius* survey, librarians noted a preference to receive the kit several weeks prior to a program's airdate).
- 7 would use the kit if they had time and space in the library to conduct a program or host a display,
- 6 would use the kit if they had the DVD of the NOVA special or a preview DVD,
- 4 would use kits that contained more activities for a specific population (such as young children and adults),
- 4 would use a kit if its topic coincided with existing library programming or with a specific school activity,
- 2 would use a kit if there were general community interest in the kit's topic, and
- 2 wished for publicity surrounding the kit.

*Knowing that the special is about to air gives the display a good tie-in to something patrons may be aware of, or makes them aware the special will be airing. Otherwise, it is less likely we'd use the kit.*

*I've never been able to use the kit with the TV special (we don't have an antenna here...) so I know the kit is useful without the special--but I think having the DVD would encourage use of the kit--but I don't know how you'd keep kit receivers from using it before you aired your specials...I've always utilized the kits before your specials to try to "psyche" the kids up for watching your shows when they air.*

### **Shelf-Life of Kits**

In the interviews, librarians were asked their opinion of the shelf-life of the kits (not in terms of the physical materials, but in terms of using the suggestions, activities, resources, etc.). A majority of librarians interviewed (9 of the 13) believe that the kits have a quite extensive shelf-life. They said that the activities are reusable, that historical information remains timeless, and several librarians plan to keep the kits in their vertical files to reuse them.

*A majority of librarians interviewed believe that the kits have a quite extensive shelf-life.*



*Projects are ones that you always can adapt, you can be very creative with these kits. As long as I'm here, we'll be using them!*

*We will keep using these for ages. They're so comprehensive; there are so many ideas. Pick one idea this time, pick another subsequently. You can repeat ideas every few years. You can do a different book display each year. It's very fascinating.*

*When new generations come along, it's all new to them. They have the same interest to learn, and the history remains the same.*

One librarian had no opinion about shelf-life; the three librarians who described the shelf-life as limited said that either they do not reuse educational materials, or that having the NOVA program's airdate printed on the kit materials (especially display materials) prohibits future material use.

### **Suggestions for Future Projects**

On the *Lives in Science* survey and during interviews, librarians were asked to suggest topics and formats of additional library outreach projects that WGBH might consider. Together, librarians suggested 30 different topics, ranging from architecture, to featuring women scientists, to history. A list of all topics suggested is contained in the Appendix.

Librarians did not often have suggestions for potential future formats. Many continued to echo that they enjoy receiving materials they can hand out (e.g., bookmarks) and use to create a display.

Regarding specific age groups, several librarians requested that future materials be aimed at younger children (pre-school through early elementary school). They suggested large, visually-appealing posters with relatively little text as well as simple activities that require only a very short presentation on the part of the librarian.

One librarian who hopes for future materials she might use with adults described wanting topics "*where the rubber hits the road*" (Interview), pertaining to issues such as personal finance, financial literacy, entrepreneurship, or home ownership.



## PATRONS' PERCEIVED INTEREST IN KIT COMPONENTS

### Highlights

- Librarians believed that the way in which the *Forgotten Genius* kit was most useful was in helping patrons become aware of and interested in the NOVA specials. (*Forgotten Genius* survey)
- Librarians believed that the kits help patrons learn about and engage with both science and the lives of the scientists featured. (*Lives in Science* survey)
- Librarians rated the color poster and bookmarks as the components most interesting to their patrons. In contrast, the social studies activities, science activities, and Ideas suggested in the Program Ideas and Tips section were rated as less useful to their patrons. (*Lives in Science* survey)

### Generating Patrons' Interest in the *Forgotten Genius* Kit

The *Forgotten Genius* survey contained additional questions pertaining to patrons' interest in that kit. Using a five-point scale from 1(*Not at all useful*) to 5(*Extremely useful*), most librarians rated the *Forgotten Genius* kit as *somewhat* to *very useful* at for all areas surveyed (see Table 28).

Table 28  
Usefulness of *Forgotten Genius* Kit at Teaching and Generating Patrons' Interest

		Not at all useful	A little useful	Somewhat useful	Very useful	Extremely useful
Helping build awareness of the TV program	<b>Mean=3.74</b>	1%	5%	33%	39%	22%
Generating interest in scientists other than Julian	<b>Mean=3.33</b>	3%	11%	45%	33%	8%
Providing youth the chance in engage in science activities featured on the TV program.	<b>Mean=3.31</b>	7%	11%	35%	39%	8%
Teaching about fields of science featured on the TV program	<b>Mean=3.25</b>	6%	11%	47%	27%	10%
Teaching about scientists who study areas featured on the TV program	<b>Mean=3.22</b>	7%	11%	43%	32%	8%

N=72-78

## Perceived Benefits of Kits to Patrons

On the *Lives in Science* survey (n=36), librarians reported what they believed to be the benefits of the other three kits to library patrons. There were 102 responses (36 for Newton, 34 for Archimedes, 32 for Galileo), and some responses were coded into more than one category.

- 45 librarians believed that the kits help patrons learn about and engage with science,
- 24 believed they help patrons engage with the lives of the scientists featured,
- 18 believed the kits help to promote the NOVA program,
- 14 perceived that the kits highlight their library's collection,
- 7 praised individual kit components,
- 6 praised the kits for use with homeschoolers and for at-home learning,
- 6 believed that the kits provide an opportunity for families to learn together, and
- 6 described the ways in which the kit allows them to develop library programs.

*The benefits are that the children I work with get a general overview of a very important scientist. Hopefully what I used encouraged the children to dig a little deeper and find out more on their own. (Newton)*

*Make them more aware of science and its history. (Newton)*

*Learn about a famous figure whose name they may have heard reference to. Learn about his contribution to science. Perhaps become interested in science. (Newton)*

*This kit helped the students who visit to learn more about an important scientist. It was fun for the parents and children to spend time together making books. (Archimedes)*

*Exposing adults and children to the history of science and mathematics. Making it a fun experience. (Archimedes)*

*Benefit is learning more about science, learning about what NOVA has to offer and increased interest in science programs. (Galileo)*

## Patrons' Perceived Interest in All Kits

Considering all four of the kits, librarians indicated the types of resources and activities they believed that their patrons find most versus least interesting. (Please note that librarians answered separate questions for the most interesting and least interesting components, and they were allowed to select more than one component each time. Therefore, it cannot be inferred that when 61% of librarians rated Display Sheets as most interesting, for example, that 39% rated them as least interesting. As seen in Table 30, only 11% of librarians rated Display Sheets as least interesting.)

*The overwhelming majority of librarians rated the color poster and bookmarks as the most interesting components to patrons.*

Table 29 presents information on the components that were rated as most interesting to patrons. The overwhelming majority of librarians rated the color poster and bookmarks as the most interesting components to patrons. The display sheets and informational handouts also were rated as interesting by a majority of librarians.

Table 29  
Components Rated Most Interesting to Patrons

	Librarians Who Rated Component Most Interesting to Patrons
Color Poster	30 (83%)
Bookmarks	30 (83%)
Display Sheets	22 (61%)
Informational handouts (e.g., Who Was Galileo? Archimedes and the Palimpsest)	22 (61%)
Bibliography	19 (53%)
NOVA program	18 (50%)
Science Activities	17 (47%)
Social Studies Activities	11 (31%)
Web site	9 (25%)
Ideas suggested in the Program Ideas and Tips section	8 (22%)

N=36, Percentages may total more than 100% because respondents could choose more than one response.

In both the *Lives in Science* survey and interviews, librarians were asked to explain why they believed those components are most interesting to patrons. There were 31 responses on the survey (some responses were coded into more than one category).

- 17 reported that their patrons are visually-oriented and like eye-catching displays, so the kit materials were wonderful for creating those displays,
- 15 noted that patrons like things they can take with them,
- 5 noted that their patrons enjoy checking out DVDs and videos, so the NOVA programs were most interesting,
- 3 reported that the patrons’ favorite materials are those that work best for children, i.e., coloring sheets, eye-catching displays, simple activities, and
- 3 reported that their patrons enjoy doing activities, so the activity-based components were most interesting,

*“The video, Galileo’s Battle for the Heavens, has been checked out 27 times, not bad for a small town!”*

*-Librarian*

*These are things they can take with them. They are also easy to read and are eye catching. If we had the Nova Program that would definitely be a plus. Many patrons do watch it on their own. (Lives in Science survey and interviews)*

*This is a lower middle income, small, rural county. Education is being improved, but still needs work. Unless things are attention grabbing and easy, it is difficult to get people interested or to participate. Anything that sounds like studying is avoided. (Lives in Science survey and interviews)*

*They love the bookmarks. The video, Galileo's Battle [for the Heavens], has been checked out 27 times, not bad for a small town! They like items they can take with them. (Lives in Science survey and interviews)*

In the interviews, participants echoed the themes from the survey, particularly that patrons seem to respond best to displays and items they can take with them, particularly bookmarks. Librarians were asked why they believed this to be the case, but no one ventured a guess beyond, “patrons like things they can take with them.”

Regarding the displays, one librarian noted that the color poster catches patrons’ attention and draws them into a display; another reported that patrons complimented the attractive color poster. Several librarians responded positively to the bright colors of the kits’ materials. Once their attention is grabbed, patrons will read the smaller display sheets, so long as they can read the sheets quickly. Patrons tend not to linger at the displays, so materials with significant amounts of text are not useful. In interviews, librarians also noted that patrons enjoyed the displays’ reminder of the upcoming airdate of the NOVA program.

Table 30 presents information for the components rated as least interesting. The social studies activities, science activities, and ideas suggested Program Ideas and Tips were rated by at least one-third of librarians as least interesting to patrons.

Table 30  
Components Rated Least Interesting to Patrons

	Librarians Who Rated Component Least Interesting to Patrons
Social Studies Activities	15 (42%)
Ideas suggested in Program Ideas and Tips	14 (39%)
Science Activities	13 (36%)
Bibliography	10 (28%)
Web site	8 (22%)
Display Sheets	4 (11%)
Informational handouts (e.g., Who Was Galileo? Archimedes and the Palimpsest)	3 (8%)
Bookmarks	3 (8%)
NOVA program	1 (3%)
Color Poster	0 (0%)

N=36, Percentages may total more than 100% because respondents could choose more than one response.

In the *Lives in Science* survey, 28 librarians described why they listed the components they did as least interesting to patrons (some responses were coded into more than one category).

- 8 librarians noted that they do not conduct programs at their library or that their patrons do not attend programs,
- 7 mentioned that various materials are not interesting to the patrons because are more appropriate for the librarians (i.e., not directly for use with patrons).
- 6 said that their patrons simply are not interested in the materials indicated as least favorite (without providing a description of why),
- 6 reiterated that their patrons prefer the visual display materials, and
- 2 librarians noted that certain components do not appeal to adults.

*Frankly, I did not have time to do these with patrons. I run this library by myself and I feel a teacher could do activities better than myself....so they were not presented.*

*Social Studies activities feel more like homework, while the science activities are educational yet fun.*

*These would not be of interest to the patrons but mostly to the librarians.*

In the interviews, when librarians spoke about elements that their patrons found less interesting, some described that their patrons simply do not attend library programs. Another speculated that, even if patrons take home activity sheets, they may not actually conduct the activities. Given that “*families where both parents work and kids are at after school programs, there just isn’t time in the day,*” one interviewee remarked.

A librarian who worked with patrons with disabilities noted that the darker posters were very difficult for patrons with vision impairment to see. Finally, one librarian noted that her patrons do not take the time to stop and read the materials containing more text, so the bibliography was not as interesting to her patrons as she had hoped it would be.

Additionally, on the *Lives in Science* survey (N=36) librarians described the interest levels of their patrons along various domains (see Table 31).

Table 31  
Patrons' Interest

Patrons' Interest in:	Mean	Moderately, Very Much, or Extremely Interested
The life and work of Galileo (n=29)	3.94	26 (90%)
The life and work of Archimedes (n=30)	3.44	22 (73%)
The life and work of Newton (n=32)	3.58	25 (78%)
The life and work of Julian (n=33)	3.33	23 (70%)
The topics featured in the kits (n=35)	3.22	26 (74%)
Attending science outreach events and activities (n=33)	2.92	18 (54%)

N=29-35

*The librarians believed that their patrons are most interested in the life and work of Galileo.*

The librarians believed that their patrons are most interested in the life and work of Galileo. Patrons do seem interested in the life and work of the other three scientists featured, as well as in the general science topics featured in the kits. In the interviews, several librarians echoed the significant interest in Galileo. One librarian noted that she conducted a book discussion group on Dava Sobel's *Galileo's Daughter*. Regarding Percy Julian, many librarians remarked that they are fascinated by all they learned in the kits, and that the *Lives in Science* program and kit was the first time that they or many of their patrons ever had heard of Percy Julian.

Fewer patrons seem interested in attending science outreach events and activities, a theme that is echoed at other points in the evaluation research (e.g., the Social Studies activities rated less interesting to patrons).

In interviews, librarians described how much the programs they conducted (including displays, activities, etc.) with the kits appeared to stimulate patrons' interest in science. Of the 13 librarians,

- 6 librarians observed that related books were circulating from their library collection while the displays were active,
- 4 had no comment, either saying that they did not have any interaction with patrons or that they were far away from where the displays were set up so did not have the opportunity to observe patrons with the displays,
- 4 noted that patrons seemed interested in the NOVA programs, and
- 2 librarians said that there was interest increased in the kits in conjunction with a school activity (e.g., science fair or related book on the summer reading list).

## CONCLUSIONS AND RECOMMENDATIONS

Results from all portions of GRG's evaluation (including both the 2003 *Galileo's Battle for the Heavens* evaluation and the surveys and interviews from the current evaluation) show that librarians used and positively rated the *Lives in Science Library Resource Kits*. They praised the kits' ease of use and the many ideas contained in them. Along with the positive feedback came suggestions for future library kits and other outreach efforts. The forgoing conclusions and recommendations build on the results and recommendations from GRG's *Galileo's Battle for the Heavens* evaluation and the results presented in this document. GRG recommends ways in which WGBH may incorporate the most successful aspects of these kits in developing future outreach materials.

Because the responses to the kits were, overall, overwhelmingly positive, the recommendations below sometimes arise from a subset of participants (rather than the majority of participants). We believe that they are, nonetheless, important recommendations to offer, and they emerged from our work across this evaluation process. In particular, some recommendations stem from the interviews with a relatively small number of librarians (N=13); however, the interviews were the only opportunity for the evaluators to converse with librarians about their experiences using the kits and to probe for deeper, richer information.

Additionally, GRG recognizes that some of the recommendations we present below are not in the sole purview of WGBH Educational Print and Outreach. However, we offer these recommendations in the spirit of providing information—based on these evaluation data—that might benefit development of future materials.

## TAILORING FUTURE OUTREACH MATERIALS

Librarians described extensive use of all kits to create displays or provide handouts to patrons. Across all evaluation efforts (both the 2003 *Galileo* evaluation and current evaluation activities), the bookmarks, color poster, display sheets, and bibliography were the kit components rated as the most useful by librarians. These components also were used by the most librarians. Respondents praised the bibliography and used it when selecting new materials for their collections and recommending resources to patrons. Librarians emphasized that posters should be colorful and have relatively little text in order to best draw patrons' interest.

Conversely, the components that were used by the fewest librarians were library programs and events and activities—those components that took the most time and resources to implement. Librarians often praised the suggestions for activities but that praise was not necessarily followed by plans to use those activities. These librarians typically do not conduct activity sessions or coordinate events, often citing constraints on their time and resources (staff, money, physical space). Rather, their library programming is focused on

materials not associated with events (displays, bookmarks, handouts, using the bibliography). As a result, there is relatively little interaction between librarians and patrons around these kits and materials, and many librarians do not have a sense of how patrons react to the kits and subjects. The activity handouts that librarians seemed to find most useful were the children's handouts that involved coloring or some other simple activity.

Additionally, some librarians suggested that kits contain more activity suggestions for particular sub-populations (e.g., preschool age children or adults).

*Recommendations for WGBH to consider:*

- *Posters and display sheets: Continue to make these visually appealing and easily readable, keeping in mind that small print, dark colors, and large amounts of text on a page are difficult for some readers.*
- *Bibliographies, display materials, and bookmarks: Continue to offer these items that librarians use in creating displays and photocopying as handouts.*
- *Bookmarks: Provide more of these to librarians on request, as some librarians distributed all 200 bookmarks and, in interviews, librarians were particularly enthusiastic about distributing all bookmarks they receive.*

*GRG recommends that WGBH consider investing fewer resources in creating activities and suggesting programming. Consider reducing the number of hands-on activities to one page. While most librarians rated these activities quite positively, fewer librarians made use of them. Consider continuing to tailor hands-on activities to particular sub-populations, such as young children.*

A few librarians commented that they thought the kit would work better at a school library (a theme that came through, in particular, in interviews). Moreover, throughout the surveys and interviews, some librarians commented that they gave all or part of the kits—particularly the non-display items—to teachers. Several interviewees also noted that the kits are particularly useful to homeschoolers. In GRG's 2003 evaluation, school librarians rated the kits slightly higher than did public librarians, so school librarians might represent a ready target audience.

*Recommendation: WGBH may wish to consider making a secondary set of outreach materials, particularly the hands-on materials (in contrast to the display materials), available to audiences other than or in addition to public librarians, e.g. school librarians, teachers, and parents who homeschool their children.*

The naming of kits and components was, at times, somewhat confusing, particularly vis-à-vis the sub-component names in the Program Ideas and Tips section. Additionally, only two kits had the name of the featured scientist as a part of the kit's title. Not having the scientist's name on the title may have contributed to fostering somewhat less awareness of the featured scientist, as the



two kits without names in their titles (*Infinite Secrets* and *Forgotten Genius*) also were the kits featuring the less well-known scientists.

*Recommendation: GRG recognizes that the following recommendation is not in the control of Educational Print and Outreach, however we recommend that developers consider clearer titles for sub-components. Include the name of the featured scientist in the title, as was the case with Newton's Dark Secrets and Galileo's Battle for the Heavens. Librarians and patrons will then associate the materials with the scientist featured. Consider adopting a standard title pattern to use across all materials in a series.*

## ENCOURAGING USE OF FUTURE OUTREACH MATERIALS

On average, librarians would like to receive future kits nine to ten weeks before the program airs, and most librarians would like the program airdate printed only on items that would be handed out. These results mirrored those from the 2003 *Galileo* evaluation.

*Recommendation: In addition to mailing outreach materials a couple months before the program airdate, WGBH might want to notify librarians further in advance about when the materials will be arriving so librarians can plan to have time and staff available to implement them.*

Librarians appreciated the fact that the kits were mailed to them free of charge. Nearly half of librarians surveyed work in rural libraries, and several librarians commented throughout the survey that they lacked resources.

*Recommendation: Continue to offer materials free of charge to librarians, particularly to those in rural and under-resourced locations.*

Librarians noted that owning the *Lives in Science* DVDs would encourage them to use the kits more often and in more ways. Less than 15% of libraries owned copies of the NOVA specials, although nearly 50% plan to buy them. Librarians used the kits to promote the NOVA broadcasts, but some libraries lacked VCRs to record the specials or even TV reception to air the specials in their libraries.

*Recommendation: Consider providing a DVD with the outreach materials, especially to librarians in rural locations. If it is not possible to provide a DVD prior to broadcast, librarians likely would welcome DVDs post-broadcast.*

Most librarians did not use the accompanying *Lives in Science* Web sites. Of those, most did not have time or were not aware of the Web site, even though the Web site links were printed on the bookmarks, posters, handouts, and tables of contents.

*Recommendation: If WGBH would like to increase use of Web sites, they should consider promoting them more or in different ways. Perhaps future materials could contain a separate sheet highlighting related NOVA Web site resources with a prominent callout of the upcoming program Web site.*

Several librarians commented (particularly in conversations during the interviews) that the kits were most useful when they coincided with a particular pre-planned event in the library, school, or community. The *Forgotten Genius* kit was cited as particularly useful during Black History Month, and several librarians plan to use The Philosopher's Stone display sheet from the Newton kit in conjunction with this summer's release of the final *Harry Potter* book. Other librarians noted connections with this year's summer reading theme of "Get a Clue @ Your Library."

*Recommendation: To enhance use of materials, consider explicitly linking outreach materials (or portions of materials) to existing events in the cycle of library, school, and calendar programming, as was done with the *Forgotten Genius* kit. This may be done either in terms of when materials are sent to librarians or by highlighting connections to events within the contents of the materials.*

An undercurrent throughout the evaluation was that librarians and patrons responded more positively to the Galileo and Newton kits. For example, those librarians who conducted activities often conducted them in conjunction with those kits (e.g. a book discussion about Galileo, using the Philosopher's Stone and Parachute Play sub-components of the Newton kit). Interviewees, in particular, described the instant fascination with Galileo and Newton among their patrons.

In contrast, there were slightly less enthusiastic reactions, on the whole, to the *Forgotten Genius* kit. For example, librarians reported that it was difficult to generate patrons' interest in the social studies activities (which sometimes seemed like homework).

*Recommendation: GRG recognizes that this recommendation is out of the control of WGBH Educational Print and Outreach. Future developers might consider doing programs on subjects and individuals who already generate a degree of interest among the target population. Kits that tap into a preexisting source of interest are, on the whole, more thoroughly used and better received.*

## APPENDIX A: SUPPLEMENTARY DATA

### USE AND RATINGS OF KITS AND KIT COMPONENTS

Table A1  
Number of Times Using Kit

	Librarians using kit 1 time	Librarians using kit 2 times	Librarians using kit 4 times
<i>Newton's Dark Secrets</i> (2005) N=5	2	2	1
<i>Infinite Secrets</i> (2003), N=4	3	1	--
<i>Galileo's Battle for the Heavens</i> (2002), N=2 N=2-5	1	1	--

Table A2  
Ages of Audiences for the Kits

	Librarians using Julian N=82	Librarians using Newton N=8	Librarians using Archimedes N=7	Librarians using Galileo N=3
Children ages 4-12	30 (37%)	4 (50%)	3 (43%)	2 (67%)
Young Adults ages 13-18	46 (56%)	2 (25%)	1 (14%)	1 (33%)
Adults older than 18	45 (55%)	1 (12%)	2 (29%)	0
Other	8 (10%)	1 (12%)	1 (14%)	0

N=82 (*Forgotten Genius*), 3-7 (other three kits)

### Components Overall

Table A3  
Usefulness of *Forgotten Genius*

	Not at all useful	A little useful	Somewhat useful	Very useful	Extremely useful
Bookmarks (n=77) <b>Mean=4.51</b>	1%	0%	8%	29%	62%
The Poster (n=75) <b>Mean=4.31</b>	1%	3%	12%	32%	52%
Bibliography (n=61) <b>Mean=4.10</b>	0%	10%	15%	31%	44%
Who Was Percy Julian? (n=53) <b>Mean=3.83</b>	2%	6%	32%	28%	32%
Display Sheets (n=59) <b>Mean=3.76</b>	0%	12%	29%	31%	29%
Program Ideas and Tips (n=45) <b>Mean=3.56</b>	0%	11%	42%	27%	20%
Science Activities (n=40) <b>Mean=3.43</b>	3%	18%	35%	25%	20%
Social Studies Activities (n=37) <b>Mean=3.30</b>	5%	19%	30%	32%	14%

N=37-77

Table A4  
Use and Ratings of *Newton's Dark Secrets* Components

	# Who Had Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Who Was Sir Isaac Newton? Handout (n=34) <b>Mean=3.91</b>	21	1 (3)%	3 (0)%	4 (12)%	16 (47)%	10 (29)%
Program Ideas and Tips (n=31) <b>Mean=3.52</b>	10	2 (6)%	4 (13)%	9 (29)%	8 (26)%	8 (26)%
Bibliography (n= 33) <b>Mean=4.18</b>	20	0	2 (6)%	4 (12)%	13 (39)%	14 (42)%
Newton Activities (n= 31) <b>Mean=3.77</b>	11	2 (6)%	3 (10)%	5 (16)%	11 (35)%	10 (32)%
Display Sheets (n=31) <b>Mean=4.00</b>	18	0	2 (6%)	6 (19%)	13 (42%)	10 (32%)
Color Poster (n= 34) <b>Mean=4.50</b>	23	0	0	3 (9%)	11 (31%)	20 (59%)
Bookmarks (n= 34) <b>Mean=4.47</b>	25	0	1 (3%)	2 (6%)	11 (31%)	20 (59)%

N=31-34

Table A5  
Use and Ratings of *Infinite Secrets* Components

	# Who Had Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Archimedes and the Palimpsest (n=31) <b>Mean=3.71</b>	14	1 (3%)	3 (10%)	7 (23%)	13 (42%)	7 (23%)
Program Ideas and Tips (n=30) <b>Mean=3.53</b>	8	2 (6%)	4 (11%)	6 (20%)	12 (40%)	6 (20%)
Bibliography (n= 29) <b>Mean=4.10</b>	20	1 (3%)	0	4 (14%)	14 (48%)	10 (35%)
Who Was Archimedes? (n=32) <b>Mean=4.06</b>	15	0	2 (6%)	7 (22%)	10 (31%)	13 (41%)
Famous Mathematicians (n=32) <b>Mean=4.03</b>	15	0	3 (9%)	5 (16%)	12 (38%)	12 (38%)
Archimedes Activities (n=30) <b>Mean=3.83</b>	8	2 (7%)	1 (3%)	7 (23%)	10 (33%)	10 (33%)
Display Sheets (n=30) <b>Mean=4.17</b>	16	1 (3%)	1 (3%)	3 (10%)	12 (40%)	13 (43%)
Science lesson (n=27) <b>Mean=3.41</b>	4	3 (11%)	3 (11%)	8 (30%)	6 (22%)	7 (26%)
Color Poster (n=31) <b>Mean=4.55</b>	20	0	0	3 (10%)	8 (26%)	20 (65%)
Bookmarks (n= 32) <b>Mean=4.53</b>	22	0	1 (3%)	1 (3%)	10 (31%)	20 (63%)

N=27-32

Table A6  
Use and Ratings of *Galileo's Battle for the Heavens* Components

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Program Ideas and Tips (n=29) <b>Mean=3.59</b>	10	3 (10%)	4 (14%)	4 (14%)	9 (31%)	9 (31%)
Bibliography (n=30) <b>Mean=4.23</b>	20	0	1 (3%)	2 (7%)	16 (53%)	11 (37%)
Who Was Galileo Galilei? Handout (n=32) <b>Mean=4.25</b>	19	1 (3%)	1 (3%)	3 (9%)	11 (34%)	16 (50%)
Scientists Today (n=31) <b>Mean=4.13</b>	15	1 (3%)	1 (3%)	4 (13%)	12 (39%)	13 (42%)
Galileo Activities (n=31) <b>Mean=3.65</b>	11	4 (13%)	2 (6%)	6 (19%)	8 (26%)	11 (36%)
Science lesson (n=29) <b>Mean=3.41</b>	8	5 (17%)	2 (7%)	4 (14%)	12 (41%)	6 (21%)
Color Poster (n=32) <b>Mean=4.50</b>	26	0	1 (3%)	3 (9%)	7 (22%)	21 (66%)
Bookmarks (n=34) <b>Mean=4.56</b>	25	0	2 (6%)	1 (3%)	7 (21%)	24 (71%)

N=29-34

### Ratings for Users Versus Non-Users

Table A7  
Ratings of *Newton's Dark Secrets* Components, Comparing by Non-Users and Non-Users

	Non-Users	Users
Who Was Sir Isaac Newton? Handout (n=34) <b>Mean=3.91</b>	3.67	4.05
Program Ideas and Tips (n=31) <b>Mean=3.52</b>	3.31	3.50
Bibliography (n= 33) <b>Mean=4.18</b>	4.00	3.95
Newton Activities (n= 31) <b>Mean=3.77</b>	3.58	3.82
Display Sheets (n=31) <b>Mean=4.00</b>	3.71	3.94
Color Poster (n= 34) <b>Mean=4.50</b>	4.00	4.55
Bookmarks (n= 34) <b>Mean=4.47</b>	3.67	4.48

N=31-34

Table A8  
Ratings of *Infinite Secrets* Components, Comparing by Non-Users and Non-Users

	Non-Users	Users
Archimedes and the Palimpsest handout (n=31) <b>Mean=3.71</b>	3.38	4.07
Program Ideas and Tips (n=30) <b>Mean=3.53</b>	3.26	4.13
Bibliography (n= 29) Mean=4.10	3.90	4.22
Who Was Archimedes? Handout (n=32) <b>Mean=4.06</b>	3.73	4.33
Famous Mathematicians handout (n=32) <b>Mean=4.03</b>	3.73	4.27
Archimedes Activities (n=30) <b>Mean=3.83</b>	3.58	4.25
Display Sheets (n=30) <b>Mean=4.17</b>	3.83	4.47
Science lesson (n=27) <b>Mean=3.41</b>	3.24	4.00
Color Poster (n=31) <b>Mean=4.55</b>	4.36	4.67
Bookmarks (n= 32) <b>Mean=4.53</b>	4.33	4.70

N=27-32

Table A9  
Ratings of *Galileo's Battle for the Heavens* Components, Comparing by Non-Users and Non-Users

	Non-Users	Users
Program Ideas and Tips (n=29) <b>Mean=3.59</b>	3.11	4.50
Bibliography (n=30) <b>Mean=4.23</b>	3.90	4.37
Who Was Galileo Galilei? Handout (n=32) <b>Mean=4.25</b>	3.75	4.53
Scientists Today handout (n=31) <b>Mean=4.13</b>	3.80	4.40
Galileo Activities (n=31) <b>Mean=3.65</b>	3.33	4.00
Science lesson (n=29) <b>Mean=3.41</b>	3.05	4.13
Color Poster (n=32) <b>Mean=4.50</b>	4.43	4.50
Bookmarks (n=34) <b>Mean=4.56</b>	4.57	4.52

N=29-34

## Program Ideas and Tips

Table A10  
Use of Programs and Events Sub-Component of Program Ideas and Tips:  
*Forgotten Genius*

	# of librarians
Adults – Invited a guest speaker to deliver a lecture/slide show	2
Adults – Showed videos about famous scientists and/or civil rights leaders	2
Young Adults – Held a science essay contest	0
Young Adults – Sponsored a What Do Chemists Do? program	1
Young Adults – Hosted a Jeopardy-style game	1
Children – Organized a story time video presentation or Family Science	9
Children – Conducted a science activity	4
Children – Created a picture board	11
Children – Sponsored a scavenger hunt	1
Developed and held some other program/event	8

N=27

Table A11  
Use of Activities Using Library Resources Sub-Component of Program Ideas and Tips: *Forgotten Genius*

	% librarians
Adults – Arranged a rare book room tour	1
Adults – Created bookmarks	14
Adults – Led a discussion highlighting original documents	1
Young Adults – Sponsored a song-writing contest	0
Young Adults – Held an innovators gallery competition	0
Children – Created resource posters and bookmarks	12
Children – Played the Who Am I? game	3
Children – Hosted a word hunt	3
Children – Made molecules	2
Children – Used Library Display Ideas	21
Conducted some other activity	5

N=36

Table A12

Use and Ratings of Program Ideas and Tips Section: *Newton's Dark Secrets*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Programs and Events (n=28) <b>Mean=3.64</b>	8	3 (11%)	3 (11%)	4 (14%)	9 (32%)	9 (32%)
Activities Using Library Resources (n=28) <b>Mean=3.54</b>	7	3 (11%)	6 (21%)	1 (4%)	9 (32%)	9 (32%)
Library Display Ideas (n=32) <b>Mean=4.00</b>	17	1 (3%)	3 (9%)	3 (9%)	13 (41%)	12 (37%)
Resources for Programs and Events (n=28) <b>Mean=3.71</b>	7	3 (11%)	2 (7%)	3 (11%)	12 (43%)	8 (29%)

N=28-32

Table A13

Use and Ratings of Program Ideas and Tips Section: *Infinite Secrets*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Programs and Events (n=30) <b>Mean=3.33</b>	5	4 (13%)	4 (13%)	6 (20%)	10 (33%)	6 (20%)
Library Resource Activities (n=31) <b>Mean=3.48</b>	7	3 (10%)	4 (13%)	7 (23%)	9 (29%)	8 (26%)
Library Display Ideas (n=32) <b>Mean=4.06</b>	14	2 (6%)	1 (3%)	2 (6%)	15 (47%)	12 (38%)
Resources for Programs and Events (n=31) <b>Mean=3.65</b>	7	2 (7%)	3 (10%)	6 (19%)	13 (42%)	7 (23%)

N=30-32



Table A14  
Use and Ratings of Program Ideas and Tips Section: *Galileo's Battle for the Heavens*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Library Events and Programs (n=30)	3	4 (13%)	4 (13%)	5 (17%)	8 (27%)	9 (30%)
						<b>Mean=3.47</b>
Library Display Ideas (n=32)	16	2 (6%)	1 (3%)	6 (19%)	13 (41%)	10 (31%)
						<b>Mean=3.88</b>
Resources (n=30)	11	2 (7%)	2 (7%)	5 (17%)	10 (33%)	11 (37%)
						<b>Mean=3.87</b>

N=30-32

### Bibliographies

Table A15  
Use and Ratings of Bibliography: *Newton's Dark Secrets*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Newton's Life and Works (n=32)	24	0	0	6 (19%)	14 (44%)	12 (38%)
						<b>Mean= 4.19</b>
Calculus, Physics, and Astronomy (n=31)	19	1 (3%)	1 (2%)	6 (19%)	14 (45%)	9 (29%)
						<b>Mean= 3.94</b>
History of Science and Mathematics (n=30)	20	1 (3%)	1 (3%)	3 (10%)	14 (47%)	11 (37%)
						<b>Mean = 4.1</b>

N=30-32

Table A16  
Use and Ratings of Bibliography: *Infinite Secrets*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Archimedes (n=29) <b>Mean=4.21</b>	16	0	0	6 (21%)	11 (38%)	12 (41%)
Math and Mathematicians (n=31) <b>Mean=4.19</b>	17	0	0	7 (23%)	11 (36%)	13 (42%)
Ancient Machines and Inventions (n=30) <b>Mean=4.17</b>	14	0	1 (3%)	5 (17%)	12 (40%)	12 (40%)
History of Books and Bookmaking (n=31) <b>Mean=4.19</b>	16	0	2 (7%)	4 (13%)	11 (36%)	14 (45%)

N=29-31

Table A17  
Use and Ratings of Bibliography: *Galileo's Battle for the Heavens*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Galileo (n=27) <b>Mean=4.15</b>	15	1 (4%)	1 (4%)	3 (11%)	10 (37%)	12 (44%)
Before and After Galileo: Selected Scientists (n=28) <b>Mean=4.14</b>	16	0	1 (4%)	4 (14%)	13 (46%)	10 (36%)
16 <sup>th</sup> and 17 <sup>th</sup> Century Italy (n=27) <b>Mean=4.04</b>	15	0	2 (7%)	5 (18%)	10 (37%)	10 (37%)
Astronomy (n=28) <b>Mean=4.18</b>	17	0	2 (7%)	3 (11%)	11 (39%)	12 (43%)
Careers (n=28) <b>Mean=4.07</b>	16	0	3 (11%)	3 (11%)	11 (39%)	11 (39%)

N=27-28

## Percy Julian/Newton/Archimedes/Galileo Activities

Table A18

Patrons' Perceived Interest in Percy Julian Science and Social Studies Activities

	Not at all interested	A little interested	Somewhat interested	Very interested	Extremely interested
"Who Am I? (n=17) <b>Mean=3.39</b>	1	3	4	8	2
"Find Percy Julian" (n=14) <b>Mean=2.86</b>	2	3	5	3	1
"The Innovators Gallery" (n=15) <b>Mean=3.27</b>	1	3	4	5	2
"Ready, Set, Sort!" (n=15) <b>Mean=3.13</b>	1	5	1	7	1
"Soggy Science, Shaken Beans" (n=12) <b>Mean=3.08</b>	2	3	0	6	1
"Seeing is Believing" (n=14) <b>Mean=3.50</b>	1	2	2	7	2
"Unmix it up" (n=14) <b>Mean=3.36</b>	1	3	1	8	1
"Changing States" (n=15) <b>Mean=3.40</b>	1	3	2	7	2
"Percy Julian and His Work" coloring sheet (n=23) <b>Mean=3.33</b>	2	5	2	10	4

N=12-23

Table A19

Use and Ratings of Newton Activities

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Newton's Discovery (n=28) <b>Mean=4.14</b>	16	1 (4%)	0	4 (14%)	12 (43%)	11 (39%)
Catch a Rainbow (n=28) <b>Mean=3.96</b>	13	1 (4%)	2 (7%)	5 (18%)	9 (32%)	11 (39%)
Parachute Play (n=28) <b>Mean=3.93</b>	11	1 (4%)	2 (7%)	4 (14%)	12 (43%)	9 (32%)
Light's Mysteries (n=28) <b>Mean=3.93</b>	9	1 (4%)	2 (7%)	5 (8%)	10 (36%)	10 (36%)
Marble on the Move (n=27) <b>Mean=3.85</b>	9	1 (4%)	3 (11%)	4 (15%)	10 (37%)	9 (33%)
Who Am I? (n=28) <b>Mean=3.96</b>	11	1 (4%)	2 (7%)	5 (18%)	9 (32%)	11 (39%)

N=27-28

Table A20  
Use and Ratings of Archimedes Activities

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
New Shapes from Old (n=29) <b>Mean=3.72</b>	10	3 (10%)	2 (7%)	5 (17%)	9 (31%)	10 (35%)
All About Archimedes (n=30) <b>Mean=3.77</b>	9	3 (10%)	2 (7%)	4 (13%)	11 (37%)	10 (33%)
Eureka! (n=29) <b>Mean=3.62</b>	8	3 (10%)	3 (10%)	5 (17%)	9 (31%)	9 (31%)
All the Grains of Sand (n=29) <b>Mean=3.59</b>	8	3 (10%)	4 (14%)	3 (10%)	11 (38%)	8 (28%)

N=29-30

Table A21  
Use and Ratings of Galileo Activities

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
In the Swing of Things (n=31) <b>Mean=3.52</b>	8	4 (13%)	3 (10%)	6 (19%)	9 (29%)	9 (29%)
The Tick Tock of a Water Clock (n=31) <b>Mean=3.74</b>	8	3 (10%)	3 (10%)	4 (13%)	10 (32%)	11 (36%)

N=31

## Display Sheets

Table A22

### Use and Ratings of Display Sheets: *Newton's Dark Secrets*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Newton's Apple (n=31) <b>Mean=4.10</b>	22	0	3 (10%)	4 (13%)	11 (36%)	13 (42%)
The Better to See Stars With (n=30) <b>Mean=4.17</b>	22	0	3 (10%)	3 (10%)	10 (33%)	14 (47%)
Rainbow of Light (n=30) <b>Mean=4.23</b>	24	0	3 (10%)	1 (3%)	12 (40%)	14 (47%)
The Philosopher's Stone (n=31) <b>Mean=4.10</b>	22	0	3 (10%)	4 (13%)	11 (36%)	13 (42%)

N=30-31

Table A23

### Use and Ratings of Display Sheets: *Infinite Secrets*

	# Who Used Component	Not at all useful	Somewhat useful	Moderately useful	Very useful	Extremely useful
Archimedes (n=29) <b>Mean=4.28</b>	15	0	1 (3%)	5 (17%)	8 (28%)	15 (52%)
History of the Book (n=30) <b>Mean=4.50</b>	17	0	1 (3%)	0	12 (40%)	17 (57%)
Shapes in Nature (n=28) <b>Mean=4.39</b>	14	1 (4%)	0	2 (7%)	9 (32%)	16 (57%)
Ancient Machines (n=29) <b>Mean=4.45</b>	15	1 (3%)	0	2 (7%)	8 (28%)	18 (62%)

N=28-30

Table A24  
Kit Use In Relation to NOVA Special Airdates

	Used kit before airdate	Used kit after airdate	Used kit both before and after airdate
<i>Newton's Dark Secrets</i> N=5	3	0	2
<i>Infinite Secrets</i> N=4	2	1	1
<i>Galileo's Battle for the Heavens</i> N=2	1	0	1

N=2-5

### INTEREST IN KIT-RELATED TOPICS

Table A25  
Patrons' Interest

Patrons' interest in:	Not at all interested	Somewhat interested	Moderately interested	Very interested	Extremely interested
The life and work of Galileo (n=29) <b>Mean=3.94</b>	0	3 (10%)	13 (45%)	10 (34%)	3 (10%)
The life and work of Archimedes (n=30) <b>Mean=3.44</b>	5 (17%)	3 (10%)	14 (47%)	5 (17%)	3 (10%)
The life and work of Newton (n=32) <b>Mean=3.58</b>	1 (3%)	6 (19%)	10 (31%)	13 (41%)	2 (6%)
The life and work of Julian (n=33) <b>Mean=3.33</b>	1 (3%)	9 (27%)	12 (36%)	8 (24%)	3 (9%)
The topics featured in the kits (n=35) <b>Mean=3.22</b>	2 (6%)	7 (20%)	13 (37%)	10 (29%)	3 (9%)
Attending science outreach events and activities (n=33) <b>Mean=2.92</b>	9 (27%)	6 (18%)	10 (30%)	4 (12%)	4 (12%)

N=29-35

Table A26  
 Librarians' Interest

Librarians' Interest in:	Did not increase	Increased somewhat	Increased moderately	Increased very much	Increased extremely
The life and work of Galileo (n=36) <b>Mean=3.47</b>	2 (6%)	2 (6%)	13 (36%)	15 (42%)	4 (11%)
The life and work of Archimedes (n=36) <b>Mean=3.36</b>	2 (6%)	6 (27%)	11 (31%)	11 (31%)	6 (17%)
The life and work of Newton (n=36) <b>Mean=3.47</b>	1 (3%)	3 (8%)	15 (42%)	12 (33%)	5 (14%)
The life and work of Julian (n=36) <b>Mean=3.36</b>	1 (3%)	7 (19%)	11 (31%)	12 (33%)	5 (14%)
The topics featured in the kits (n=34) <b>Mean=3.56</b>	0	6 (18%)	10 (29%)	11 (32%)	7 (21%)
Conducting science outreach events and activities for patrons (n=36) <b>Mean=3.08</b>	6 (17%)	5 (14%)	11 (31%)	8 (22%)	6 (17%)

N=34-36

## SUGGESTED TOPICS FOR FUTURE LIBRARY OUTREACH

Librarians suggested the following topics for future library outreach materials. Numbers in parentheses indicate the number of librarians who provided the suggestion. Where no numbers are indicated, only 1 librarian suggested the topic.

1. Alternative energies
2. Archaeology/Egyptology (2)
3. Architecture/construction (3)
4. Art forgery
5. Artists/musicians
6. Asian-American Month
7. Biographies of authors (2)
8. Business/entrepreneurship
9. Dinosaurs (3)
10. Disabilities/Americans with Disabilities Act
11. Food/farming/hunger
12. Gardening
13. Healthcare, nutrition, diet, human body, epidemiology (4)
14. History (5)
15. History of libraries/history of book burning and banning
16. Immigration
17. Inventors
18. Math (3)
19. Native Americans
20. Other PBS programs: Reality series (Frontier House, Colonial House), Frontline, Masterpiece Theater (3)
21. Outer space/astronauts (3)
22. Papermaking/bookmaking/writing
23. Personal finance/consumer information
24. Race relations
25. Railroads/transportation (3)
26. Science bibliographies for all age ranges
27. Science books for elementary school-aged kids
28. War in Iraq
29. Weather/climate/environment/oceans (4)
30. Women scientists (2)



## APPENDIX B: SURVEYS AND INTERVIEW GUIDE

### FORGOTTEN GENIUS SURVEY

Welcome to the *Forgotten Genius Library Resource Kit* Survey!

Thank you for participating in the evaluation of NOVA's *Forgotten Genius Library Resource Kit*. At the end of the survey, we will ask for your contact information. The first 50 people who complete the survey and include their complete contact information will receive a *Forgotten Genius DVD*.

The survey should take 15 to 20 minutes to complete. As you move through the survey, use the "back" and "next" buttons at the bottom of the screen. Do NOT use your browser's buttons as this may result in lost data.

To begin the survey, enter the ID number from your email invitation in the box below and press "next."

**1. Have you used the *Forgotten Genius Library Resource Kit* in your library?**

- Yes
  - Not yet, but I plan to
    - When do you plan to start using it? *month/year* (skip to Question 30)
    - If you are unsure, check the box below "I am not sure when I will start using the kit."
    - How do you plan to use the kit (e.g. with whom, which components)?
    - If you are unsure, check the box below. "I am not sure how I will use the kit."
  - No (skip to Question 30)
- [If no, will be asked:] Why did you decide not to use the kit?

**2. With what age groups did you use this kit? (Check all that apply)**

- Children (ages 4-12)
- Young Adults (ages 13-18)
- Adults (ages 18+)
- Other, please describe:

**3. Have you watched the *Forgotten Genius* NOVA special? (This TV special about the life of chemist and civil rights activist Percy Julian aired on PBS in February 2007.)**

- Yes
- No

**4. Did you use the *Forgotten Genius* NOVA special (purchased or recorded) as a part of programs you conducted at your library? If you did not use it and do not plan to in the future, please explain your response below.**

- Yes, I have used the NOVA special.
  - No, I have not used the NOVA special, but plan to in the future.
  - No, have not used the NOVA special and do NOT plan to in the future.
- [If yes] Please describe how you used the *Forgotten Genius* TV program.  
[If no] Why do you not plan to use the NOVA special in the future?

**5. Have you purchased the *Forgotten Genius* NOVA special for your library? If you have not purchased it and do not plan to in the future, please explain your response below.**

- Yes, I have purchased the NOVA special.
  - No, I have not purchased the NOVA special, but plan to in the future.
  - No, I have not purchased the NOVA special and do NOT plan to in the future.
- [If no] Why do you not plan to purchase the NOVA special in the future?

**This section of the survey will ask about your use of the kit components.**

**Who Was Percy Julian? reproducible handout**

**6. If you used the *Who Was Percy Julian?* reproducible handout, how did you use it?**  
(Check all that apply. If you did not use the handout, check the appropriate box below.)

- Distributed to patrons
- Displayed in the library
- Used it myself as a reference
- Other, please describe: \_\_\_\_\_
  
- I did not use the “Who Was Percy Julian?” handout

**Program Ideas and Tips**

**7. Which activities within the Programs and Events section (page 1 of 3) did you conduct?**  
(Check all that apply. If you did not use any activities, check the appropriate box below.)

**Programs & Events, Adults**

- Invited a guest speaker to deliver a lecture/slide show
- Showed videos about famous scientists and/or civil rights leaders

**Programs & Events, Young Adults**

- Held a science essay contest
- Sponsored a “What Do Chemists Do?” program
- Hosted a Jeopardy-style game

**Programs & Events, Children**

- Organized a story time, video presentation, or Family Science Fun Night
- Conducted a science activity
- Created a picture board
- Sponsored a scavenger hunt

**Programs & Events, General tips**

- I developed and held a program/event not listed on the sheet. Please describe: \_\_\_\_\_  
If you conducted one or more activities, please explain your experiences with them.
- I did not conduct any Program and Events activities.  
Why did you not conduct any activities?

**8. Which activities within the Activities Using Library Resources section (page 2 of 3) did you conduct?** (Check all that apply. If you did not conduct any activities, check the appropriate box below.)

**Activities Using Library Resources, Adults**

- Arranged a rare book room tour
- Created bookmarks
- Led a discussion highlighting original documents

**Activities Using Library Resources, Young Adults**

- Sponsored a song-writing contest
- Held an innovators gallery competition

**Activities Using Library Resources, Children**

- Created resource posters or bookmarks
- Played the “Who Am I?” game
- Hosted a word hunt
- Made molecules
- Used Library Display Ideas

**Activities Using Library Resources, Other**

I conducted a program/event not listed on the sheet. Please describe: \_\_\_\_\_

If you conducted one or more activities, please explain your experiences with them.

I did not conduct any activities in the Activities Using Library Resources section.  
Why did you not conduct any activities?

**9. Which of the following Library Display Ideas (page 3 of 3) did you incorporate? (Check all that apply. If you did not incorporate any ideas, check the appropriate box below.)**

- Display on Percy Julian’s life and work
- Display on Chemistry’s benefits
- Display on Science activities
- Display of science fair projects
- Display on a new generation of scientists
- Display of civil rights milestones
- Display of local civil rights events and activities
- Display of pioneering scientists of color
- Display of “Did you know?” about the work of scientists of color
- I created a display not listed on the sheet. Please describe: \_\_\_\_\_

If you used one or more Display Ideas, please explain your experiences with them.

I did not use the Library Display Ideas section.  
Why did you not incorporate any Display Ideas?

**Bibliography:**

**10. How did you use the Bibliography? (Check all that apply. If you did not use the Bibliography, check the appropriate box below.)**

Displayed in library

- Distributed to patrons
- Used it for my own reference
- Other, please describe: \_\_\_\_\_

I did not use the Bibliography.

**Percy Julian Activities**

**11. How interested were patrons in each of the following social studies and science activities? (If you did not use or observe an activity with patrons, select “I did not observe.”)**

	Not at all interested	A little interested	Somewhat interested	Very interested	Extremely interested	I did not observe
<b>Social Studies Activities</b>						
“Who Am I?”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Find Percy Julian”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“The Innovators Gallery”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Who Am I?”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Science Activities						
“Ready, Set, Sort!”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Soggy Science, Shaken Beans”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Seeing is Believing”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Unmix it up”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Changing States”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
“Percy Julian and His Work” coloring sheet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**12. In addition to conducting the activities yourself, did you use any of the social studies or science activities in other ways?** (Check all that apply. If you did not conduct any activities, check the appropriate box below.)

- I conducted the activity
- I invited a local scientist or other community member to conduct the activities
- I gave the activities to teachers
- Other, please explain: \_\_\_\_\_
  
- I did not conduct any social studies or science activities.

### **Display Sheets**

**13. Which of the following display sheets did you use?** (Check all that apply. If you did not use any sheets, check the appropriate box below.)

- Natural vs. Synthetic
- Plant Medicines
- Chemistry and Stuff around Us
- I’m a Chemist
- African American Scientist
  
- I did not use any of the display sheets.

**14. How did you use display sheets?** (Check all that apply. If you did not use the display sheets, check the appropriate box below.)

- Displayed in the library
- Used them myself as a reference
- Photocopied and distributed to patrons
- Other, please describe: \_\_\_\_\_

### **Additional Kit Components**

**15. Of the 200 bookmarks you received, approximately how many did you hand out to library patrons?** \_\_\_\_\_ bookmarks (drop-down list in 10-unit increments)

**16. Did you display the poster in the library?**

- Yes
- No

**Web site**

**17. Did you use the *Forgotten Genius* Web site ([www.pbs.org/nova/julian](http://www.pbs.org/nova/julian)) to supplement the library resource kit?**

- Yes (*skip to Question 19*)

*[If yes]* What areas of the Web site did you visit? Please describe any portions that were particularly helpful to you. [Open-ended]

- No

**18. Why did you not use the Web site? (Check all that apply.)**

- I was not aware of the Web site.
- I did not have time.
- I did not find the Web site useful.
- I experienced technical difficulties.
- Other, please explain: \_\_\_\_\_

**General reactions to the *Forgotten Genius Library Resource Kit***

**19. How useful to you were the following components of the *Forgotten Genius Library Resource Kit* when planning and implementing events/activities at your library? If you did not use an item, select “I did not use.”**

	Not at all useful	A little useful	Somewhat useful	Very Useful	Extremely Useful	I did not use
Program Ideas and Tips	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bibliography	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Poster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bookmarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Who Was Percy Julian?</i> Reproducible handout	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Science Activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Studies Activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Display Sheets (Natural vs. Synthetic, Plant Medicines, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**20. Please rate each of the following aspects of the kit.**

	Poor	Fair	Good	Very good	Excellent
Library-resource kit content	1	2	3	4	5
Library resource kit format as a folder	1	2	3	4	5
The amount of material in the library resource kit	1	2	3	4	5
The ease with which the library resource kit could be used	1	2	3	4	5
The appropriateness of the material in the library resource kit for your audience	1	2	3	4	5
For those items you rated as <i>fair</i> or <i>poor</i> , what improvements would you suggest to those areas?					

**21. How well did the contents of the library resource kit prepare you to use the materials?**

- Extremely well
- Very well
- Somewhat well
- A little
- Not at all well

**22. Did you modify any of the library resource kit components to better meet your needs before using them?**

- Yes
- Not yet, but I might in the future
- No

[If yes or not yet] Please describe how you modified or might modify the individual components.

**23. What did you particularly like about the kit?**

**24. What ways, if any, would you suggest for improving the kit (e.g., what components could be modified or eliminated, what components could be added)?**

**25. Did the library resource kit meet your expectations?**

- It exceeded my expectations
- It met my expectations
- It did not meet my expectations

Please explain your response:

**26. How useful do you believe the library resource kit was in...**

	Not at all useful	A little useful	Somewhat useful	Very useful	Extremely useful
Helping build awareness of the TV program	1	2	3	4	5
Generating interest in scientists other than Julian	1	2	3	4	5
Teaching about fields of science featured on the TV program	1	2	3	4	5
Teaching about scientists who study areas featured on the TV program	1	2	3	4	5
Providing youth the chance to engage in science activities featured on the TV program	1	2	3	4	5

**27. In the *Forgotten Genius Library Resource Kit*, the program airdate was printed on all of kit's materials except for the display sheets. What is your preference for having the airdate printed on the outreach materials?**

- Airdate printed on everything
- Airdate printed on those items to be posted or handed out (e.g., poster, bookmarks, reproducible handouts, display sheets)
- Airdate printed on as few items as possible
- It doesn't matter to me

**28. In general, how far in advance would you like to receive materials pertaining to an upcoming broadcast program? \_\_\_\_\_ weeks [drop-down list in 1 week increments up to >20 weeks]**

**29. Please write any additional comments about the *Forgotten Genius Library Resource Kit*.**

**Other Lives in Science library resource kits**

In addition to the *Forgotten Genius Library Resource Kit*, WGBH and NOVA distributed three other *Lives In Science* kits in past years: *Newton’s Dark Secrets* (2005), *Infinite Secrets* (Archimedes, 2003), and *Galileo’s Battle for the Heavens* (2002). We’re interested in learning whether you received and used any or all of those kits. The following section contains brief questions about them.

**30. Receipt and use of kits**

Did you receive and use any or all of the following library resource kits?				
	I received <b>and</b> used this kit.	I received but did NOT use this kit.	I did not receive this kit.	I don’t remember.
<i>Newton’s Dark Secrets</i> (2005)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Infinite Secrets</i> (Archimedes, 2003)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Galileo’s Battle for the Heavens</i> (2002)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**31. Use of the activities**

Which of the following activities do you recall conducting with each kit? (Check all that apply for each kit.)			
	<i>Newton’s Dark Secrets</i> (2005)	<i>Infinite Secrets</i> (Archimedes, 2003)	<i>Galileo’s Battle for the Heavens</i> (2002)
Displayed the large color poster	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Distributed bookmarks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used the “Who Was Newton/Archimedes/Galileo?” handout	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used the “Program Ideas and Tips” section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used the bibliography	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducted (or distributed to others to conduct) one or more of the activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hung or distributed the display sheets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I don’t remember which activities I conducted with this kit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**32. Which of the *Lives In Science* TV specials (purchased or recorded) did you use a part of programs you conducted at your library? (Check all that apply.)**

- Newton’s Dark Secrets* (2005)
- Infinite Secrets* (Archimedes, 2003)
- Galileo’s Battle for the Heavens* (2002)
- I did not use any of the TV specials.

**33. Did you purchase any or all of the *Lives In Science* TV specials for your library? (Check all that apply.)**

- Newton’s Dark Secrets* (2005)
- Infinite Secrets* (Archimedes, 2003)
- Galileo’s Battle for the Heavens* (2002)
- I did not purchase any of the TV specials.

**34. Please tell us anything else you remember about how you used the past kits and about your impressions of the kits.**

**Some final questions about you:**

**35. In what state is your library located?**

(For this question, show a drop down of all states for people to select theirs)

**36. In what type of setting is your library located?**

- Rural
- Suburban
- Urban

**37. What is your job title?**

**Providing the following information makes you eligible to receive a *Forgotten Genius* DVD if you are one of the first 50 people to complete this survey.**

**38. Preferred email address: \_\_\_\_\_**

**39. Postal address**

**Name:**

**Library name:**

**Library Street Address:**

**City/Town:**

**State (*drop-down list*):**

**Zip Code:**

**You have now completed the survey and your answers have been submitted to Goodman Research Group, Inc. Thank you for helping us with this research. You will be notified via email if you were one of the first 50 people to complete the survey and will be receiving a DVD.**



## LIVES IN SCIENCE SURVEY

Thank you for participating in Phase Two of the *Lives In Science Library Resource Kit* evaluation. Your responses will help inform development of future library outreach materials.

We suggest that you refer to the kits we sent you while taking the survey. You will first be asked questions for each kit separately. Following that, you will be asked some questions pertaining to all of the kits.

### INDIVIDUAL KITS

#### **Newton's Dark Secrets Library Resource Kit (2005)**

1. Does your library have a copy (purchased or recorded) of the *Newton's Dark Secrets* NOVA TV special?
  - Yes, we have a copy.
  - No, we do not have a copy, but we plan to obtain one.
  - No, we do not have a copy and do NOT plan to obtain one in the future. *[If no] Why not?*
  
2. Did you use the *Newton's Dark Secrets* NOVA TV special (purchased or recorded) as a part of programs you conducted at your library?
  - Yes, I used the NOVA special.  
*[If yes] Please describe how you used the TV program.*
  - No, I did not use the NOVA special, but I plan to in the future.
  - No, I did not use the NOVA special and do NOT plan to in the future.  
*[If no] Why not?*
  
3. Did you receive the *Newton's Dark Secrets Library Resource Kit* in 2005?
  - I received AND used the kit. *[Proceed to next question]*
  - I received but did NOT use the kit *[Skip to question 8]*
  - I did not receive the kit. *[Skip to question 8]*
  - I do not remember *[Skip to question 8]*
  
4. How many times have you used the kit or part of the kit? *Answer choice will be a drop-down menu with choices from 1-10 and "more than 10."*
  
5. When did you use the kit in relation to when the TV special aired (November 15, 2005)?
  - Before the TV special aired
  - After the TV special aired
  - Both before and after the TV special aired
  - I don't remember

6. With what age groups did you use this kit? (*Check all that apply*)
- Children (ages 4 – 12)
  - Young Adults (ages 13 – 18)
  - Adults (ages 18+)
  - Other, please describe:
7. Please describe any of the activities or sessions you conducted (including displays, events, etc.) with the kit.

WGBH is interested on getting input about the kit from librarians like you. The next set of questions will ask you about specific components of the kit. Please refer to the kit as you answer these questions. ***Regardless of whether or not you used the kit in the past, please answer the following questions. Please draw on your experiences using the kit in the past and/or reviewing it now.***

8. Use and rating of components overall

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? ( <i>Please answer regardless of whether or not you used it in the past.</i> )				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Who Was Sir Isaac Newton? handout	Yes/No	1	2	3	4	5
Program Ideas and Tips	Yes/No	1	2	3	4	5
Bibliography	Yes/No	1	2	3	4	5
Newton Activities	Yes/No	1	2	3	4	5
Display Sheets	Yes/No	1	2	3	4	5
Color Poster	Yes/No	1	2	3	4	5
Bookmarks	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

9. Now, please turn to the section on Program Ideas and Tips (brown page border).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Programs and Events (page 1 of 4)	Yes/No	1	2	3	4	5
Activities Using Library Resources (page 2 of 4)	Yes/No	1	2	3	4	5
Library Display Ideas (page 3 of 4)	Yes/No	1	2	3	4	5
Resources for Programs and Events (page 4 of 4)	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

10. Now, please turn to the Bibliography (dark blue page border).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Newton's Life and Works	Yes/No	1	2	3	4	5
Calculus, Physics, and Astronomy	Yes/No	1	2	3	4	5
History of Science and Mathematics	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

11. Now, please turn to the section on Newton Activities (olive green page border).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Newton's Discovery	Yes/No	1	2	3	4	5
Catch a Rainbow	Yes/No	1	2	3	4	5
Parachute Play	Yes/No	1	2	3	4	5
Light's Mysteries	Yes/No	1	2	3	4	5
Marble on the Move	Yes/No	1	2	3	4	5
Who Am I?	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

12. Now, please turn to the section with Display Sheets.

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Newton's Apple	Yes/No	1	2	3	4	5
The Better to See Stars With	Yes/No	1	2	3	4	5
Rainbow of Light	Yes/No	1	2	3	4	5
The Philosopher's Stone	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

13. What do you particularly like about the kit?

14. What are the benefits of this kit to your library patrons? *If you have not yet used the kit, please describe how you believe your patrons would benefit from it.*

15. How likely are you to use the *Newton's Dark Secrets Library Resource Kit* in future library programming?
- Extremely likely
  - Very likely
  - Moderately likely
  - Somewhat likely
  - Not at all likely
- [If moderately → extremely]* How do you plan to use the kit in the future?  
*[If not at all or somewhat]* What might encourage you to use this kit in the future?
16. Did you use the *Newton's Dark Secrets* Web site ([www.pbs.org/nova/newton](http://www.pbs.org/nova/newton)) to supplement the library resource kit?
- Yes  
*[If yes]* What areas of the Web site did you visit? Please describe any portions that were particularly helpful to you. *[skip to Question 18]*
  - No
17. Why didn't you use the Web site? *(Check all that apply.)*
- I was not aware of the Web site.
  - I did not have time.
  - I did not find the Web site useful; please explain: \_\_\_\_\_
  - I experienced technical difficulties.
  - Other, please explain: \_\_\_\_\_
18. Please write any additional comments about the *Newton's Dark Secrets Library Resource Kit*.

### **Infinite Secrets Library Resource Kit (Archimedes, 2003)**

19. Does your library have a copy (purchased or recorded) of the *Infinite Secrets* NOVA TV special? *If your library does not have a copy and does not plan to obtain one in the future, please explain your response below.*
- Yes, we have a copy.
  - No, we do not have a copy, but we plan to obtain one.
  - No, we do not have a copy and do NOT plan to obtain one in the future. *[If no]* Why not?
20. Did you use the *Infinite Secrets* NOVA TV special (purchased or recorded) as a part of programs you conducted at your library?
- Yes, I used the NOVA special.  
*[If yes]* Please describe how you used the TV program.
  - No, I did not use the NOVA special, but I plan to in the future.
  - No, I did not use the NOVA special and do NOT plan to in the future.  
*[If no]* Why not?

21. Did you receive the *Infinite Secrets Library Resource Kit* in 2003?
- I received AND used the kit. [*Proceed to next question*]
  - I received but did NOT use the kit [*Skip to question 26*]
  - I did not receive the kit. [*Skip to question 26*]
  - I do not remember [*Skip to question 26*]
22. How many times have you used the kit or part of the kit? *Answer choice will be a drop-down menu with choices from 1-10 and “more than 10.”*
23. When did you use the kit in relation to when the TV special aired (September 20, 2003)?
- Before the TV special aired
  - After the TV special aired
  - Both before and after the TV special aired
  - I don't remember
24. With what age groups did you use this kit? (*Check all that apply*)
- Children (ages 4 – 12)
  - Young Adults (ages 13 – 18)
  - Adults (ages 18+)
  - Other, please describe:
25. Please describe any of the activities or sessions you conducted (including displays, events, etc.) with the kit.

WGBH is interested on getting input about the kit from librarians like you. The next set of questions will ask you about specific components of the kit. Please refer to the kit as you answer these questions. ***Regardless of whether or not you used the kit in the past, please answer the following questions. Please draw on your experiences using the kit in the past and/or reviewing now.***

26. Use and rating of components overall

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Archimedes and the Palimpsest handout	Yes/No	1	2	3	4	5
Program Ideas and Tips	Yes/No	1	2	3	4	5
Bibliography	Yes/No	1	2	3	4	5
Who Was Archimedes? handout (page 1 of yellow Archimedes handout)	Yes/No	1	2	3	4	5
Famous Mathematicians handout (page 2 of yellow Archimedes handout)	Yes/No	1	2	3	4	5
Archimedes Activities (pages 3 – 6 of Archimedes Handout)	Yes/No	1	2	3	4	5
Display Sheets	Yes/No	1	2	3	4	5
Science lesson (Web site listed on the Table of Contents)	Yes/No	1	2	3	4	5
Color Poster	Yes/No	1	2	3	4	5
Bookmarks	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

27. Now, please turn to the section on Program Ideas and Tips (red page border).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Programs and Events (page 1 of 4)	Yes/No	1	2	3	4	5
Library Resource Activities (page 2 of 4)	Yes/No	1	2	3	4	5
Library Display Ideas (page 3 of 4)	Yes/No	1	2	3	4	5
Resources for Programs and Events (page 4 of 4)	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

28. Now, please turn to the Bibliography (burnt orange page border).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Archimedes (page 1 of 4)	Yes/No	1	2	3	4	5
Math and Mathematicians (page 2 of 4)	Yes/No	1	2	3	4	5
Ancient Machines and Inventions (page 3 of 4)	Yes/No	1	2	3	4	5
History of Books and Bookmaking (page 4 of 4)	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.



29. Now, please turn to the section on Archimedes Activities (pages 3 – 6 of Archimedes handout, yellow page border).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
New Shapes from Old (page 3 of 6)	Yes/No	1	2	3	4	5
All About Archimedes (page 4 of 6)	Yes/No	1	2	3	4	5
Eureka! (page 5 of 6)	Yes/No	1	2	3	4	5
All the Grains of Sand (page 6 of 6)	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

30. Now, please turn to the section with Display Sheets.

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Archimedes	Yes/No	1	2	3	4	5
History of the Book	Yes/No	1	2	3	4	5
Shapes in Nature	Yes/No	1	2	3	4	5
Ancient Machines	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

31. What do you particularly like about the kit?

32. What are the benefits of this kit to your library patrons? *If you have not yet used the kit, please describe how you believe your patrons would benefit from it.*

33. How likely are you to use the *Infinite Secrets Library Resource Kit* in future library programming?

- Extremely likely
- Very likely
- Moderately likely
- Somewhat likely
- Not at all likely

*[If moderately → extremely]* How do you plan to use the kit in the future?

*[If not at all or somewhat]* What might encourage you to use this kit in the future?

34. Did you use the *Infinite Secrets* Web site ([www.pbs.org/nova/archimedes](http://www.pbs.org/nova/archimedes)) to supplement the library resource kit?

- Yes

*[If yes]* What areas of the Web site did you visit? Please describe any portions that were particularly helpful to you. *[skip to Question 36]*

- No

35. Why didn't you use the Web site? *(Check all that apply.)*

- I was not aware of the Web site.
- I did not have time.
- I did not find the Web site useful; please explain: \_\_\_\_\_
- I experienced technical difficulties.
- Other, please explain: \_\_\_\_\_

36. Please write any additional comments about the *Infinite Secrets Library Resource Kit*.

### **Galileo's Battle for the Heavens Library Resource Kit (2002)**

37. Does your library have a copy (purchased or recorded) of the *Galileo's Battle for the Heavens* NOVA TV special? *If your library does not have a copy and does not plan to obtain one in the future, please explain your response below.*

- Yes, we have a copy.
- No, we do not have a copy, but we plan to obtain one.
- No, we do not have a copy and do NOT plan to obtain one in the future. *[If no]* Why not?

38. Did you use the *Galileo's Battle for the Heavens* NOVA TV special (purchased or recorded) as a part of programs you conducted at your library?

- Yes, I used the NOVA special.  
*[If yes]* Please describe how you used the TV program.
- No, I did not use the NOVA special, but I plan to in the future.
- No, I did not use the NOVA special and do NOT plan to in the future.  
*[If no]* Why not?

39. Did you receive the *Galileo's Battle for the Heavens Library Resource Kit* in 2002?
- I received AND used the kit. *[Proceed to next question]*
  - I received but did NOT use the kit *[Skip to question 44]*
  - I did not receive the kit. *[Skip to question 44]*
  - I do not remember *[Skip to question 44]*
40. How many times have you used the kit or part of the kit? *Answer choice will be a drop-down menu with choices from 1-10 and "more than 10."*
41. When did you use the kit in relation to when the TV special aired (October 29, 2002)?
- Before the TV special aired
  - After the TV special aired
  - Both before and after the TV special aired
  - I don't remember
42. With what age groups did you use this kit? *(Check all that apply)*
- Children (ages 4 – 12)
  - Young Adults (ages 13 – 18)
  - Adults (ages 18+)
  - Other, please describe:
43. Please describe any of the activities or sessions you conducted (including displays, events, etc.) with the kit.

WGBH is interested on getting input about the kit from librarians like you. The next set of questions will ask you about specific components of the kit. Please refer to the kit as you answer these questions. ***Regardless of whether or not you used the kit in the past, please answer the following questions. Please draw on your experiences using the kit in the past and/or reviewing now.***

44. Use and rating of components overall

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Program Ideas and Tips	Yes/No	1	2	3	4	5
Bibliography	Yes/No	1	2	3	4	5
Who Was Galileo Galilei? handout (page 1 of olive green handout)	Yes/No	1	2	3	4	5
Scientists Today handout (page 2 of olive handout)	Yes/No	1	2	3	4	5
Galileo Activities (pages 3 and 4 of olive handout)	Yes/No	1	2	3	4	5
Science Lesson	Yes/No	1	2	3	4	5
Color Poster	Yes/No	1	2	3	4	5
Bookmarks	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

45. Now, please turn to the section on Program Ideas and Tips (purple page border and type).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Library Events and Programs (page 1 of 4)	Yes/No	1	2	3	4	5
Library Display Ideas (page 2 of 4)	Yes/No	1	2	3	4	5
Resources (pages 3 and 4)	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

46. Now, please turn to the Bibliography (burgundy page border).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
Galileo (page 1 of 4)	Yes/No	1	2	3	4	5
Before and After Galileo: Selected Scientists (page 2 of 4)	Yes/No	1	2	3	4	5
16 <sup>th</sup> and 17 <sup>th</sup> Century Italy (page 2 of 4)	Yes/No	1	2	3	4	5
Astronomy (page 3 of 4)	Yes/No	1	2	3	4	5
Careers (page 4 of 4)	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

47. Now, please turn to the Galileo Activities (pages 3 and 4 of the section on Reproducible Handouts, olive green page border and type).

Kit Component	Have you used this component [already]? (click one)	How useful is this component to you? (Please answer regardless of whether or not you used it in the past.)				
		Not at all useful 1	Somewhat useful 2	Moderately useful 3	Very useful 4	Extremely useful 5
In the Swing of Things (page 3 of 4)	Yes/No	1	2	3	4	5
The Tick Tock of a Water Clock (page 4 of 4)	Yes/No	1	2	3	4	5

For any of the components you've used, please describe how you've used them.

48. What do you particularly like about the kit?

49. What are the benefits of this kit to your library patrons? *If you have not yet used the kit, please describe how you believe your patrons would benefit from it.*

50. How likely are you to use the *Galileo's Battle for the Heavens Library Resource Kit* in future library programming?

- Extremely likely
- Very likely
- Moderately likely
- Somewhat likely
- Not at all likely

[If moderately → extremely] How do you plan to use the kit in the future?

[If not at all or somewhat] What might encourage you to use this kit in the future?

51. Did you use the *Galileo's Battle for the Heavens* Web site ([www.pbs.org/nova/galileo](http://www.pbs.org/nova/galileo)) to supplement the library resource kit?

- Yes

[If yes] What areas of the Web site did you visit? Please describe any portions that were particularly helpful to you. [skip to Question 53]

- No

52. Why didn't you use the Web site? (Check all that apply.)

- I was not aware of the Web site.
- I did not have time.
- I did not find the Web site useful; please explain: \_\_\_\_\_
- I experienced technical difficulties.
- Other, please explain: \_\_\_\_\_

53. Please write any additional comments about the *Galileo's Battle for the Heavens Library Resource Kit*.

### **Forgotten Genius Library Resource Kit (Percy Julian, 2007)**

We are interested in learning a bit more about your use or intended use of the *Forgotten Genius* kit, now that you have received it in the mail.

54. Have you used the *Forgotten Genius Library Resource Kit* in your library?

- Yes
- No

55. How likely are you to use the *Forgotten Genius Library Resource Kit* in the future?

- Extremely likely
- Very likely
- Moderately likely
- Somewhat likely
- Not at all likely

Please explain your response.

For the next question, please refer to the color display sheets from the *Newton's Dark Secrets* and *Forgotten Genius* (Percy Julian) kits. The four display sheets from the *Newton's Dark Secrets* kit are: Newton's Apple, The Better to See Stars With, Rainbow of Light, and The Philosopher's Stone. From the *Forgotten Genius* kit, the five displays sheets are: Natural vs. Synthetic, Plant Medicines, Chemistry and Stuff Around Us, I'm a Chemist, and African American Scientists.

56. Overall, do you prefer the display sheets from *Newton's Dark Secrets* or those from *Forgotten Genius*?

- I prefer the *Newton's Dark Secrets* display sheets
- I prefer the *Forgotten Genius* display sheets
- I have no preference

Please explain your response.

### **Questions Across All Four Lives In Science kits**

57. Which types of resources/activities do your patrons find MOST interesting? *Check all that apply.*

- The library programming ideas suggested in the Program Ideas and Tips section
- Bibliography
- Social Studies Activities
- Science Activities
- Display Sheets
- Informational handouts (e.g., Who Was Galileo? Archimedes and the Palimpsest)
- Color Poster
- Bookmarks
- Web site
- NOVA program

Please explain why:

58. Which types of resources/activities do your patrons find LEAST interesting? *Check all that apply.*

- The library programming ideas suggested in the Program Ideas and Tips section
- Bibliography
- Social Studies Activities
- Science Activities
- Display Sheets
- Informational handouts (e.g., Who Was Galileo? Archimedes and the Palimpsest)
- Color Poster
- Bookmarks
- Web site
- NOVA program

Please explain why:

59. Besides the materials already included in the kits, are there any other types of materials you would like to see added?

- No
- Yes

*[If yes]* What types of materials do you wish were added, and why?

60. Are there any types of materials that you would recommend omitting from the kits?

- No
- Yes

*[If yes]* What types of materials do you recommend omitting, and why?

61. How important do you feel it is to use the kits in conjunction with the TV special?

- Extremely important
- Very important
- Moderately important
- Somewhat important
- Not at all important

62. What would prompt you to use a kit soon after receiving it?

63. How much, if at all, has your own level of interest increased as a result of your experiences with the *Lives In Science* kits?

<i>YOUR interest in:</i>	Did not increase	Increased somewhat	Increased moderately	Increased very much	Increased extremely
The life and work of Galileo	1	2	3	4	5
The life and work of Archimedes	1	2	3	4	5
The life and work of Newton	1	2	3	4	5
The life and work of Julian	1	2	3	4	5
The topics featured in the kits	1	2	3	4	5
Conducting science outreach events and activities for patrons	1	2	3	4	5

64. If your interest in one or more of the above topics did not increase, please explain why.



65. How interested have your patrons appeared to be in the following:

<i>Your PATRONS' interest in:</i>	Not at all interested	Somewhat interested	Moderately interested	Very interested	Extremely interested
The life and work of Galileo	1	2	3	4	5
The life and work of Archimedes	1	2	3	4	5
The life and work of Newton	1	2	3	4	5
The life and work of Julian	1	2	3	4	5
The topics featured in the kits	1	2	3	4	5
Attending science outreach events and activities	1	2	3	4	5

66. Have you used educational resources in the past that were similar to the *Lives In Science* kits?

- No  
 Yes

*[If yes]* Please list two or three of the most recent resources you have used.

67. Overall, how do the kits compare to other educational resources you've used?

- These kits are significantly better than other resources  
 These kits are somewhat better than other resources  
 These kits are about the same as other resources  
 These kits are somewhat worse than other resources  
 These kits are significantly worse than other resources

Please explain your response. \_\_\_\_\_

68. Please list any suggestions you have for future library outreach projects that WGBH might consider.

69. Please write any additional comments about the *Lives In Science Library Resource Kits*.

**You have now completed the survey and your responses have been submitted to Goodman Research Group, Inc. As soon as we receive your stipend form, we will mail your \$50 stipend and the four *Lives In Science* DVDs. Thank you for your help!**

## *LIVES IN SCIENCE INTERVIEW GUIDE*

1. In the survey, you indicated which activities you conducted. Since each librarian's use of the kit and activities was unique, could you please describe, more specifically, how you used each kit? What activities did you conduct, and why did you choose those activities/displays? (start with Percy, the move backwards in the chronology for the kits they used).
2. Please describe for me how your use of the kits affected your interest in conducting future science programming in your library.
3. What did patrons like most about the activities and events you conducted with the kits? What did they find most engaging? [probe for a range of programming ideas that were part of the kit, including events, activities, & displays]
4. What did they like least? Was there anything they seemed less engaged in? Why do you think that was?
5. How much, if any, did the activities appear to stimulate patrons' interest in science? [probe for specific examples]
6. What kind of shelf-life do you think these kits have? Why? What could improve their shelf-life?
7. Now let's turn to more general questions about science programming you do at your library. Typically, how many displays related to science do you create each year? How many science activities or events do you conduct yearly? What age levels are they aimed at? Can you give me some examples of science displays, activities, or events you have done in the past year?
8. Have you ever received science outreach materials from other sources? [If yes:] Please tell me a bit about those materials, for instance, how often do you receive them? Who sends them? How would you rate their quality (and why)? What about their shelf-life?
9. Based on your experiences with these kits and other outreach materials, what suggestions do you have for future library outreach materials or campaigns? We're interested in any suggestions you have for future science topics and non-science topics, for any patron audiences and age levels. [probe for a range of activities, including and beyond physical outreach materials; probe for any differences in suggestions by age levels]
10. Do you have any additional comments about the kits or your experience with the kits?

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