Report
GettyGuide Bookmarks: Do They Really Work?

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Executive Summary

Over the past few years, many museums have launched multimedia projects (on PDAs, kiosks, and Web sites) that allow visitors to bookmark information of interest for later use. Visitors can retrieve the bookmarked information either via links in an e-mail sent to the visitor at the end of his/her visit or via a personal page on the Museum’s Web site accessible to the visitor through a username and password.

Preliminary studies of some of the available applications (at Tate Modern, the London Science Museum, and the Boston Science Museum, among others) show that few visitors take full advantage of the features offered by bookmarking, either on-site (on kiosks and PDAs) or online. In order to better understand why this is the case, we carried out an evaluation of visitors' usage of the bookmarking feature on GettyGuide multimedia kiosks at the Getty Center.

The evaluation, which took place in April and May 2006 with the support of the Getty Web Group, Interactive Programs, and Institutional Research departments, was organized in three different steps (kiosk and bookmarking data analysis, surveys and a usability study), including both quantitative and qualitative research.

Besides providing useful information about whom, why and how Getty Center visitors use the kiosks, the collected data indicate that the percentage of kiosk-users who bookmark and click through the received information is still quite low (bookmarking rate: between 6% and 15%, click through rate between 0.2% to 2.6%). Even if low, this rate is in line with the results obtained by other museums with similar applications (Boston Science Museum, London Science Museum, etc.)

Reasons for the low percentage of bookmarkers are various. Despite the general lack of interest and time, the high percentage of kiosk-users, who declared not having noticed the bookmarking feature or not having understood its purpose, is a sign that problems exist with the interface and the terminology. In particular, the usability tests helped us understand that the bookmarking functionality, as it is set up now on the GettyGuide kiosks, is too complex for the user to understand without guidance from museum staff. In order to simplify the process, we suggest replacing the account system with the simple option of allowing visitors to e-mail the information of interest directly to their inbox. A possible solution for simplifying the Getty Guide bookmarking system without having to redesign the interface completely is proposed at the end of the document.

In Appendix A, we report the results of a small study that was carried out during an orientation workshop with a group of teachers at the Getty Villa with the aim of better understanding the potential of online and on-site bookmarking to support their activities in the classroom. The analysis of the survey results as well as feedback from Getty Center educators seem to confirm the teachers’ interest in using the bookmarking functionality (particularly the online version) before, during and after the visit to support classroom activities. However in order for teachers and students to fully take advantage of these functionalities and to successfully carry out interesting and useful activities, it will be necessary to implement a series to modifications to the existing system.
1.0 Background

Over the past few years, many museums have launched multimedia projects (on PDAs, kiosks, and Web sites) that allow visitors to bookmark information of interest for later use. Visitors can retrieve the bookmarked information either via links in an e-mail sent to the visitor at the end of his/her visit or via a personal page on the Museum’s Web site accessible to the visitor through a username and password.

Museums have introduced bookmarking for many reasons. Because repetition is key to retaining information over time, bookmarking may be a tool with strong educational potential. Bookmarking can also help visitors activate prior knowledge and pursue individual interests, which can boost their knowledge, positive feelings toward the subject, and desire to learn more.

Museums have also adopted bookmarking as a way to extend visitors' experience beyond their visit to the physical site. When museum content is accessible at home, work, and elsewhere, visitors can focus more on experimentation and discovery while in the museum, leaving more traditional learning tasks such as reading and listening for later. Hence the “visitor experience” does not end in the museum but continues at home after the visit, creating a stronger relationship between the institution and the visitor.

2.0 The Study

Although museums have introduced bookmarking on PDAs, kiosks, and the Webs in the hope that it will help prolong the museum experience, build a stronger relationship with the visitor, and facilitate learning, there is still little evidence that bookmarking actually works in the terms envisaged by its promoters.

Preliminary studies of some of the available applications (at Tate Modern, the London Science Museum, and the Boston Science Museum, among others) show that few visitors take full advantage of the features offered by bookmarking, either on-site (on kiosks and PDAs) or online. In order to better understand why this is the case, we carried out an evaluation of visitors' usage of the bookmarking feature on GettyGuide multimedia kiosks at the Getty Center.

The aim of the GettyGuide kiosks is to provide visitors to the Getty Center and Villa with multimedia information (text, audio, images and video) about the museum, its organization, history, collection, exhibited artists and the art-historical movements that they belong to. Among the different features, the system allows visitors to “bookmark” specific artworks, artist or video material they are interested in, by setting up an account. The bookmarked information can then be accessed on the kiosks during a subsequent visit or on a personal page available on the museum’s website, accessible to the visitor through a username and password. This particular feature made GettyGuide the perfect candidate for a thorough evaluation of how museums visitors use the bookmarking functionality onsite.

The evaluation, which took place in April and May 2006 with the support of the Getty Web Group, Interactive Programs, and Institutional Research departments, was aimed at assessing the following:

1. Whether visitors understand what bookmarking is and how it can be valuable;
2. Whether visitors bookmark content and why;
3. How visitors find out about bookmarking;
4. Whether visitors set up an account and why;
5. Whether visitors send e-mails and why;
6. What content visitors bookmark;
7. How many bookmarks visitors make;
8. Whether visitors find bookmark easy to use; and
9. Whether visitors are interested in using bookmarking again.

The evaluation was organized in three different steps, including both quantitative and qualitative research:

1) An in-depth analysis of the kiosks and bookmarking data to find out preliminary information about the way visitors use this feature before, during and/or after the visit.
2) **On-site surveys** with 377 visitors who used the kiosks\(^1\), to find out more detailed information about whether, why, and what visitors bookmark\(^2\).

3) **A usability study** with selected kiosk users to better understand possible navigation and design problems of the bookmarking feature highlighted by the survey.

The survey questions and a summary of the usability tests results are available in Appendix B and C. The results of the on-site surveys are accessible online at or at http://www.surveymonkey.com/DisplaySummary.asp?SID=2032074&U=203207449882 or by contacting Tim Hart at thart@getty.edu

### 3.0 The Results

Although the main focus of the study was the bookmarking feature, we also included questions about the use of the kiosks in order to capture information about GettyGuide users. The answers to these questions, although not directly relevant to the study, are briefly analyzed here.

#### 3.1 Who Uses the GettyGuide Kiosks?

According to the Getty Center quarterly visitor surveys conducted over the past two years, the percentage of visitors using GettyGuide kiosks ranges between 9% and 11%, corresponding to approximately 100,000 visitors a year.

More specific demographics details about kiosk users obtained through the bookmarking survey indicate that:

- First-time visitors (56.3%) are more likely to use the kiosks than repeat visitors (43.7%) 

- Kiosks are used by visitors of many different age groups, from teenagers to the elderly, as summarized in the figure below. The most frequent users are visitors between the age of 18 and 34. The mean age of kiosk users, excluding minors, is 37.84, which is slightly younger than the mean age of all visitors, which is 41 (Nahmias Spring Survey 2006). This suggests that kiosks tend to attract younger audiences and that it might be worth considering developing specific content for this age group in the future.

![Figure 1: Age Distribution of GettyGuide Users](image)

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1 The number of surveys necessary for the study was determined based on the daily number of visitors to the Getty Center, the percentage of those visitors using the kiosks, and the desired margin of error (+/- 5%).

2 The questionnaires were distributed randomly to visitors using one of the 22 kiosks distributed over 5 different locations at the Getty Center site. Because kiosks are often used by people under age 18, it was decided to include visitors age 18 and younger in the sample, with parental consent.
• There are slightly more males than females among kiosk users (53.2% vs. 46.8%), but this difference is too small to be statistically relevant.

• Most kiosk users visit the museum in the company of relatives (51.2%), friends (31.5%), or out-of-town guests (4.5%), or as part of a group (4.5%). Only 14.9% visited alone, as summarized by the figure below.

![Figure 2: Percentage of GettyGuide Users by Context of Visit](image)

Figure 2: Percentage of GettyGuide Users by Context of Visit

• The majority of kiosk users come to the museum without children (69.1% versus 30.9%) and is not visiting as part of a school assignment (79% versus 21%).

• Kiosks are used by visitors of varied educational backgrounds, from high school graduates to holders of graduate degrees. Visitors with graduate degrees make up the largest class of users, as shown in the figure below.

![Figure 3: GettyGuide users distribution by level of education](image)

Figure 3: GettyGuide users distribution by level of education
• The vast majority of kiosk users come from California (almost 70%), followed by a minority from other US states (around 10%) and from outside the US (around 10%). Users from outside the US include British, Canadians, and Australians, but also Mexicans, Asians (from the Philippines, Korea, China), and continental Europeans. This is an indication that nonnative English speakers are willing to use the kiosks, despite the language barrier. However, developing content in other languages (e.g., Spanish) might help increase the percentage of foreigners using the kiosk.

• Most kiosk users did not go to the Getty's Web site to prepare for their visit (65.7% versus 34.3%). However, the majority (68.8% versus 31.2%) planned to go online to follow up after their visit. This may indicate that the GettyGuide kiosks have a positive influence on visitors by stimulating their desire to go online after their visit. Note, however, that visitors often confuse the GettyGuide kiosk with the Web site and therefore expect to be given access to the same exact content online (see page 10 for more detail on this issue).

3.2 What Do Visitors Do at the Kiosks?

Besides helping us understand the demographics of kiosk users, the bookmarking survey helped reveal how visitors to the Getty Center utilize the kiosks. The survey indicates that:

• Visitors interviewed mainly used the kiosks out of curiosity (53.6%) or to look for specific information (32.2%). Several also cited the need for rest and relaxation.

• Visitors interviewed spent a significant amount of time at the kiosks, with over 45% of the users staying for more than 10 minutes (see figure below for a summary of the responses). These data might, however, be slightly biased by two considerations:
  
  o users may have overestimated the time they spent at the kiosk
  o visitors who spent less time at the kiosk may have been less likely to participate to the survey

Direct observation during the questionnaire distribution, however, seems to confirm the survey results, especially for the GettyGuide and East Pavilion rooms, where visitors have the opportunity to relax while waiting for family or group members.

![Figure 4: Time Spent at the Kiosks by GettyGuide Users](image)

• Cross-tabbing the data collected about time spent at the kiosks with demographic information, we notice that there is a significant difference between people who use the kiosks for more than 30 minutes and people who stay less than a minute. Visitors who stayed longer were more likely to be
using the kiosk with another person or in a group or to be visiting the museum with children or as part of a school assignment. They were also more likely to express the desire to follow up after their visit by going online.

- The most popular activities at the kiosks were: viewing artworks (62.2%) and watching videos (46%), followed by zooming in on images (29.8%), listening to audio (29.5%), viewing artist biographies (22.3%), playing with the timeline (17%), and looking at temporary exhibitions (16.5%). Visitors' interest in videos, audio, and image zooming is particularly significant and suggests a preference for a more "passive" experience.

- Visitors mostly found out about the kiosk by walking past one (80%). Other sources of information such as word of mouth (6.1%), the Getty Web site (2.2%), the information desk (6.7%), the Getty Center brochure (3.6%), and the orientation video (cited a few times under the category “Other”) were also mentioned. However, these much lower percentages suggest that more efforts should be put into advertising the kiosks both inside and outside the museum.

- Half of the respondents used the kiosk alone (50.1%), while the other half used it in a group (9.1%) or with another person (40.8%). This observation challenges the notion, often widespread amongst museum professionals, that kiosk activities are isolating. Certainly the double headsets, the extra chairs, and the speakers available in the GettyGuide and East Pavilion rooms facilitate use by more than one person at the time.

3.3 Do Visitors Use the Bookmarking Feature?

After establishing who uses the GettyGuide kiosks and determining what they do with them, we can now concentrate on the primary objective of our study: bookmarking. The first question is whether people use the bookmarking feature. To answer this question, we can rely on the kiosk log data for the period January 2005–March 2006 (see table below) and the results of the on-site survey.

<table>
<thead>
<tr>
<th></th>
<th>I. Sessions at kiosks (total)</th>
<th>II. Sessions in which bookmarks were selected</th>
<th>III. Sessions in which accounts were created</th>
<th>IV. Sessions in which e-mail was sent</th>
<th>V. Accounts accessed online</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2005</td>
<td>13761</td>
<td>1105</td>
<td>164</td>
<td>90</td>
<td>NA</td>
</tr>
<tr>
<td>February</td>
<td>11154</td>
<td>1016</td>
<td>152</td>
<td>102</td>
<td>NA</td>
</tr>
<tr>
<td>March</td>
<td>9470</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>April</td>
<td>10412</td>
<td>797</td>
<td>105</td>
<td>98</td>
<td>30</td>
</tr>
<tr>
<td>May</td>
<td>12648</td>
<td>783</td>
<td>105</td>
<td>118</td>
<td>28</td>
</tr>
<tr>
<td>June</td>
<td>12469</td>
<td>753</td>
<td>126</td>
<td>93</td>
<td>37</td>
</tr>
<tr>
<td>July</td>
<td>12012</td>
<td>1075</td>
<td>105</td>
<td>118</td>
<td>83</td>
</tr>
<tr>
<td>August</td>
<td>14470</td>
<td>1120</td>
<td>182</td>
<td>137</td>
<td>63</td>
</tr>
<tr>
<td>September</td>
<td>11361</td>
<td>661</td>
<td>91</td>
<td>92</td>
<td>27</td>
</tr>
<tr>
<td>October</td>
<td>11937</td>
<td>842</td>
<td>107</td>
<td>89</td>
<td>33</td>
</tr>
<tr>
<td>November</td>
<td>11630</td>
<td>803</td>
<td>171</td>
<td>138</td>
<td>97</td>
</tr>
<tr>
<td>December</td>
<td>10552</td>
<td>690</td>
<td>110</td>
<td>100</td>
<td>108</td>
</tr>
<tr>
<td>January 2006</td>
<td>13164</td>
<td>793</td>
<td>113</td>
<td>86</td>
<td>98</td>
</tr>
<tr>
<td>February</td>
<td>14441</td>
<td>891</td>
<td>432</td>
<td>110</td>
<td>382</td>
</tr>
<tr>
<td>March</td>
<td>15032</td>
<td>1125</td>
<td>185</td>
<td>139</td>
<td>NA</td>
</tr>
</tbody>
</table>

Figure 5: Table Summarizing the Kiosk Log Data, January 2005–March 2006.

The log data summarized in the table above shows that the percentage of kiosk sessions in which bookmarks were created ranges between 9%, in the period where the GettyGuide handheld was available, to 6% in
September 2006 (column II). The majority of kiosk users who used the bookmarking feature, however, limited themselves to saving objects on the kiosk, without creating an account or sending the bookmarked items by e-mail. The number of accounts created (column III) is, in fact, much lower that the number of sessions in which bookmarks were selected (column II). The number of sessions in which e-mails were sent (column IV) is also lower than the number of sessions in which bookmarks were created (column II).

Why did more kiosk users create bookmarks than set up accounts or send e-mail? Visitors may:

- have tried the bookmarking feature either by mistake or only out of curiosity;
- have found the bookmarking feature too complicated to use; or
- not have been interested in saving the information for later access at home.

Once an account was created at the kiosk (column III), the percentage of kiosk users that went online to check the bookmarked information ranged from 22% to 98% depending on time period (columns V). If compared to the total number of kiosk users (column I), the click through percentage is even lower, ranging between 0.22% in May 2005 and 2.6% in February 2006.

**Conclusion I**: The percentage of kiosk users taking advantage of the full functionality of Getty Bookmarks is very low. Of all visitors who used the kiosk in February 2006, for example, only 2.6% accessed their accounts online.

Results from the on-site survey are slightly more encouraging but generally confirm the trend seen in the kiosk log data: 84.70% of respondents (kiosk users only) did not use the bookmarking feature, while the remaining 15.30% either tried to or succeeded in saving bookmarks for later access, as summarized in the figure below.

![Figure 6: Percentage of Kiosk Users Who Did and Did Not Bookmark, According to the On-Site Survey](image)

Differences in the percentage of "bookmarkers" revealed in the survey (15.30%) and the log data (6–9%) can be explained by three factors:

- The margin of error for the survey is +/- 5%. This means that the percentage of kiosk users who bookmarked effectively ranges between 10% and 20%.
- The kiosk log data might not be a 100% reliable due to problems in the recording process.
- Some survey participants might have thought they created bookmarked content on the kiosk without having effectively used the feature.

**Conclusion II**: The actual bookmarking rate for kiosk users lies somewhere between 6% and 15%. Though low, this rate is in line with the results obtained by other museums with similar applications (such as The Boston Museum of Science, where 10% of Star Wars PDA tour users bookmarked at least one of the objects on the tour).

Silvia Filippini Fantoni, GettyGuide Bookmarks: do they really work?
Among respondents who did not bookmark, most indicated that “they did not notice the bookmarking feature” (35.6%), “they were not interested” (21.1%), “they did not understand what it was for” (19.6%), or “they did not have time” (17.4%). These data seemed to highlight the general lack of interest for these solutions. For most visitors the experience starts and finishes at the museum and there is no need or curiosity to extend it beyond its wall.

**Conclusion III:** However, the high percentage of kiosk users who did not notice or understand the bookmarking feature suggests that other problems exist, especially with the feature's design and implementation (see section 3.5 for more detail on this issue).

Those who did bookmark indicated that “they did so mainly out of curiosity” (47.5%), “to save information for later use” (40.7%), or to “retrieve bookmarks that they had created on the Getty's Web site” (23.7%) (see figure below for more detail). Only one person who gave that last response, however, had actually been to the Getty's Web site. The others may have confused the GettyGuide kiosk with the Getty's Web site.

**Figure 7: Kiosk Users' Main Reasons for Bookmarking**

**Conclusion IV:** The survey seems to confirm the trends highlighted by research in other museums (such as Tate Modern) that curiosity is the main reason for bookmarking. This may explain why many visitors who did bookmark did not open or click on any links in the e-mail they sent to themselves from the kiosk.

**3.4 Differences between bookmarks and non-bookmarkers**

Comparing the demographic information between bookmarks and non-bookmarkers (see scheme below) reveals few statistically significant (chi-square test) differences between the two groups of kiosk users, except:

- Bookmarkers are more likely to be second-time visitors.
- Females are more likely to bookmark than males.
- Bookmarkers are more likely to want to visit the Getty Web site after their visit than non-bookmarkers.

**Conclusion V:** The fact that bookmarks are more likely than non-bookmarkers to visit—or intend to visit—the Getty's Web site suggests that bookmarking can help museums extend visitors' experience beyond the visit to the physical site.
Comparing the kiosk usage preferences between bookmarkers and non-bookmarkers (see scheme below) reveals significant differences between the two groups of kiosk users. In particular:

- There is a higher percentage of bookmarkers that use the kiosk to look for information than non-bookmarkers.
- There is a higher percentage of non-bookmarkers that use the kiosk out of curiosity than bookmarkers
- Bookmarkers seem to spend more time at the kiosk than non-bookmarkers
- Bookmarkers tend to access more information about artworks and artists (including images and audio), while non-bookmarkers are more interested in videos (which suggests a more passive use of the kiosk)

<table>
<thead>
<tr>
<th><strong>Context of visit</strong></th>
<th><strong>Bookmarkers</strong></th>
<th><strong>Non Bookmarkers</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone:</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>With Family members:</td>
<td>56.1%</td>
<td>50.6%</td>
</tr>
<tr>
<td>Friends:</td>
<td>26.3%</td>
<td>32.5%</td>
</tr>
<tr>
<td>Out of town guests:</td>
<td>5.3%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Tour:</td>
<td>1.8%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Visited with children:</td>
<td>40%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Visited without children:</td>
<td>60%</td>
<td>71.1%</td>
</tr>
<tr>
<td>Visited as apart of a school assignment:</td>
<td>22.8%</td>
<td>20.3%</td>
</tr>
<tr>
<td>Not visited as apart of a school assignment:</td>
<td>77.2%</td>
<td>79.7%</td>
</tr>
<tr>
<td><strong>Reasons for using the kiosk</strong></td>
<td><strong>Bookmarkers</strong></td>
<td><strong>Non Bookmarkers</strong></td>
</tr>
<tr>
<td>While waiting:</td>
<td>17.9%</td>
<td>20.4%</td>
</tr>
<tr>
<td>Curiosity:</td>
<td>41.1%</td>
<td>55.9%</td>
</tr>
<tr>
<td>Orientation:</td>
<td>16.1%</td>
<td>16%</td>
</tr>
<tr>
<td>To look for information:</td>
<td>39.3%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Other:</td>
<td>0%</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Time spent at the kiosk:</strong></td>
<td><strong>Bookmarkers</strong></td>
<td><strong>Non Bookmarkers</strong></td>
</tr>
<tr>
<td>&gt;1 min:</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>1&lt;&gt;5 min:</td>
<td>11.1%</td>
<td>23.5%</td>
</tr>
<tr>
<td>5&lt;&gt;10 min:</td>
<td>29.6%</td>
<td>33.2%</td>
</tr>
<tr>
<td>10&lt;&gt;30 min:</td>
<td>50%</td>
<td>32.9%</td>
</tr>
<tr>
<td>&lt;30 min:</td>
<td>9.3%</td>
<td>9.4%</td>
</tr>
<tr>
<td><strong>Type of content accessed at the kiosk</strong></td>
<td><strong>Bookmarkers</strong></td>
<td><strong>Non Bookmarkers</strong></td>
</tr>
<tr>
<td>Work of art:</td>
<td>76.8%</td>
<td>59.8%</td>
</tr>
<tr>
<td>Artist Bios:</td>
<td>30.4%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Images:</td>
<td>42.9%</td>
<td>27.2%</td>
</tr>
<tr>
<td>Timeline:</td>
<td>25%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Videos:</td>
<td>37.5%</td>
<td>48.1%</td>
</tr>
<tr>
<td>Audio:</td>
<td>41.1%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Temporary exhibition:</td>
<td>14.3%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Other:</td>
<td>7.1%</td>
<td>6.6%</td>
</tr>
<tr>
<td><strong>Context of use of the kiosk</strong></td>
<td><strong>Bookmarkers</strong></td>
<td><strong>Non Bookmarkers</strong></td>
</tr>
<tr>
<td>Alone:</td>
<td>50.9%</td>
<td>49.7%</td>
</tr>
<tr>
<td>With another person:</td>
<td>35.1%</td>
<td>42%</td>
</tr>
</tbody>
</table>
3.5 How Do People Use the Bookmarking Feature?

Of the 59 bookmarkers (out of 377 participants in the survey), 51 responded to the second part of the survey related to the use of the bookmarking feature. Although the sample size is too small to draw any wide-ranging conclusions or to allow a deep analysis of the data, it is still worth briefly mentioning the results.

When asked how they found out about the bookmarking feature, the majority of the respondents said they noticed it on the screen (64.75%), while 23.5% were told about it by one of the volunteer docents (stationed only in the East Pavilion and the GettyGuide rooms). Word of mouth (3.9%) and the Getty's Web site (2%) seem to have been less efficient in making people aware of the bookmarking tool. This last point is particularly important as very little visibility has been given to the Getty Bookmarks feature on the Web site.

When asked how they used the bookmarking feature, most respondents indicated that they either created an account (41.2%) or sent an e-mail to themselves (60.8%), which, in practice, is the same thing given that users need to provide their e-mail address to set up an account. Sending an e-mail to somebody else, although not a popular feature, was used or tried by 7% of the respondents. Only one person, a teacher who came to prepare for a visit with her students, accessed an account she had created on the Web site before her visit. We can assume that the remaining 15.7% who answered “Not applicable” to this question either tried to bookmark an artwork but did not succeed or bookmarked objects without setting up an account (see figure below).

![Figure 8: How Visitors Used the Bookmarking Function on the Kiosk](image-url)

When asked what type of information they were expecting to receive, either via e-mail or online, no definite trends emerge from the survey. Some respondents seemed to be satisfied with more basic information, while others expected to be given access to the exact same content they had accessed on the kiosk.
When asked what information they bookmarked, the vast majority of the respondents (80.9%) indicated that they saved artworks, followed by artist biographies (38.3%), videos (21.3%), and information about temporary exhibitions (6.4%), as shown in the figure below.

![Figure 9: Content Bookmarked By Respondents on the Kiosk](image)

The majority of respondents saved between one and five (54.2%) bookmarks. One quarter of all respondents saved one bookmark, 8.3% saved between ten and twenty, 4.2% saved between five and ten, and 2.1% saved more than twenty.

When asked about the ease of use of the bookmarking feature and the likelihood that they would use it again, respondents seemed fairly positive, as summarized in the two figures below.

![Figure 10: Respondents' Feedback about the Bookmarking Feature's Ease of Use](image)
Despite the apparently positive feedback, answers to question 18 ("Why didn’t you use the bookmarking feature?"), as well as a series of inconsistencies in the responses provided throughout the second part of the questionnaire, show that despite the apparent success and declared ease of use, respondents did not fully understand how the bookmarking system works or how to set up an account.

To sort out this question, we conducted task-based usability tests with GettyGuide users. Results of these tests are analysed below.

3.6 Usability test

As a result of the log data and survey analysis, it became evident that the low percentage of bookmarkers was due, not only to the lack of interest or time, but also to problems related to the interface design, use of terminology and the complexity of the system. In order to determine the real nature of the problems, we carried out task-based usability tests with GettyGuide users.

Participants were approached after they had used the kiosk on their own or with other people for at least 5 minutes. After an initial screening, which was meant to determine if the selected users fit our target audience (demographics highlighted by the survey), we checked whether they were able to:

1. Recognize “Add to bookmark” as the functionality that allows visitors to save information for later access at home.
2. Bookmark an artwork of interest
3. Bookmark a second artifact
4. Send the bookmarked information to a friend
5. Retrieve the bookmarks saved during the first consultation and add a new artwork

In compliance with usability testing methodology, the above-mentioned tasks were prompted in a realistic way, bringing the user gradually from one step to the next through a logical and natural progression (see Appendix B for the interview transcripts).

We interviewed 7 people in total (6 women, 1 man) between the age of 14 and 70, four of which had already visited the Getty Center before. A scheme summarizing the respondents’ feedback concerning the 5 different tasks they were asked to carry out during the test is available in Appendix C. Here below we provide a detailed analysis of the results.

**Task 1: Recognize “Add to bookmark” as the functionality that allows visitors to save information for later access at home.**

Of the seven participants only two were able to identify on their own, but not without difficulties, that “My Bookmarks” allowed them to save information for later access at home. The others thought that it would simply let them save information on the kiosk. Sam, for example, a 14-year-old first time visitor from Australia, who had tried to use the bookmarking feature before the interview commented: “I thought bookmarks would allow me to save the information on the kiosk. I didn’t think it would send it.” Kalioppee, a 64-year-old retired LA Times journalist, had a similar remark: “Bookmarks only conveys the sense of saving it here [on the kiosk], I didn’t know I could capture it and send it to myself”. Moreover the word bookmark seems to prove particularly difficult for non-native speakers. Tina, for example, a 44-year-old Norwegian, with little computer experience and relatively poor English, had no idea what the word referred to. She had never used it or encountered it before.

**Conclusion VII:** The word “bookmark” is confusing for the user because it doesn’t convey the idea that the system allows the user to save information for later use at home.
When asked what other term the Getty could use to better express the fact that the system allows the users to save information and access it later at home, three out of seven respondents suggested the word e-mail. Jodie, a 24-year-old Australian, for example, remarked: “Yes, you should use something like send by e-mail, send home. For me a bookmark is something you specifically save to the computer.”

Sending an e-mail is what visitors think about when wanting to retrieve information of interest. As a matter of fact, it is something most people understand, are familiar with and have done at least once in their life, while setting up an account, which is what the system here allows them to do, is somewhat less common, in particular when the account in question is set up on a kiosk in a museum and then accessed on line through the museum website.

**Conclusion VIII:** Setting up an account onsite and then accessing it online via the museum website does not correspond to a mental model visitors are familiar with. Therefore it should be replaced by a more simple solution that involves e-mailing the information of interest directly to the user.

**Task 2: Bookmark an artwork of interest**

Besides having difficulties understanding what bookmarking is about, visitors also experienced problems while setting up accounts. Respondents seemed to be confused by the registration process, despite the detailed instructions provided on the screen, which nobody was willing to read. Three out of seven participants, for example, did not expect to have to fill out their e-mail address in order to set up an account, while two out of seven respondents had the problem of having filled out an e-mail address but not knowing what to click on next. If we prompt users to fill out an e-mail address, they are bound to think they are actually sending an e-mail with the information rather than setting up an account on line that would allow them to access the information later.

**Conclusion IX:** Asking visitors to provide an e-mail address in order to set up an account is confusing because users don’t understand they are actually setting up an account, but rather think they are sending an e-mail with the bookmarked information.

While setting up an account, users also seemed to experience difficulties using the virtual keyboard. The distribution of the letters in alphabetical order is particularly problematic for people that are used to a traditional keypad (e.g. QWERTY). Moreover in order to speed up the process, especially for users with long e-mail addresses, it would be useful to introduced pre-set keys with some of the most common addresses used in the world such as: .com, .org, .edu, yahoo.com, hotmail.com, etc.

**Conclusion X:** A traditional keypad and pre-sets keys with partial e-mail addresses would make the registration process faster and easier.

**Task 3: Bookmark a second artifact**

Once visitors have figured out how to bookmark the first object, they don’t seem to experience any difficulties in adding a second artifact. However, in a couple of occasions confusion was created by the fact that the image of one of the two selected items did not appear on the bookmark list at the bottom of the screen. This is because such bookmark (either a video or an artwork) was not available for consultation online. However, if no message is displayed on screen to explain that this is the case, visitors do not understand that the information about the selected artwork will not be available on line

**Conclusion XI:** The bookmarking functionality should be removed whenever information about that artifact is not available on line for consultation.

**Task 4: Send the bookmarked artifacts to a friend**

Only one person did not experience any problem in carrying out this task. Two out of seven people thought that the only way to send an e-mail to a friend was to set up a new account, while two others were able to follow the right procedure but forgot to bookmark an artifact before filling out their friends’ e-mail addresses.
Once again this seems to confirm the confusion that exist in people’s mind between sending an e-mail and setting up an account as well as the difficulties in the registration process that were outlined in the paragraphs above.

**Task 5: Retrieve the bookmarks saved during the first consultation and add a new artwork**

By the end of the test, people had started getting a grasp of the process and were mostly able to carry out these tasks without problem. However, in a real situation, when people come back to the Getty Center maybe once a year, if they are local, or once in a decade, if they are tourist, it’s doubtful whether they would remember having set up an account. Particularly interesting in this respect were the comments provided by Sam (“Well, I am from Australia, I don’t get the chance to come over very often and I honestly would have forgotten about my account and would create a new one” and “what if my e-mail address has changed in the meanwhile?”) and Jody (“Well, when I think of a museum or a collection I think of visiting. I don’t see myself coming back or needing something on a regular basis. I come here and get what I want. And go and that’s why I think about sending an e-mail. The e-mail is mine. It’s in my inbox and then I can do whatever I want with it”).

**Conclusion XII:** Visitors would find it easier to simply e-mail the information rather than having to remember their username & passwords.

**Other issues**

Besides identifying the many difficulties encountered by visitors to perform the most basic bookmarking tasks, the usability tests also helped us highlight other important issues, such as:

- People are confused by the amount of information available on the screen. They often feel overwhelmed and they don’t bother reading any of the instruction provided. This suggests the importance of implementing a solution that is self-explanatory and doesn’t require museum staff supervision.
- When asked what kind of information they would want to receive, the respondents seem to expect the same content they accessed on the kiosk, either embedded in the e-mail or accessible via links to the website. What they do not want is to have to set up an account to be able to access the bookmarked information.
- Some respondents expressed an interest in wanting to see or review the e-mail before sending it, as a way to understand what information they would be e-mailing.
- An interview with Jennifer, a 70-year-old Getty docent, as well as feedback from the various volunteers working in the GettyGuide and learning rooms showed that even amongst the Getty personnel there is a lot of confusion about what bookmarking is and how it works. By simplifying the system and providing basic training to the staff, we could easily overcome these limitations.

**4.0 Conclusions & recommendations**

Analysis of the kiosks log data as well as the survey and usability test results have provided interesting and useful answers about the use of bookmarking in general and in the specific context of the GettyGuide kiosks.

The data seem, in fact, to confirm what other research on similar applications at other museums had already highlighted (with the exception of The Tech Museum in San Jose and Tate Modern in London which had extremely positive results): that the percentage of visitors who bookmark and click through is still quite low. Failure to click through is mainly due to the fact that visitors bookmark primarily out of curiosity which does not represent a strong enough motivation to pursue further learning about the artworks in question.

Reasons for the low percentage of bookmarkers are various. Certainly lack of interest and lack of time are major factors, as museums cannot expect from every visitor the kind of involvement and interest that would push them to find out more about the artworks from home. This type of behavior is associated more frequently
with specific target groups like teachers, students or art lovers that come to the museum to discover and learn about the collection or in relation to a classroom activity.

Despite the general lack of interest, the high percentage of visitors that declared not having noticed the bookmarking feature or not having understood what it was for is a sign that other problems exist which, if solved, could easily result in an increase of usage of the bookmarking feature.

In particular, the usability tests were very valuable in helping us understand that the bookmarking functionality, as it is set up now, is too complex for the user to understand without guidance from museum staff. In order to simplify the process, we suggest replacing the account system with the simple option of allowing visitors to e-mail the information of interest directly to their inbox.

The e-mail that visitors receive should either include the bookmarked information or display a series of links to the Getty website for further information. For those who are interested in setting up an online account that would allow them to save and retrieve the information for multiple usage over time, the e-mail should also contain a link to the Getty bookmarks functionality. In this way the system would still be able to offer continuity between the online and onsite visit. The only disadvantage of this solution is that it would not allow visitors who have set up an account online to retrieve the information on site. However, given the very low percentage of users that normally takes advantage of this feature (1 out of 59 user in the survey), removing it should not represent a major concern.

Other useful modifications that would simplify the system and make the registration process faster are:

1) Replace the alphabetical keypad with a traditional keypad;
2) Add pre-sets keys with partial e-mail addresses to the keypad;
3) Remove all unnecessary background information when displaying the keypad;
4) Allow the users to preview the e-mail before sending it;
5) Remove the bookmarking option whenever information about that artifact is not available for on line for consultation.

The wire frames below describe a possible solution for simplifying the Getty Guide bookmarking system that follows the above-mentioned recommendations, without having to redesign the interface completely. Please note that the proposed solution has not been tested with end-users. We recommend doing so before implementing it, especially when it comes to the proposed terminology, which, if not appropriate, might lead to further confusion.

**GettyGuide homepage**

The existing “My Getty Bookmarks” bar should be removed from the GettyGuide homepage.
“Add to my Bookmarks” should be replaced by the function “E-mail artwork information” or “E-mail video” or “E-mail artist biography” according to the type of content accessed by the user. Tests showed that it is very important for the visitor to understand the type of content s/he is going to receive.

When the visitor selects the option “Email artwork information”, the “My Getty e-mail” bar appears at the bottom of the screen. On the left hand side are the control buttons that allow the user to respectively send the e-mail, remove items from the e-mail (following the same procedure that is currently in use) or to request for help on how to use the system. Next to the control button, in the middle, a small image of the bookmarked item indicates that the work has been selected to be e-mailed. On the right hand side is a message prompting the user to add more items to his/her e-mail before sending it, if s/he wishes.
Artist biography page

The visitor can also add artist biographies and videos to his/her e-mail by clicking on the link “Email biography information” (or “E-mail video”). By doing so, the image of the selected artwork will appear next to the previously selected item/s. The user can add up to 50 items to his/her e-mail.

Remove Items option

In order to edit the e-mail list the user can select the option “Remove items” and then click on the items s/he wants to remove. A short message prompting what to do will appear on the left hand side of the “My Getty e-mail” bar, whenever room is available.
Send e-mail option

When the user is ready to send the e-mail, s/he selects the option “Send e-mail”. The “My Getty e-mail” bar will then be grayed out and a traditional keypad (e.g. QWERTY), with predefined sets of keys for the most common e-mail addresses, will appear on the screen accompanied by send, cancel and preview e-mail buttons. If the user clicks on cancel, s/he will be brought back to the previous screen. If the user clicks on preview e-mail, a pop-up window will appear with a preview of the e-mail that will be sent.

Confirmation message

If the user clicks on the option “Send e-mail”, after having inserted the address, a message will appear to confirm that the e-mail has been sent, accompanied by the address to which it was sent. If the user realizes the address is wrong or if s/he wishes to send another e-mail with the same content to a friend, s/he can click on the option “Back to keypad”. Otherwise, s/he can select the option “Continue” and go back to the last item s/he was looking at before selecting the option “send e-mail”.

Silvia Filippini Fantoni, GettyGuide Bookmarks: do they really work?
Appendix A: Bookmarking in the classroom

Background
Bookmarking on-site, and particularly online, can be very useful tools for teachers who want to prepare, support or follow up on their museum visit with their students. Bookmarking offers teachers the possibility to print out a list of artifacts for the visit, set up study sets, provide personalized recommendations and/or test the knowledge acquired during the visit by asking students to create a personal collection. For all these reasons, online and on-site bookmarking has tremendous potential to support teachers’ activities in the classroom.

The Study
In order to better understand this potential, we carried out a series of interviews and conducted questionnaires with both educators at the Center and at the Villa as well as a group of 32 teachers (K-12). The teachers’ feedback was collected at the end of an orientation workshop (that took place at the Villa on May 3rd 2006), during which Stephanie Lile illustrated in detail the different aspects of the onsite and online bookmarking feature. The results of these enquiries are summarized in this document, followed by a series of recommendations that could help the J. Paul Getty Museum make “Getty bookmarks” a more efficient and useful tool for students and teachers.

The Results
The teachers’ survey helped us to point out the following issues:

1. **Lack of visibility of the bookmarking feature, particularly online**

   Despite the fact that most of the 32 teachers who filled out the questionnaire had come to the museum and visited the Getty website before, none of them had ever used or was aware of the existence of the onsite and online bookmarking features. This point is particularly important, as very little visibility has been given so far to the Getty Bookmarks, particularly online. Despite its potential as an educational tool, “My Getty Bookmarks” is, in fact, buried deep down in the art section of the website, where it has been recently removed also from the secondary menu. When asked why they visited the Getty website, most of the 17 (out of 32) teachers who had been online, claimed that they mainly used it to plan a school visit, look for lessons plans as well as information about artwork/artist/exhibitions. This suggests that besides the art section, the bookmarking feature should be advertised in the education section of the website, where most teachers are likely to go to plan a museum visit.

2. **Teachers are enthusiastic about the bookmarking feature**

   With the exception of only a couple of teachers who are not comfortable with using technology in the classroom, most of the respondents seemed enthusiastic about bookmarking and eager to use it for different purposes: “Possibilities are endless. It is an amazing feature. I’m excited to try it!” – remarked Julie Jones, a 6th grade teacher. And again: “Exciting idea!!!” commented another 6th grade teacher.

3. **“My Getty Bookmarks” is a great tool to prepare for the visit**

   For most respondents the main reason for wanting to use “online” bookmarking is to plan and to prepare for a museum visit: “It is great to be able to make our own tour to follow or to go over specific pieces before our visit to the museum” – commented Lara Landry another 6th grade teacher. By allowing teachers to select specific artworks from the online collection (both at the Center and at the Villa), “Getty Bookmarks can make the preparation and organization of a study trip easier and the tour more meaningful for the students”.

   The importance of having a tool that helps students develop “personal connections” with the works of art they are going to see in the museum is of fundamental importance for educators. A 6th grade teacher in the Topanga Canyon area, for example, commented: “I hope to get my students to look closely at ceramics so when they come to the museum they will have a personal connection”. While S. Reick, also a 6th grade teacher, added: “I can definitely see myself using these tools for helping the kids have a visual connection. It can help students get a much better understanding. It helps bring the information alive.....”. In the hope of helping to create excitement and familiarization with the exhibited objects, teachers envisage using bookmarks in
PowerPoint presentations or slideshow, to create lessons plans, and curricula as well as to initiate discussion about artworks before the visit: “We can use them as a classroom project: students can work in groups to create a PowerPoint project to show what is available or what they are interested in studying. They can also see in details all the pieces that they are interested in learning about,” commented a 6th grade teacher.

4. Bookmarking as a support during the visit: maps, scavenger hunts and worksheets

Besides helping them to prepare for their museum visit, teachers can use Getty Bookmarks as a support during their actual visit. After selecting the works of art they are interested in from the online collection, teachers can create and print out a map of their location and take it to the museum for better orientation during self-guided tours. Maps can also be printed out and distributed to students who can look for their favorite objects and “practice map reading skills”. For all of these reasons it is of fundamental importance for teachers that the map provided is easy to read and detailed enough to direct students to the right location in the museum (28 out of 32 teachers indicated this as one of the most important features). While the Getty Villa map seems to meet the teacher’s orientation needs, the Getty Center one is “often misleading” because it does not highlight the distribution of the different rooms and objects in each pavilion. A more detailed map of the Getty Center modeled on the Villa example or on the example of Tate Britain (see below) could help support the visitors and teachers experience better.

Figure 1: Map of the Getty Villa and of Tate Britain

Another interesting way in which respondents envisage using Getty Bookmarks to support their experience at the museum is to create worksheets with artworks on view, including a space for annotation, where children can write their comments or notes during the visit. In a similar fashion, bookmarks can be used to set up scavenger hunts: by assigning different groups of children sets of artworks and questions to which they need to find an answer, bookmarks can easily turn the museum visit into something not only educational but also enjoyable for the children. In order to support these functions, however, it would be necessary for the online bookmarking system to let each user create multiple collections (under the same username), to allow
annotation and a particular printing set up, features that are currently not supported by the system but that are deemed very important by teachers. 23 and 24 out of 32 respondents indicated in fact that multiple collections and annotation are two of the most important features they would like to be added to the system.

5. **Bookmarking facilitates the follow up to the visit**

Another sought after scenarios in which teachers envision using the online and onsite bookmarking feature is to allow students to follow up at home or in the classroom on what caught they attention during the visit.

“Students can - in fact - revisit the works they have seen in the museum at home with their parents or as part of a homework assignment” - remarked Nina, a 5th grade teacher. “After the actual trip they could then use the information to tell others about their experience” - added another respondent (8th grade teacher).

The easiest way for students to share their experience with others is to “create their own collections of favorite artworks enriched with comments and annotations that they can then publish or send to friends and family”.

These features are only partially supported by the existing system, which can send a list of bookmarks to a third party but does not allow the user to publish personal annotated collections, following the example of the Virtual Museum of Canada, a screenshot of which is represented below. Similarly, younger children (K1-2) can use the list of bookmarks to create “personal coloring books enriched with stories that they can then take home and share with their parents” – added a 1st grade teacher.

![Figure 2: A screenshot from the Virtual Museum of Canada's bookmarking feature, which allows publishing and annotation of personal collections](image)

The list of bookmarks can also be used to both “evaluate the knowledge acquired during the visit by the students and to allow for further research on specific artworks” - commented another 6th grade teacher. In effect, the fact that an important part of the content concerning the museum visit can be made accessible at home or in another context via the Getty Bookmarks, allows the visitor to focus more on discovery and the aesthetic experience while in the museum and to leave the more traditional didactic aspects for later, as underlined by one of the respondents: “It could help me to focus my students interest on the visit and provide background knowledge upon which to scaffold” (6th grade teacher). Research also indicates that repetition is a major mechanism for retaining memories over time. It can also help visitors to activate “previous knowledge” and pursue "individual interests." All these elements are usually associated with increased knowledge, positive
emotions and the intrinsic desire to learn more, as underlined by Julie Jones another 6th grade teacher, who commented: “It is important to have a visual tool that jags the memory and helps students retain the information. They love to hear the stories, so I can share my bookmarks with them”.

6. Need to improve the collection search functionality to facilitate bookmarking

Finding artworks of interest via the online collection search functionality is a key element for the successful use of the online and onsite bookmarking feature by teachers and students as well as the general public. However, feedback from educators at the Getty Center and the Getty Villa shows that this is not always an easy task to achieve, especially on the website. The online search functionality proposes 4 different search options (search engine, by artist, by subject and by type of art) but does not allow a search by location (Getty Center and Getty Villa), which could indeed speed up the process for teachers who are planning a self-guided visit to either site. Similarly usability tests to the Getty site kiosks (see section 3.5) show that visitors find it very hard to look for artworks of interest, especially when they don’t recollect the title of the piece or the name of the artist. A search by subject has often led to long and unsuccessful enquiries that frequently result in the visitor abandoning the kiosk.

Conclusions & recommendations

The analysis of the survey results as well as feedback from Getty Center educator seems to confirm the teachers’ interest in using the bookmarking functionality (particularly the online version) before, during and after the visit to support classroom activities. However in order for teachers and students to fully take advantage of these functionalities and to successfully carry out interesting and useful activities, it will be necessary to implement the following modifications to the existing system:

- Improve the visibility of the bookmarking feature on the website and promote it in all types of communication with teachers
- Add new features like annotation, creation of multiple collection per user, different printing set up that can facilitate the use by teachers in the classroom and in the museum
- Improve the Getty Center map by modeling it on the Getty Villa example
- Improve the searching functionality both online and onsite.
Appendix B: Bookmarking Survey: list of questions

1. Is this your first visit to the Getty Center?  Yes  No

2. Your age ____________________________  3. You are:  Male    Female

4. Who did you come to the Getty with today? [Check all that apply]
   Alone    Family members/relatives    Friends    Out-of-town guests    Tour group

5. Are any children under 18 years of age with you today?  Yes  No

6. Is your visit related to a school activity or assignment?  Yes  No

7. If you live in the United States, what is your zip code? _________________________

8. If you do not live in the United States, what country do you live in? _________________________

9. Your highest level of education?
   o Some Middle/High School
   o High School Graduate
   o Some College/Associate Degree
   o College Graduate
   o Some Graduate Work
   o Graduate Degree

10. Did you go to the Getty Web site (www.getty.edu) to prepare for today’s visit?  Yes  No

11. Do you plan to visit the Getty Web site (www.getty.edu) to follow up on today’s visit?  Yes  No

12. What were your reasons for using the kiosk? [Check all that apply]
   o While waiting for group members
   o Out of general curiosity
   o For an orientation about what to visit
   o To look up specific information
   o Other: [Please specify]______________

13. How much time did you spend at the kiosk?  
   o Less then 1 minute
   o Between 1 and 5 minutes
   o Between 5 and 10 minutes
   o Between 10 and 30 minutes
   o More than 30 minutes

14. Which of the following best describes what you did at the kiosk? [Check all that apply]
   o Viewed works of art
   o Viewed biographies of artists
   o Zoomed on images
   o Played with the timeline
   o Watched videos
   o Listened to audio
   o Looked at a temporary exhibition: for example Courbet, Robert Adams, Degas, etc.
   o Other: [Please specify]______________

15. How did you find out about the kiosk? [Check all that apply]
   o I was told about it by a friend/colleague
   o I read about it on a Getty brochure
   o I walked past one
   o I read about it on the Getty Web site
   o I was told about it at the information desk
   o I knew about it from a previous visit
   o Other: [Please specify]________________

16. I used the kiosk: [Please check the option that best describes your experience]
   Alone     With one other person     In a group

17. Did you use or try to use “My Bookmarks”, when using the kiosk?  Yes  No
   [“My bookmarks” is the feature that allows you to save or e-mail information from the kiosk for use at home]
18. If not, why? [Check all that apply]
- I am afraid of spam
- I am not interested
- I did not understand what it was for
- I did not notice it
- I did not have time
- I tried to use it but it didn't work
- I tried to use it but it was too complicated
- Not applicable
- Other [please specify] _______________

19. If yes, why? [Check all that apply]
- I was curious
- I tried it by mistake
- I wanted to save information for later use
- Somebody I know might be interested in the information
- I bookmarked items on the Getty Web site and wanted to retrieve them
- I bookmarked items during a previous visit
- Not applicable
- Other [please specify] _______________

If you used or tried to use “My Bookmarks”, please turn the page and continue with the survey.
If you didn’t use “My Bookmarks”, please return your survey to the staff. Thank you for your help.

20. How did you find out about “My Bookmarks”? [Check all that apply]
- I noticed it on the screen
- I read about it on the Getty Web site
- I was told about it at the Information desk
- I was told about it by a friend/colleague
- I knew about it from a previous visit
- Not applicable
- Other: [please specify] _______________

21. Which of the following best describes what you did or tried to do with “My Bookmarks” at the kiosk? [Check all that apply]:
- I created an account
- I sent an e-mail to myself
- I sent an e-mail to someone else
- I accessed an account I had created the last time I came here
- I accessed an account I had created on the Getty Web site
- Not applicable
- Other: [please specify] _______________

22. If you sent or tried to send an e-mail, what information do you expect yourself or your friend to find in the e-mail?
- A simple list of titles of the items you bookmarked
- A simple list of titles and images of the items you bookmarked
- A list of titles and images of the items you bookmarked, with links to more information
- All information I saw on the kiosk, including videos, audio files and text
- Not applicable
- Other: [please specify] _______________

23. If you set up or tried to set up an account here at the Getty, what information do you expect to find when you go home and log in to your account on the Getty Web site (www.getty.edu)?
- A simple list of titles of the items you bookmarked
- A simple list of titles and images of the items you bookmarked
- A list of titles and images of the items you bookmarked, with links to more information
- All information I saw on the kiosk, including videos, audio files and text
- Not applicable
- Other: [please specify]

24. What information did you bookmark? [Check all that apply]:
- Works of art
- Artists
- Videos
- Temporary exhibitions: for example Courbet, Robert Adams, Degas, etc.
- Other: [Please specify] _______________
25. How many bookmarks did you make?
   o None
   o One
   o Between 1 and 5
   o Between 5 and 10
   o Between 10 and 20
   o More than 20

26. “I found “My Bookmarks” easy to use” [Please check the option that best describes your experience.]

   Strongly agree        Agree        Neutral       Disagree       Strongly disagree       Not applicable

27. If you DID NOT find “My Bookmarks” easy to use, please tell us why.

_________________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________

28. How likely are you to use “My Bookmarks” again at home or during your next visit to the Getty? [Please, check the option that best describes your expectation.]

   Very likely        Likely        Neutral       Unlikely       Very unlikely       Not applicable

Thank you for taking this survey. Your comments will help us improve the Getty Guide Kiosk.
Appendix C: Summary of usability tests results

Legend
Yes = task performed
No = task not performed

<table>
<thead>
<tr>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
<th>Task 4</th>
<th>Task 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize “Add to bookmark” as the functionality that allows visitors to save information for later access at home.</td>
<td>Bookmark an artwork of interest</td>
<td>Bookmark a second artefact</td>
<td>Send the bookmarked information to a friend</td>
<td>Retrieve the bookmarks saved during the first consultation and add a new artwork</td>
</tr>
<tr>
<td>Jodie</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>She thinks it’s the greyed out e-mail option that would allow her to save information for later use</td>
<td>She selects “create a new account” without filling out an e-mail address + Difficulties with the keypad</td>
<td></td>
<td>She expects to set up another account</td>
<td>Yes</td>
</tr>
<tr>
<td>Maria Trinidad</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>but she hesitates a bit when I ask her to delete an artwork</td>
</tr>
<tr>
<td>Kalioppee</td>
<td>Yes, but very hesitant. She selects it by exclusion (she thought bookmark would save info on the kiosk)</td>
<td>No, after inputting her e-mail address she doesn’t know whether she should select “log in” or “create a new account” + no thumbnail appears once she has bookmarked the artwork</td>
<td>Yes, but she is confused by the fact that this time a thumbnail appears on the bookmarked items list</td>
<td>Yes, but she doesn’t really know what she sent. She wonders if she can see the e-mail before sending it</td>
</tr>
<tr>
<td>Sam</td>
<td>No, He seemed really confused when I explain what “My</td>
<td>No, He selects “create a new account” without filling out an e-mail address</td>
<td>Yes, but, he is confused by the fact that this time a thumbnail appears on the</td>
<td>No, He logs out and create a new account instead of using the</td>
</tr>
<tr>
<td>Name</td>
<td>bookmarks” allows him to do</td>
<td>+ He is not sure whether he has already sent the e-mail or not</td>
<td>No thumbnail appears once he has bookmarked the artwork</td>
<td>bookmarked items list</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Tina</td>
<td>Yes, He thought bookmarks would allow him to save the artworks on the kiosk</td>
<td>No, He is not sure whether he has already sent the e-mail or not</td>
<td>No thumbnail appears once he has bookmarked the artwork</td>
<td>Yes</td>
</tr>
<tr>
<td>Nohalani</td>
<td>No, But she is not really sure what bookmarks means</td>
<td>No, Once she has filled out her e-mail address she doesn’t know what to do</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Jennifer</td>
<td>No, She thinks it is the greyed out e-mail option that would allow her to save information for later use</td>
<td>No, She selects “create a new account” without filling out her e-mail address</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>No, The e-mail address is very long so she has some difficulties using the keyboard</td>
<td>No, She doesn’t add a bookmark before filling out her friend’s e-mail address</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>No, She doesn’t have an e-mail address and therefore she is not familiar with the terminology</td>
<td>No, She doesn’t have an e-mail address and doesn’t understand the lingo</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>No, She doesn’t have an e-mail address and doesn’t understand the lingo</td>
<td>No, She doesn’t have an e-mail address and doesn’t understand the lingo</td>
<td>No</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>No, She doesn’t have an e-mail address and doesn’t understand the lingo</td>
<td>No, She doesn’t have an e-mail address and doesn’t understand the lingo</td>
<td>No</td>
<td>NA</td>
</tr>
</tbody>
</table>

Silvia Filippini Fantoni, GettyGuide Bookmarks: do they really work? 29