

Summative Evaluation of  
*PRI's The World Radio Broadcast, Science Podcast,  
Online Resources and Science Forum*

Report for

**Public Radio International (PRI)**

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Summative Evaluation of  
*PRI's The World Radio Broadcast*  
*Science Podcast, Online Resources and Science Forum*  
Executive Summary

The findings summarized below focus on three of *The World's* media venues: (1) its radio broadcast, (2) its Science Podcast (<http://www.world-science.org/category/podcast>), and (3) its online resources (e.g., articles, streaming audio and video). An additional focus is on *The World's* participatory Science and Technology Forums. The primary research aim is to assess the project's impact and success at reaching its intended goals while avoiding unintended negative outcomes. Toward these ends, *The World's* audience members were asked to respond to an online survey, which is included in the Appendix on Page 24. Notices inviting them to respond to the survey were announced in *The World's* podcasts and presented on its website's home page from September 6<sup>th</sup> to 20<sup>th</sup>, 2010. In addition, on September 3<sup>rd</sup> a link to the survey was posted on the home page of the website's Science section ([theworld.org/science](http://theworld.org/science)) and a request for survey responses was posted on Facebook. Further, Rhitu Chatterjee, *The World's* Multimedia Science Reporter/Producer, included invitations for listeners to respond to the survey in the Science podcast on September 8th and 15th. Mention of the survey was also made in the PRI e-Newsletter on September 14th.

While more than three-fourths of the 152 survey responses received are from individuals in thirty-seven states distributed across the United States, other participants are located in a total of nineteen additional countries. A little more than half of the sample members have reportedly earned a graduate or professional degree and nearly a third have a college degree. However, a significantly larger percentage of members in the online cohort (respondents who have only accessed *The World's* resources online) have higher education degrees than members in either the radio broadcast cohort (respondents who have reportedly only listened to *The World* radio broadcast) or podcast cohorts (respondents who have only listened to *The World's* podcasts). A third of the sample members are 18-34 years old and a fourth fall into the 35-44 age group. The majority are either white/Caucasian, Asian or Hispanic/Latino.

Sample members reportedly access *The World* from a mixture of avenues. About three-fourths of them, for example, access it via podcasts and nearly a quarter access radio broadcasts. Almost a fifth access *The World's* resources online. A much smaller percentage access the program via Facebook, Twitter, or RSS feed.<sup>1</sup> A little over half of the sample members discovered *The World* website from a podcast and nearly a third discovered it via a radio broadcast. None of the survey respondents reported having learned about the website from either Facebook or Twitter. Nearly half of them said they listen to *The World* almost daily and a third listen at least once a week.

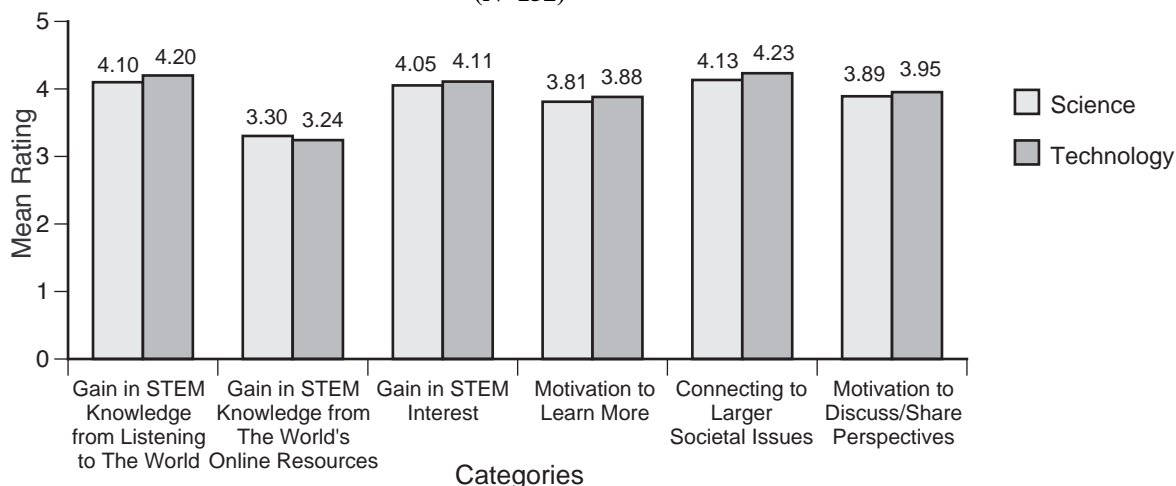
On average, survey respondents reported consistently high gains in STEM knowledge, interest in STEM-related topics, motivation to learn more, awareness of connections between science/technology developments and larger societal issues, and motivation to discuss/share perspectives and ideas regarding science and technology. Statistical analysis, however, reveals

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<sup>1</sup>Announcements inviting responses to our survey were made on podcasts, *The World's* website, and the PRI e-Newsletter, but not in radio broadcasts. Consequently, many of the individuals who do not frequently avail themselves of *The World's* online resources may not have been aware that this feedback opportunity was available. Thus, there is a greater representation of ideas and perceptions from podcast listeners than might otherwise be the case had requests for survey participation also been conveyed via broadcast invitations.

that individuals who listen to *The World* “almost daily” report that the program has motivated them to learn more about science to a significantly greater extent than it has for individuals who listen to the program less frequently. Similarly, individuals who are less than 45 years old report that *The World* has enhanced their knowledge about the connections between science developments and larger societal issues to a significantly greater extent than it has for individuals who are 45 years of age or older. Differences in other reported gain ratings with respect to demographic/background variables (i.e., gender, age group, education), subject area (science, technology), media venue cohort, and frequency of listening to *The World* are not statistically significant.

**Impact of *The World* on Science/Technology  
Knowledge, Interest, and Motivation  
(N=152)**



They have acquired a broad range of knowledge about STEM topics from *The World*, which has motivated them to learn more about global news events associated with science/technology. It has had other broad-ranging positive impacts on their behavior, such as participating in a science or technology-related event, listening to another science/technology radio program, and reading an article or book about science/technology. They have also found a broad range of applications for the STEM knowledge/information they have acquired from *The World's* broadcast, podcasts and/or online resources, most notably that they share what they have learned with others in their professional and personal networks.

Slightly more than a fourth of the sample members (i.e., 39) reported having visited *The World's* Science Forum. More specifically, 28 of these 39 visitors reported having viewed but not commented in a discussion and 11 said that they have both viewed and commented in a Forum. Twenty-five (64%) of the Forum visitors said that they have checked out more than one discussion. The three primary reasons given for initially visiting the Forum are: (1) interested in the topic(s), (2) the story/interview that launched the discussion was really gripping, and (3) an intention to acquire information not easily obtained elsewhere.

Of the survey respondents who have viewed a Forum but not commented, more than a third point to constraints on their time to explain why they haven't posted a comment or responded to other participants' comments. Another third attribute their lack of interaction to shyness or hesitancy due to lack of confidence about their knowledge of the topic.

Of the respondents who are reportedly Forum visitors, 80% rated them as either “very informative” or “moderately informative.” The remaining 20% rated them as “okay.” On

average, their informative value received a 4.21 rating on a five-point scale ranging from 1 (Not informative) to 5 (Very informative).

Relative to other Internet-based forums, 38.5% of the 39 survey respondents who have visited *The World Science Forums* rated them as “very distinctive.” Similarly, 38.5% gave them a “moderately distinctive” rating. The remaining 23.1% rated them as “okay.” On average, their distinctiveness garnered a 4.15 rating on a five-point scale ranging from 1 (Not distinctive) to 5 (Very distinctive).

Participants in this summative evaluation study described a broad range of interesting and/or compelling aspects of *The World Science and Technology Forums*, as reflected by their comments included on Page 16 of the report. A review of their broad-ranging feedback reveals that experts/guests and interaction with them are appealing aspects of *The World Forums*.

Summative Evaluation of  
***PRI's The World Radio Broadcast***  
***Science Podcast, Online Resources and Science Forum***

October 10, 2010

### **Project Description**

The findings reported here focus on three of *The World's* media venues: (1) its radio broadcast, (2) its science and technology podcasts, and (3) its online resources (e.g., articles and streaming audio/video). An additional focus of summative research is on its participatory Science and Technology Forums. These project elements are intended to provide avenues for information and discussions surrounding issues addressed by *The World*, a daily global news public radio broadcast.

### **Evaluation Goals and Issues**

While the intention of prior formative and progress evaluation research focused on discerning the need for midcourse corrections, the primary aim for this summative evaluation study is to assess the project's impact and success at reaching its intended goals while avoiding unintended negative outcomes. Such information will guide further project development and provide a check for understanding about lessons learned over the course of prior evaluation research (Years 1 & 2).

The researcher (Dr. Arthur Johnson, Director of Edumetrics) looked for patterns in the quantitative and qualitative data summarized in this report. Communication between the evaluator and project staff took place at the outset of research in order to review developments and agree upon specific evaluation issues. Toward these ends, in addition to obtaining demographic and background information, the online research study focused on informing our understanding about the following twenty key issues:

1. How much do online survey respondents report having learned about science and technology from listening to *The World*?
2. How much have they learned about science and technology from *The World's* online resources (e.g., Science/Technology Forums, theworld.org)?
3. How do they rate how much *The World* has increased, if at all, their interest in science and technology and how they impact their life, if at all?
4. What three science/technology topics have they learned most about from *The World*?
5. How strongly has *The World* motivated them to learn more about science and technology, if at all?
6. Which of the following ways, if any, has *The World* motivated them to learn more about global news events associated with science/technology?
  - a. Read an article or book about science/technology
  - b. Listen to another science/technology radio program
  - c. View a science/technology television program
  - d. View a science or technology film
  - e. Participate in a science- or technology-related event
  - f. Become a member of a science or technology organization
  - g. Enroll in a science or technology course
  - h. Discuss science or technology with someoneThey were also provided the opportunity to describe other ways *The World* has impacted their behavior.
7. How strongly has *The World* enhanced their knowledge about the connections between science and technology developments, and larger societal issues?

8. How strongly has *The World* motivated them to discuss/share perspectives and insights about science and technology with others, whether in-person or online?
9. How have they applied science and technology information they have acquired from *The World's* broadcast, podcasts and/or online resources, if at all?
10. Which of the following statements describes how they use *The World* online forums?
  - a. I have viewed but not commented in Science/Technology Forum discussions.
  - b. I have commented in Forum discussions.
  - c. I have not viewed or commented in any Forum discussions.
11. If they have viewed *The World* Science or Technology Forum but not commented, why haven't they commented?
12. How did they learn about *The World* Science and/or Technology Forums?
13. What prompted them to come to *The World* Science and/or Technology Forum?
14. Have they checked out more than one of *The World* online discussions? If so, how many?
15. Overall, how informative are *The World* discussion forums?
16. How distinctive is *The World* discussion forums compared to other online discussions?
17. What is the most interesting/compelling aspect of *The World* Science and Technology Forums?
18. What first led them to *The World* (i.e., <http://www.theworld.org>)?
19. How frequently do they listen to *The World*?
20. How do they typically access/listen to *The World*?

## Research Procedure

PRI's *The World* radio broadcast and website, online science and technology forum, and podcast audiences were asked to respond to an online survey, which is included in the Appendix on Page 24. Notices inviting audience members to respond to the online survey were announced in *The World's* podcasts and presented on its website's home page from September 6<sup>th</sup> to 20<sup>th</sup>. In addition, on September 3<sup>rd</sup> a link to the survey was posted on the home page of the website's Science section and a request for survey responses was posted on The World Science Facebook page. Further, Rhitu Chatterjee, *The World's* Multimedia Science Reporter/Producer, included invitations to respond to the survey in the Science podcast on September 8th and 15th. The survey was also mentioned in the PRI Newsletter on September 14th. Over the course of September 2010, a total of 152 individuals responded to the survey. The following sections of the report present summaries of findings.

## Demographic & Background Variables

Summative evaluation research obtained feedback regarding *The World* from a total of 152 online survey respondents (111 male, 41 female), which forms the sample. The sample is further divided into four cohorts: (1) the 15 survey respondents (i.e., 9.9%) who have reportedly only listened to *The World* radio broadcast, (2) the 12 respondents (i.e., 7.9%) who have only accessed *The World's* resources online (articles and streaming audio/video), (3) the 92 respondents (i.e., 60.5%) who have only listened to *The World's* podcasts, and (4) the 39 respondents (25.7%) who have viewed/commented in *The World's* Science and/or Technology Forum discussions. Other members of the sample reportedly access *The World* via a mixture of media venues, as discussed later, and not exclusively through the avenues represented by the cohorts. An examination of other potential cohorts (e.g., frequency of listening to *The World*) did not reveal any significant findings.

The gender distribution within the entire sample and each of the cohorts is summarized in Table 1. Note that the percentages in parentheses, which have been rounded, denote the percentage of the entire sample and not the cohort. For example, the 8 male respondents who

are members of the radio audience cohort constitute 5.3% of the entire 152 member sample. Note also that 60.5% of the sample prefer to access *The World's* resources via podcast. In addition, 25.6% of the sample have viewed/participated in Forum discussions. Percentages by gender of the entire sample are reported for media venue cohorts since 33 survey respondents have used a mixture of venues and thus do not fall within a cohort that avails themselves of one venue exclusively. Similarly, the gender breakdown of the Forum cohort reflects the percentage of the entire sample rather than the percentage of each entire gender sample population since 113 survey respondents have reportedly not accessed *The World's* discussion threads and thus do not fall within this cohort.

Table 1. Gender Distribution

Gender	Percentage of All Respondents N=152	Media Venue			
		Percentage of Radio Cohort n=15 (% of sample)	Percentage of Online Cohort n=12 (% of sample)	Percentage of Podcast Cohort n=92 (% of sample)	Percentage of Forum Cohort n=39 (% of sample)
Male	111 (73.0%)	8 (5.3%)	10 (6.6%)	71 (46.7%)	28 (18.4%)
Female	41 (27.0%)	7 (4.6%)	2 (1.3%)	21 (13.8%)	11 (7.2%)

Table 2 presents the distribution of the sample by age group (Response to this inquiry was optional.). Note that 32.9% of the sample are 18-34 years old, 25.0% fall into the 35-44 age group, 17.1% are in the 45-54 group, 18.4% are 55-64, and 6.6% are 65 or older. The average age of a sample member is 43. Note that younger sample members generally prefer accessing *The World's* resources only via podcast.

Table 2. Age Distribution

Age Group	Percentage of All Respondents (N=152)	Media Venue			
		Percentage of Radio Cohort n=15 (% of sample)	Percentage of Online Cohort n=12 (% of sample)	Percentage of Podcast Cohort n=92 (% of sample)	Percentage of Forum Cohort n=39 (% of sample)
65+	10 (6.6%)	2 (1.3%)	–	6 (4.0%)	3 (2.0%)
55-64	28 (18.4%)	6 (4.0%)	3 (2.0%)	16 (10.5%)	10 (6.6%)
45-54	26 (17.1%)	3 (2.0%)	1 (0.7%)	15 (9.9%)	7 (4.6%)
35-44	38 (25.0%)	1 (0.7%)	4 (2.6%)	24 (15.8%)	10 (6.6%)
18-34	50 (32.9%)	3 (2.0%)	4 (2.6%)	31 (20.4%)	9 (5.9%)

Table 3 presents the distribution of the survey sample and media venue cohorts by race/ethnicity (Response was optional.). Note that the largest percentage of responses were received from sample members who are either white/Caucasian (71.7%), Asian (9.9%), or Hispanic/Latino (7.2%). Correspondingly, the largest percentage of members in each cohort fall within these classifications, respectively.

Table 3. Distribution by Race/Ethnicity

Race/Ethnicity	Percentage of All Respondents (N=152)	Media Venue			
		Percentage of Radio Cohort n=15 (% of sample)	Percentage of Online Cohort n=12 (% of sample)	Percentage of Podcast Cohort n=92 (% of sample)	Percentage of Forum Cohort n=39 (% of sample)
White or Caucasian	109 (71.7%)	10 (6.6%)	10 (6.6%)	66 (43.4%)	29 (19.1%)
Asian	15 (9.9%)	2 (1.3%)	–	8 (5.3%)	4 (2.6%)
Hispanic or Latino	11 (7.2%)	2 (1.3%)	–	7 (4.6%)	3 (2.0%)
Black or African American	5 (3.3%)	1 (0.7%)	–	4 (2.6%)	2 (1.3%)
Native Hawaiian/Pacific Islander	5 (3.3%)	–	–	2 (1.3%)	–
American Indian or Alaska Native	2 (1.3%)	–	1 (%)	1 (0.7%)	1 (0.7%)
Other	5 (3.3%)	–	1 (%)	4 (2.6%)	–

The following responses are descriptions of race/ethnicity or comments other than the identifiers listed in Table 3 that were reported by five sample members:



- “Singaporean/Indian Mother and Portuguese/St. Vincent Father.”
- “Human.”
- “Iranian.”
- “West-Indian and Latin (Brazil).”
- “Mex-American.”

When asked to specify where they are currently living, of the 152 respondents to this inquiry, 119 (78.3%) reportedly live in the United States and 33 (21.7%) reside in a country other than the U.S. More specifically, the respondents to this inquiry who live in the U.S. identified the cities/towns and 37 states listed in the table included in the Appendix on Page 17. Responding states are divided into four regions as defined by the U.S. Census Bureau. Of the 119 U.S. residents, 45 (37.8%) live in the West, 28 (23.5%) are in the South, 24 (20.2%) are in the Midwest, and 22 (18.5%) are in the Northeast.

The geographical distribution of the 33 survey respondents who reportedly live outside the United States is listed in Table 4. Note that they identified a total of nineteen countries.

Table 4. Geographical Distribution Outside U.S.  
(Countries = 19, Respondents = 33)

Country	Responses	Country	Responses
Australia	2	Ireland	1
Belgium	1	Italy	1
Canada	3	Japan	3
England	4	Mexico	2
Ethiopia	1	Netherlands	1
France	2	Philippines	1
Germany	2	Puerto Rico	2
Hong Kong	1	Singapore	1
India	3	Sweden	1
Iraq	1		

With regard to the highest level of education they have achieved, Table 6 shows that 86 (56.6%) of the 152 member sample have reportedly earned a graduate or professional degree, 46 (30.3%) have a college degree, 19 (12.5%) have some college experience, and one sample member achieved the level of a high school diploma.

More specifically, consideration was given to discerning the correspondence between education level achieved and use of *The World's* media venues. While 33 survey respondents reportedly access *The World* via a mixture of media venues, discussed later in the report, 119 specified an exclusive avenue. The distribution of these 119 survey respondents by level of education and media venue cohort is summarized in Table 5. A review of the table reveals that a significantly larger percentage of members in the podcast cohort have higher education degrees than members in either the radio broadcast or online cohorts.

Table 5. Sample Distribution by Education

Level of Education Completed	Percentage of All Respondents* (N=152)	Media Venue			Percentage of Forum Cohort n=39 (% of sample)
		Percentage of Radio Cohort n=15 (% of sample)	Percentage of Online Cohort n=12 (% of sample)	Percentage of Podcast Cohort n=92 (% of sample)	
Grad./professional degree	86 (56.6%)	5 (3.3%)	5 (3.3%)	58 (38.2%)	27 (17.8%)
College degree	46 (30.3%)	8 (5.3%)	5 (3.3%)	24 (15.8%)	8 (5.3%)
Some college	19 (12.5)	2 (1.3%)	2 (1.3%)	9 (5.9%)	4 (2.6%)
High school	1 (0.7%)	—	—	1 (0.7%)	—
Some high school	—	—	—	—	—

\*Totals do not equal exactly 100.0% due to rounding.

## Evaluation Results

Research findings reported below resulted from an analysis of responses to an online questionnaire during the month of September 2010. In addition to reviewing the summary of quantitative findings, readers are encouraged to examine all of the quoted comments contained in the report and appendix to acquire a deeper understanding of the findings summarized here and to glean further insights from additional ideas expressed in respondents' actual feedback.

**How *The World* is Accessed.** Survey respondents were asked how they typically access *The World*. A review of Table 6 reveals that they access it from a mixture of avenues. About three-fourths (75.7%) of them, for example, reportedly access *The World* through its podcasts. Nearly a quarter (23.7%) access it via radio broadcasts. Almost a fifth (19.1%) access its resources online and listen to audio and video content via streaming. Other avenues of access are Facebook (3.9%), RSS feed (2.6%), and Twitter (0.7%).

As previously specified, announcements inviting responses to our survey were made on podcasts, the home page of *The World's* website, and mentioned in the PRI Newsletter, but not in radio broadcasts. Consequently, many of the individuals who do not frequently avail themselves of *The World's* online resources may not have been aware that this feedback opportunity was available. Thus, there is a greater representation of ideas and perceptions from podcast listeners than might otherwise be the case if requests for survey participation had also been conveyed via broadcast invitations.

A summary of findings associated with the exclusive use of *The World* radio broadcasts, podcasts, and online resources was previously specified in the preceding demographics section.

Table 6. How is *The World* Accessed/Heard

Frequency	Responses (% of Sample)
<i>The World's</i> podcast(s)	115 (75.7%)
Radio broadcast	36 (23.7%)
Online (e.g., streaming)	29 (19.1%)
Facebook	6 (3.9%)
RSS feed	4 (2.6%)
Twitter	1 (0.7%)
<i>I have never listened to The World.</i>	2 (1.3%)

**What Led Respondents to *theworld.org*.** Survey respondents were asked to specify what first led them to *The World* website (i.e., <http://www.theworld.org>). The summary of responses presented in Table 7 shows that the three most frequently mentioned discovery venues are a podcast (55.3%), a radio broadcast (29.6%), and from another website (5.3%). Note that none of the survey respondents reported having learned about *The World's* website from either Facebook or Twitter.

Table 7. How *The World* Website Was Discovered (N=152)

Discovery Source	Responses*
I heard about it on a podcast.	84 (55.3%)
I heard about it on a radio broadcast.	45 (29.6%)
It was referred from another website.	8 (5.3%)
It was referred to me by someone I trust.	7 (4.6%)
I learned about it from the Apple iTunes Store.	1 (0.7%)
I discovered it using my browsers 'Search'	1 (0.7%)
I learned about it from Facebook.	–
I learned about it from Twitter.	–
<i>Other</i>	6 (3.9%)

\*Totals do not equal exactly 100.0% due to rounding.

As noted in the table, a total of six respondents to this inquiry offered the following remarks describing “other” prompts that led them to *The World* website:

- “Hearing The World music theme on an episode of Weeds. Showtime motivated me to start listening regularly. I knew of The World prior to Weeds, but I reengaged.”
- “KPCC (89.3 Los Angeles).”
- “My local NPR station had an hour dedicated to The World. I’ve since moved but kept listening via the podcasts.”
- “The Sound of Young America.”
- “www.boingboing.net.”
- “I wanted to improve my English and I searched for a podcast talking about general world news. I found the perfect one: yours. I since listen to it every day!”

**Frequency of Listening to The World.** Survey respondents were asked how frequently they generally listen to *The World* via any method. Responses to this inquiry are summarized in Table 8. Note that nearly half (48.7%) of them listen almost daily, a third (33.6%) listen at least once a week, and another 12.5% listen a few times a month.

Table 8. Frequency of Listening to The World (N=152)

Frequency	Responses
Almost daily	74 (48.7%)
At least once a week	51 (33.6%)
A few times a month	19 (12.5%)
Once a month or less frequently	6 (3.9%)
I have never listened to The World.	2 (1.3%)

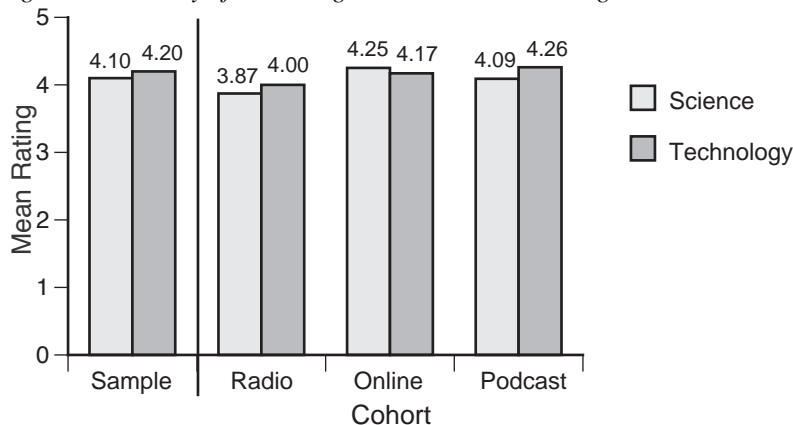
**The World’s Impact on Knowledge.** Survey respondents were asked to rate how much they have learned about science and technology from listening to *The World*, using a five-point Likert scale ranging from 1 (Nothing) to 5 (A great amount). A review of the ratings presented in Table 9 reveals that, on average, sample members rated their level of acquired science knowledge as 4.10 and technology knowledge as 4.20.

Table 9. Knowledge Gain Rating: Listening to The World (N=152)

	Rating					Average
	1	2	3	4	5	
Science	4	8	23	51	66	4.10
Technology	2	4	20	62	64	4.20

Figure 1 presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to survey respondents’ self-reported science and technology knowledge gain resulting from listening to *The World*.

Figure 1. Summary of Knowledge Gain Means: Listening to The World



With an interest in interaction effects, ANOVAs (Analysis of Variance) with interactions and nested factors were calculated for knowledge gain rating and individual demographic/background variables (i.e., gender, age group, education), subject area (science, technology), media venue cohort, and frequency of listening to *The World*. None of the interactions are statistically significant. Thus, differences in rating means are not significant with respect to these variables.

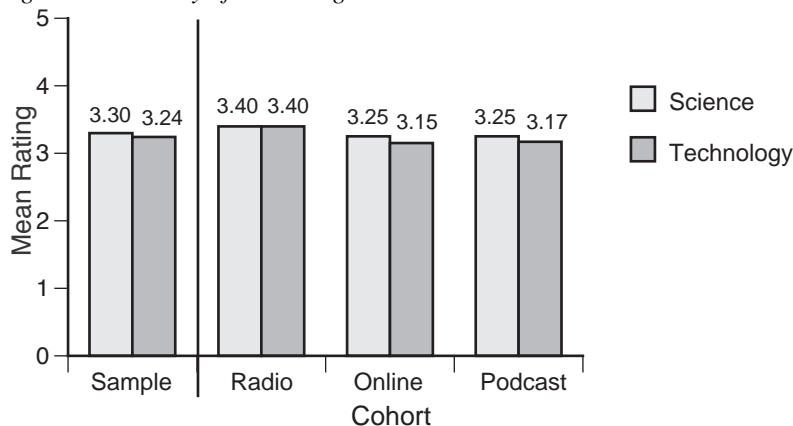
As a follow-up question, respondents were asked to rate how much have they have learned about science and technology from *The World's* online resources (e.g., the World Science/Technology Forums or theworld.org), using a five-point scale ranging from 1 (Nothing) to 5 (A great amount). Table 10 shows that, on average, they rated their level of science and technology knowledge acquired from the program's online resources as 3.30 and 3.24, respectively.

Table 10. Knowledge Gain Rating: Online Resources (N=152)

	Rating					Average
	1	2	3	4	5	
Science	19	29	32	32	40	3.30
Technology	19	28	38	31	36	3.24

Figure 2 presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to survey respondents' self-reported science and technology knowledge gain resulting from accessing *The World's online resources*. Analysis of variance reveals that differences in rating means are not significant with respect to demographics/background, subject area, or cohort.

Figure 2. Summary of Knowledge Gain Means: Online Resources



Probing further, asked to specify the three science/technology topics they have learned most about from *The World*, respondents identified 108 topics that can be roughly divided into the following 17 themes, drawn from written responses to this inquiry (Note that numbers in parenthesis indicate the total number of similar responses received.):

- Technology in developing countries (26)
- Emerging computer/communication technology (16)
- Social impacts of science and technology (14)
- Environmental issues (13)
- Alternative Energy (12)
- Mobile technology (12)
- Internet technology (11)
- Technology outside of the U.S. (9)
- Public health (9)

- Disease research (9)
- Climate change (8)
- Solar Energy (8)
- Conservation (7)
- Global warming (7)
- Biology (7)
- Genetics (7)
- Outer space (7)

Readers are encouraged to examine all of the topics they identified, which are included in the Appendix on Page 17, to acquire a deeper understanding of the findings summarized here and to glean further insights from additional ideas expressed in their actual remarks.

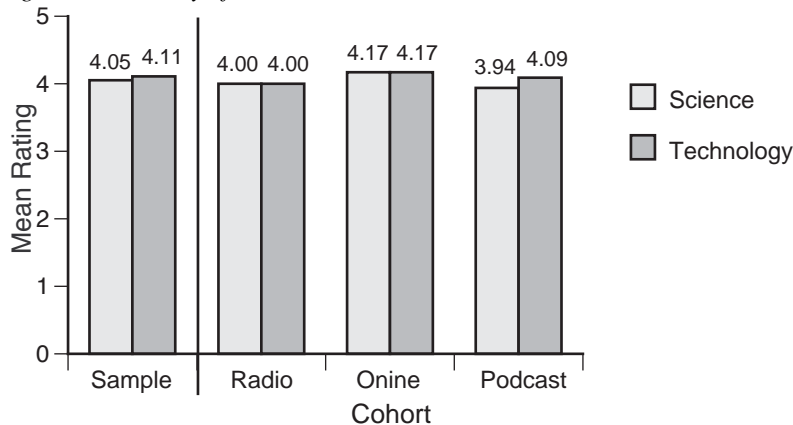
***The World’s Impact on Interest in Science and Technology.*** Survey respondents were asked to rate how much *The World* has increased, if at all, their interest in science and technology and how these subject areas impact their life, using a scale ranging from 1 (Not at all) to 5 (A great amount). Table 11 shows that, on average, they rated *The World’s* positive impact on their level of interest in science as 4.05 and technology as 4.11.

Table 11. *The World’s Impact on Interest in Science/Technology* (N=152)

	Rating					Average
	1	2	3	4	5	
Science	9	6	19	53	65	4.05
Technology	3	8	21	57	63	4.11

Figure 3 presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to survey respondents’ self-reported science and technology interest gain resulting from accessing *The World’s online resources*. Analysis of variance reveals that differences in rating means are not significant with respect to demographics/background, subject area, cohort, or frequency of listening to *The World*.

Figure 3. *Summary of Interest Gain Means*



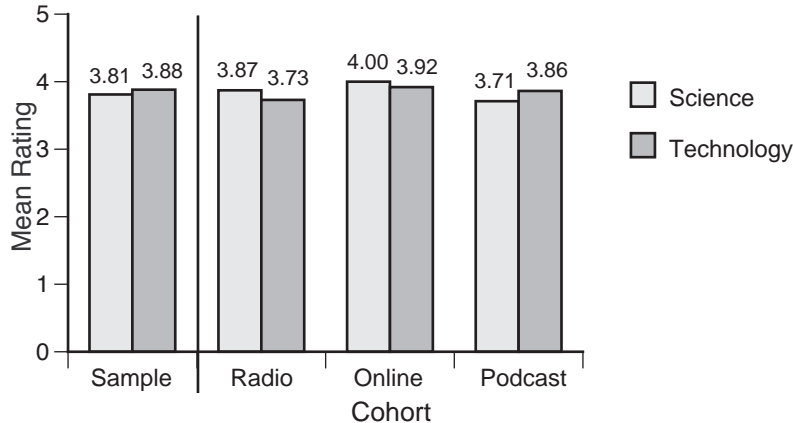
***The World’s Impact on Motivation to Learn More.*** Survey respondents were asked to rate how strongly *The World* has motivated them to learn more about science and technology, if at all, using a scale ranging from 1 (Not at all) to 5 (A great amount). Table 12 (on the following page) shows that, on average, its impact on their motivation to learn more about science received a 3.81 rating and technology received a 3.88 rating. Statistical analysis (ANOVA) reveals that individuals who listen to *The World* “almost daily” report that the program has motivated them to learn more about science to a significantly greater extent than it has for individuals who listen to the program less frequently ( $p = 0.0507$ ).

Table 12. Impact on Motivation to Learn About Science/Technology (N=152)

	Rating					Average
	1	2	3	4	5	
Science	10	8	32	53	49	3.81
Technology	6	6	37	55	48	3.88

Figure 4 presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to survey respondents' self-reported gain in motivation to learn more about science and technology as the result of their experience with *The World*. Analysis of variance reveals that differences in rating means are not significant with respect to demographics/background, subject area, or cohort.

Figure 4. Summary of Motivation Gain Means: Learn More



As a follow-up question, survey respondents were asked to specify which of the eight way(s) listed in Table 13, if any, *The World* has motivated them to learn more about global news events associated with science/technology. Note that the three most frequently specified behavior outcomes are: (1) participation in a science or technology-related event, (2) listening to another science/technology radio program, and (3) reading an article or book about science/technology.

Table 13. Impact on Motivation to Learn About Science/Technology News

Behavioral Outcome	Responses (% of Sample)
Participate in a science or technology-related event	120 (79.0%)
Listen to another science/technology radio program	104 (68.4%)
Read an article or book about science/technology	101 (66.5%)
Discuss science or technology with someone	97 (63.8%)
View a science/technology television program	76 (50.0%)
View a science or technology film	48 (31.6%)
Enroll in a science or technology course	12 (7.9%)
Become a member of a science or technology organization	10 (6.6%)

Additionally, they were provided the opportunity to describe other ways *The World* has impacted their behavior. The following are the nineteen quoted remarks that were received, which are grouped by either a description of an action that was taken or an explanation that they are currently a science/technology enthusiast:

Action Taken (N=11)

- “Do research.”
- “Browse other websites that cover some of the topics in-depth which I heard about the first time through THE WORLD.”
- “I automatically download from iTunes and listen to all new podcasts. I recommend that you make an iPhone app for this purpose.”

- “I listen to the technology and science podcasts more often because they have increased my interest in these topics.”
- “I incorporate more science and technology into my design work.”
- “I investigate topics mentioned on the podcast via the Web.”
- “I now volunteer to help enable access to technology to those who want it but aren't able to get it easily.”
- “I talk a lot about the subjects that have been dealt with on the podcasts.”
- “I visit science & technology websites more frequently.”
- “Lessen my ‘global footprint’ via recycling.”
- “I go to university podcasts (particularly Stanford, and University of Minnesota), and search ones that give me even deeper, current information on topics related to PRI's The World Science & Technology Podcasts, both of which I also download, individually, and listen to more than once until I completely understand what's being discussed. I've even deleted/unsubscribed to NPR's Science podcasts, as I found them to be condescendingly puerile in their approach to their topics, (the same goes for NOVA Science NOW, and NOVA podcasts, both of which I've also removed from my listening routine). Your Technology and Science Podcasts are THE BEST, outside of Stanford's and University of Minnesota's Academic podcasts and lectures, bar none.”

Currently Science/Technology Enthusiast (N=8)

- “I am considering trying to become an engineer.”
- “These podcasts fit well in my commuting schedule – they deal with the same kinds of material that I choose to read.”
- “I have been in the high tech industry since the 70’s so the tech podcast is a great addition to my already heavy reading and listening on technology and science.”
- “I am already a scientist, so I was already motivated to learn and talk about science, but not technology, per se.”
- “I like all the tech stories and don't care about most of the science pieces, although I appreciate the fact that other listeners care about them.”
- “I am a techie so I keep up on most technology related stuff. I listen to a number of tech related podcasts.”
- “I am already very interested in science. I'm am a Ph.D. student in immunology. However, I greatly enjoy the multidisciplinary science and technology pieces on The World.”
- “I am a scientist. I listen to The World for news in a variety of topics.”

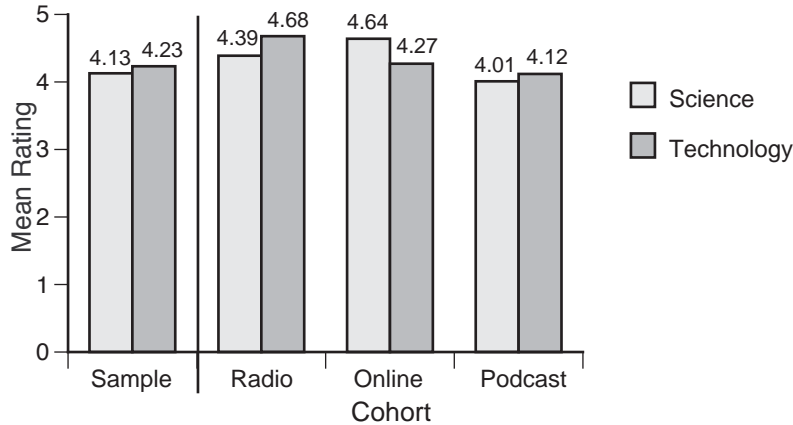
**Connecting Science/Technology and Larger Societal Issues.** Survey respondents were asked to rate how strongly *The World* has enhanced their knowledge about the connections between science/technology developments and larger societal issues, if at all, using a scale ranging from 1 (Not at all) to 5 (A great amount). Table 14 shows that, on average, its impact on their knowledge about these connections with respect to science received a 4.13 rating and technology received a 4.23 rating. Statistical analysis (ANOVA) reveals that individuals who are less than 45 years old report that *The World* has enhanced their knowledge about the connections between science developments and larger societal issues to a significantly greater extent than it has for individuals who are 45 years of age or older ( $p = 0.0197$ ).

Table 14. Impact on Knowledge About Connections (N=152)

	Rating					Average
	1	2	3	4	5	
Science	6	4	22	53	67	4.13
Technology	2	4	23	51	72	4.23

Further, Figure 5 presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to self-reported gain in knowledge about these connections. Analysis of variance reveals that differences in rating means are not significant with respect to demographics/background (other than age), subject area, cohort, or frequency of listening to *The World*.

Figure 5. Summary of Knowledge Gain Means: Connections



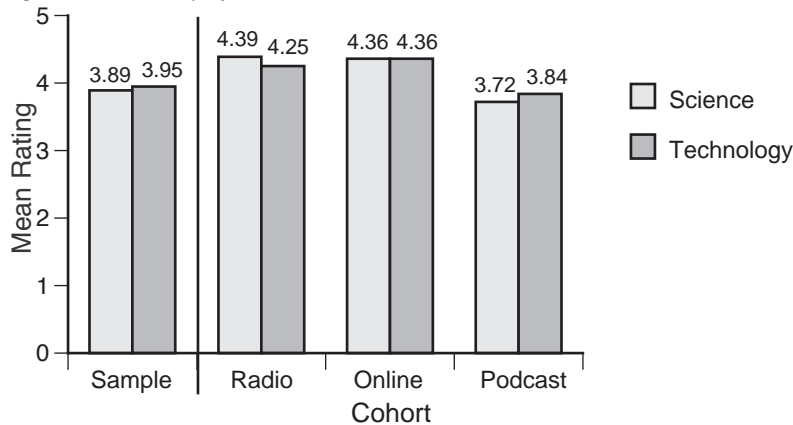
**Impact on Motivation to Discuss Perspectives and Insights.** Survey respondents were asked to rate how strongly *The World* has motivated them to discuss/share perspectives and insights about science and technology with others, whether in-person or online, using a scale ranging from 1 (Not at all) to 5 (A great amount). Table 15 shows that, on average, its impact on their motivation to discuss/share science ideas received a 3.89 rating and technology received a 3.95 rating.

Table 15. Impact on Motivation to Discuss/Share Perspectives (N=152)

	Rating					Average
	1	2	3	4	5	
Science	9	10	26	51	56	3.89
Technology	6	10	25	55	56	3.95

Figure 6 presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to survey respondents' self-reported gain in motivation to discuss/share ideas. Analysis of variance reveals that differences in rating means are not significant with respect to demographics/background, subject area, cohort, or frequency of listening to *The World*.

Figure 6. Summary of Motivation Gain Means: Share Ideas





***How Respondents Have Applied Acquired Knowledge.*** Survey respondents were asked to describe how they have applied science and technology knowledge/information they have acquired from *The World's* broadcast, podcasts and/or online resources, if at all. They identified a broad range of applications that are often overlapping across science and technology fields. The reported 66 applications of science knowledge and 57 applications of technology knowledge can be roughly divided into the twenty-two themes listed below for each of these fields. Readers are highly encouraged to examine all of their quoted comments, included in the Appendix on Page 20, to acquire a deeper understanding of the findings summarized here and to glean further insights from additional finer-grained ideas expressed in their actual feedback.

***Science***

- Teaching/lectures
- Employee training programs
- Conversations with others
- Science policy meetings
- Patient care
- Broader/deeper knowledge
- Enhanced world view
- Staying informed (science)
- Write blog posts
- Reports for work
- Inform colleagues at work
- Improve productivity at work
- Enhance professional activity
- Homework assignments
- School science fair
- Consumer electronics choices
- Shopping decisions
- Data security
- Science related societal issues
- Serve impoverished nations
- Maintain interest in science
- Protect environment/animals

***Technology***

- Teaching/lectures
- Resource for research
- Conversations with others
- Informed about effects/impact of technology
- Patient care
- Broader/deeper knowledge
- Write about alternative energy
- Staying informed (technology)
- Informed my charitable giving and related activities
- Explore new technology applications/innovations
- Inform colleagues at work
- Improve productivity at work
- Enhance professional activity
- Homework assignments
- Clean energy investing
- Consumer electronics choices
- Shopping decisions
- Data security
- Making career choices
- Check for understanding
- Discussions with architect/engineer
- Inspired to start my own science podcast

***Participation in The World's Online Discussion Forums.*** When asked if they have viewed or commented in any of *The World's* Science or Technology Forum discussions, 39 (25.7%) of the 152 individuals who submitted a completed survey reported having visited a Forum. The other 113 (74.3%) said that they had neither viewed or commented in any Forum discussions and thus did not respond to any of the following inquiries about the Forums.

Of the 39 survey respondents who availed themselves of Form features, 28 (71.8%) reported having viewed but not commented in a discussion and 11 (28.2%) said that they have both viewed and commented in a Forum. As a follow-up question, the 28 respondents who have viewed a Forum but not commented were invited to explain why they haven't posted a comment or responded to other participants' comments. Their quoted responses are presented below. Note that eleven of them made reference to constraints on their time, nine describe shyness or hesitancy due to lack of confidence about knowledge of the topic, and two explained that a discussion thread had been well underway by the time they became aware of its existence. Other remarks indicate a preference for being a passive reader, unfamiliarity with how a forum works, avoidance of "nasty" feedback, their ideas had already been covered, and an intention of contributing in the future.

#### Time constraints (N=11)

- “ I have limited time for participating in online forums.”
- “Strong interest, but too little time.”
- “Mostly time constraints.”
- “Time, it has been a busy year for me.”
- “Lack of time on my part.”
- “I don’t have enough time.”
- “Time constraints.”
- “Time availability.”
- “Lack of time.”
- “Too busy.”
- “No time.”

#### Shyness (N=9)

- “Shy, about my knowledge.”
- “I don't know those people.”
- “Not sure what I want to say.”
- “I don’t have enough knowledge to contribute.”
- “I’m not a person who usually comments on articles.”
- “I don't always have something to say, sometimes I'd rather just 'listen in'.”
- “I usually only comment in response to other comments, and there weren't any comments I felt needed a response at that time.”
- “No compelling need and no real substance to add.”
- “Haven't had any thing relevant to say... yet.”

#### Discussion Already Underway (N=2)

- “I am usually behind on listening to the podcast, so by the time I hear about the discussion the time has passed.”
- “The thread was well underway by the time I checked in.”

#### Miscellaneous (N=6)

- “I enjoy being a passive participant and love to read the forum discussions.”
- “Just enjoy reading.”
- “Was just making a quick check of it. Not that familiar with how forums work.”
- “I have avoided commenting in most, but not all, websites after seeing how nasty they often become.”
- “My interests/ideas were covered by earlier commenters.”
- “Only seen it once or twice. I will in the future.”

Probing further, the 39 individuals who indicated that they have visited a *World Science* and/or *Technology Forum* were asked if they have checked out more than one Forum discussion and if so, how many. A total of 27 (69.2%) said that they have an average of 3.29 times (ranging from 3 to 9 times) and 12 (30.8%) have reportedly only followed one discussion thread.

***How Respondents Learned About the Discussion Forums.*** When survey respondents who have accessed *The World’s Science* and/or *Technology Forum* were asked how they learned about it, a review of Table 16, on the following page, reveals that two-thirds (66.7%) reported having heard about it in a podcast, 15.4% heard about it on a radio broadcast, 12.8% discovered is using their browser’s “Search” feature, one learned about it on a blog, and another was referred from someone they trust. Note that none of them learned about it from Facebook or Twitter.

Table 16. How The World's Science Forum Was Discovered (N=39)

Discovery Source	Responses*
I heard about it on a podcast.	26 (66.7%)
I heard about it on a radio broadcast.	6 (15.4%)
I discovered it using my browsers 'Search'	5 (12.8%)
I learned about it on a blog.	1 (2.6%)
It was referred from someone I trust.	1 (2.6%)
I learned about it from Facebook.	—
I learned about it from Twitter.	—

\*Totals do not equal exactly 100.0% due to rounding.

**What Prompted Forum Participation.** Asked to describe what prompted them to come to *The World's Science and/or Technology Forum* after having discovered its existence, a review of Table 17 reveals that some of the 39 respondents specified more than one prompt. The three primary reasons given for initially visiting the Forum(s) are: (1) they were interested in the topic(s), (2) the story/interview that launched the discussion was really gripping, and (3) they wanted to acquire information not easily obtained elsewhere.

Table 17. What Prompted Forum Participation/Access

Prompt	Responses (% of Sample)
I was interested in the topic(s).	20 (51.3%)
The story/interview that launched the discussion was really gripping.	9 (23.1%)
I wanted to acquire information not easily obtained elsewhere.	6 (15.4%)
I wanted to share my ideas.	3 (7.7%)
I wanted to engage in a discussion with the featured expert/author.	2 (5.1%)
Other	4 (10.3%)

A total of four respondents to this inquiry offered the following remarks describing “other” reasons why they have chosen to access the Forum(s) to read and/or offer comments:

- “I wanted to share it on Facebook and also reference it in my work report.”
- “I wanted to comment further on a topic. Yet, though I RSS'd it, no comment was ever made on mine, to my knowledge.”
- “As a measure of respect for the author's desire to engage with the public and to spark a discussion that would bring in other people.”
- “I especially enjoy Ritu's podcast presentation and discussions w/Elsa. The topics are presented in a fun and playful manner. My favorite presentations are two recorded from India with local color, debate on pronunciation with producer ~January 2010, and termite music May 26.”

**Rating the Forum's Overall Informative Value.** Survey respondents were asked to rate how informative *The World's* discussion forums are, overall, using a five-point scale ranging from 1 (Not informative) to 5 (Very informative). Feedback summarized in Table 18 shows that 16 (41.0%) of the respondents rated them as “very informative,” 15 (38.5%) gave them a “moderately informative” rating, and 8 (20.5%) rated them as “okay.” On average, their informative value received a 4.21 rating.

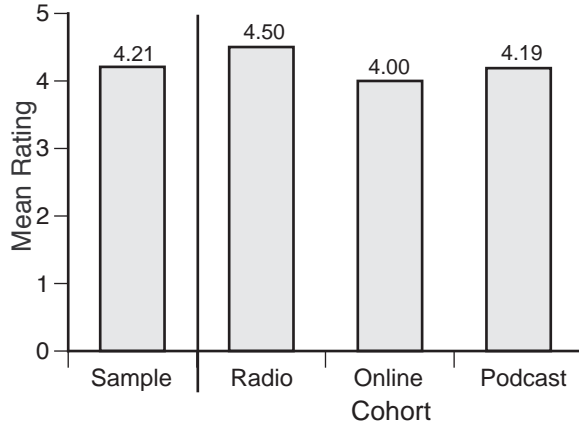
Table 18. Rating Overall Forum Informative Value (N=39)

	Categories	Responses Number (%)	Mean Rating
5	Very Informative	16 (41.0%)	4.21
4	Moderately Informative	15 (38.5%)	
3	Okay	8 (20.5%)	
2	Slightly Informative	—	
1	Not Informative	—	

Figure 7, on the following page, presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to survey respondents'

perception of the overall informative value of the discussion forums. Analysis of variance reveals that differences in rating means are not significant with respect to demographics/background (i.e., Gender, Age Group, Education) or cohort.

Figure 7. Summary of Forum Informative Value Means



**The World Discussion Forums vs. Other Online Discussions.** Survey respondents were asked to rate how distinctive *The World* discussion forums are compared with other online discussions, using a five-point scale ranging from 1 (Not distinctive) to 5 (Very distinctive). Table 19 shows that, relative to other Internet-based forums, 15 (38.5%) rated *The World* discussion forum as “very distinctive.” Similarly, another 15 (38.5%) gave them a “moderately distinctive” rating. The remaining 9 (23.1%) rated them as “okay” in comparison. On average, their distinctiveness garnered a 4.15 rating.

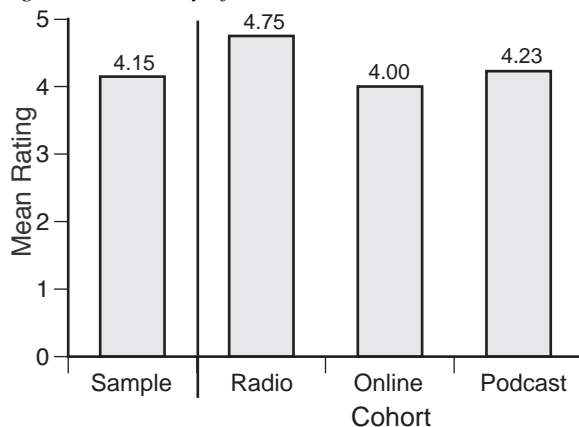
Table 19. Distinctiveness of Forum (N=39)

	Categories	Responses* Number (%)	Mean Rating
5	Very Distinctive	15 (38.5%)	<b>4.15</b>
4	Moderately Distinctive	15 (38.5%)	
3	Okay	9 (23.1%)	
2	Slightly Distinctive	—	
1	Not Distinctive	—	

\*Totals do not equal exactly 100.0% due to rounding.

Figure 8 presents a summary of rating means/averages for the entire sample and the three media venue cohorts with regard to survey respondents’ perceptions of Forum distinctiveness. Analysis of variance reveals that differences in rating means are not significant with respect to demographics/background or cohort.

Figure 8. Summary of Forum Distinctiveness Means



***What is Most Interesting/Compelling About the Forums.*** Survey respondents were asked to describe what they think is the most interesting/compelling aspect of *The World Science and Technology Forums*. A review of their following broad-ranging responses to this inquiry reveals that experts/guests and interaction with them are appealing aspects of *The World Forums*:

*Expert/Guest Responses*

- “Speaking directly to the expert!”
- “The presence of a different expert each time.”
- “Back and forth with the experts.”
- “The opportunity to discuss topics with experts.”
- “The expert guest and interactive participants.”
- “Having expert moderators.”
- “That you have an authority in the field answering questions from the public at large. That is rare in my experience.”
- “Discussion with authors.”
- “The guests and the quality of both the comments and the replies.”
- “I mainly enjoy the interactive discussions with authors, scientists and other participants. It is cool.”
- “Guests' expertise.”

*Miscellaneous Responses*

- “The fact that the expert directly addresses each comment provides for a very interesting and detailed discourse. This extended opportunity for interaction is a major distinction and attraction.”
- “The variety of topics and probing of a topic by more than one interviewer.”
- “It discusses a whole range of different kinds of issues and also talks a lot about environmental issues which are very close to my heart.”
- “People's situations throughout the world.”
- “The unexpectedness.”
- “Broad ranging perspectives and information.”
- “The opinions.”
- “The reality-based people.”
- “The feedback between reporters, public and scientists.”
- “More information on the topic.”
- “It does not have a marketing approach.”
- “Most responders are insightful, intelligent, and civilized.”
- “Rhitu has an engaging style – excellent content.”
- “Interactive exploration of issues.”
- “Topics.”
- “Highly intelligent and informed discussion of specialized topics with less doctrinaire positioning than one usually finds in such fora.”
- “I enjoy listening to the podcast while I run.”

## Appendix

### Geographical Distribution of U.S. Survey Respondents (N=119)

City/Town	State	Responses	City/Town	State	Responses
<b>Midwest (N=24)</b>			<b>Northeast (N=22)</b>		
Chicago	IL	7	Guilford	CT	1
Lake Zurich	IL	1	New Hampshire	NH	1
Naperville	IL	1	Colts Neck	NJ	1
Indianapolis	IN	1	Brooklyn	NY	1
Shawnee	KS	1	Croton	NY	1
Dexter	MI	1	Jericho,	NY	1
Lansing	MI	1	New York	NY	3
Burnsville	MN	1	Portland	ME	1
Minneapolis	MN	1	Scarborough	ME	1
Saint Paul	MN	2	Boston	MA	2
Omaha	NE	1	Brookline	MA	1
Ada	OH	1	Cambridge	MA	1
Cincinnati	OH	1	Dorchester	MA	1
Madison	WI	2	Somerville	MA	1
Milwaukee	WI	2	Worcester	MA	1
			Philadelphia	PA	2
<b>West (N=45)</b>			Wallingford	PA	1
Brea	CA	1	Burlington	VT	1
Chula Vista	CA	1			
Cupertino	CA	1	<b>South (N=28)</b>		
Laguna Niguel	CA	1	Arab	AL	1
Los Angeles	CA	4	Huntsville	AL	1
Pleasant Hill	CA	1	District of Columbia	DC	2
Riverside	CA	1	Miami	FL	2
San Carlos	CA	1	Tampa	FL	1
San Diego	CA	3	Atlanta	GA	1
San Francisco	CA	3	Savannah	GA	1
San Jose	CA	1	Louisville	KY	1
Santa Cruz	CA	1	New Orleans	LA	1
Walnut Creek	CA	1	Baltimore	MD	1
Lakewood	CO	1	Asheville	NC	1
Longmont	CO	2	Clayton	NC	1
Kailua	HI	1	Pittsboro	NC	1
Boise	ID	1	Clemson	SC	1
Henderson	NV	1	Greenville	SC	1
Albuquerque	NM	1	Gatlinburg	TN	1
Edgewood	NM	1	Hendersonville	TN	1
Las Cruces	NM	1	Austin	TX	3
Magdalena	NM	1	Dallas	TX	1
Beaverton	OR	1	Fort Worth	TX	1
Portland	OR	6	Woodlands	TX	1
Salem	OR	1	Reston	VA	1
Bow	WA	1	Richmond	VA	1
Port Townsend	WA	1	West Virginia	WV	1
Seattle	WA	2			
Spokane	WA	1			

### Written Responses to Open-Ended Questions

Readers are encouraged to examine all of the quoted comments presented below to grasp their true nature and tone, to acquire a deeper understanding of the findings summarized in the report, and to glean further insights from additional ideas expressed in their actual feedback.

#### *What Survey Respondents Have Learned*

Survey respondents were asked to specify the three science/technology topics they have learned most about from *The World*. They identified 108 topics that can be roughly divided into the 17 themes presented on Page 8 in the report, which were drawn from the following set of text

entries offered in response to this inquiry (Note that numbers in parenthesis indicate the total number of similar responses received.):

- Active networked tags
- African technology (2)
- Agriculture (2)
- Alternative Energy (12)
- Animal behavior
- Anthropology
- Archeology (4)
- Asteroids
- Astronomy (2)
- Astrophysics
- Bagpipes
- Bamboo bicycles
- Biodiversity
- Bioengineering
- Biology (7)
- Biotechnology
- Birds (3)
- Brain function/studies (4)
- Challenges of developing countries
- Changing cell phone/mobile computing technology
- Citizen science
- Climate change (8)
- Conservation (7)
- Cosmology (3)
- Current results from current scientific research
- Defusing the population bomb
- Deployment of medicines and inoculations not using refrigeration
- Diet/nutrition
- Digital divide
- Disease research (9)
- Earth Science
- Ecological/large-scale biological news
- Efficient stoves designed for Africa
- Elephant
- Emerging computer/communication technology (16)
- Endangered species/areas
- Environmental issues (13)
- Eye exams from iPhones
- Food production
- Genetics (7)
- Geography (3)
- Geology (2)
- Gerontology care robots in Japan
- Global science issues (2)
- Global warming (7)
- GMOs (3)
- Human origins and evolution (3)
- Insects
- Internet freedom worldwide
- Internet security (4)

- Internet technology (6)
- Inventions (2)
- Iran
- Kiva
- Large Hadron Collider (2)
- Marine life (2)
- Medical science (5)
- Mobile technology (12)
- Natural sciences (3)
- Nautical stories
- Net neutrality
- New discoveries about animals
- New research in science
- New science discoveries via podcast
- Non-standard applications of technology (2)
- Organic food
- Origin of kindness
- Other cultures (3)
- Outer space (7)
- Pakistan's floods
- Paleontology
- Pavlovsk Experiment station in Russia
- Physics (2)
- PlayPump Water System
- Political issues (2)
- Proposed road through Serengeti
- Public health (9)
- Racial bias & empathy
- Renewable energy (2)
- Saving Lebanon's cedar trees
- Scientists like Charles Darwin (2)
- Social impacts of science and technology (14)
- Social Networking (6)
- Solar Energy (8)
- Stephen Hawking's new book
- Technology for education (4)
- Technology in developing countries (26)
- Technology outside of the U.S (9)
- Technology usefulness in emergencies/disasters (3)
- The BP oil spill (2)
- The breadth of science being conducted
- The effect of bees on elephants
- The incredible creativity and inventiveness of scientists and engineers
- The ongoing experiment in Russia to prepare for a trip to Mars
- The plastic "island" in the ocean
- The Siberian Tigers
- The Venezuelan community that participated in the Huntington Disease survey
- The ways people are using technology (2)
- Tiger
- Treating Mental Illness in Sudan
- Twitter
- UnderCover/UnderReported Tech



- Ushahidi (2)
- Web 2.0
- WikiLeaks
- Wildlife conservation (3)
- Word-by-word translation equipment
- Zoology (4)

### ***How Respondents Have Applied Acquired Knowledge***

Survey respondents were asked to describe how they have applied science and technology knowledge/information they have acquired from *The World's* broadcast, podcasts and/or online resources, if at all. The knowledge applications reported can be roughly divided into the themes listed on Page 12 of the report for each field, which were drawn from the following text entries offered in response to this inquiry.

#### Applications of Science Knowledge (N=66)

- “I have used The World science topics to inspire graduate research topics and class discussions (I am currently enrolled as a student, Master Natural Resources).”
- “I have engaged in many discussions with friends and family and regularly forward the link to them.”
- “I look at the world differently.”
- “It encouraged me to read books about scientific subjects.”
- “I used the information to buy produce at the market.”
- “Changes my perspective(s).”
- “When the information is surprising or deeply interests me, I'll search for further information on the subject.”
- “Shared information I learned that applied to my scientist husband's work.”
- “Own curiosity.”
- “I used what I learned to start discussions with other teachers in the school I teach in.”
- “I am thinking of using some of the information in my classes.”
- “Conversations with others.”
- “Discussed ideas with friends.”
- “Nothing specific. Just added knowledge.”
- “Used information in patient care.”
- “Shared with others.”
- “Mainly in adjusting my world view.”
- “Homework, topics of conversation.”
- “To make better shopping decisions.”
- “I use the information for personal knowledge.”
- “I am currently a graduate student in biochemistry, and find The World's science news stories diverse and informative, especially with respect to how science and societal issues affect each other.”
- “General interest and conversation with others.”
- “I am a teacher and include what I learn.”
- “I have used some in my teaching of introductory botany.”
- “I teach English in a science department. I use news to enhance my lessons.”
- “I make my students at university listen to it – and this is for arts and humanities classes, not science!”
- “Discussions with others at work.”
- “In conversations.”
- “Conversation and possible avenues for outreach.”
- “Motivated to reach out to impoverished nations (I'm a physician).”
- “Discussion with friends, children, colleagues.”

- “Share it with coworkers and friends.”
- “Talked about it with colleagues and friends.”
- “Mainly sharing what I have learned with others and having discussions about the impacts.”
- “I use the information to council patients.”
- “I used the article about cell phones and eye exams in a report for work.”
- “I have used it in casual conversations with others.”
- “Being well informed and up to date on technology and science is important for my professional and personal life.”
- “I have brought up science topics with colleagues and friends during meetings and casual conversation.”
- “Conversations.”
- “Improved general knowledge.”
- “General input into my work.”
- “Employee training programs.”
- “To broaden my own knowledge.”
- “Used in my own lectures.”
- “Provided ideas for school science fair.”
- “It keeps my deep interest in science alive, something which is not so present in my day to day life.”
- “Show off to friends.”
- “I’ve written blog posts on Science subjects introduced by The World.”
- “Family discussion topic.”
- “To my general knowledge base.”
- “Conversation with others; making connections and drawing conclusions in my personal life.”
- “I use the information to help fight to protect the environment and all animals.
- “Sent episode discussing Parkinson's Disease and bicycling to my Uncle who was suffering from the disease.”
- “Discussions with friends and family.”
- “Personal interest.”
- “I’m French and often, the topics you talk about are not even evocated in the French media. So I permit my friends to discover them.”
- “Applied food science information at work.”
- “I mostly use the information for random conversations. However I’ve used the information in my team meetings (I’m in graduate school studying science policy).”
- “Indirectly: conveyed some information to my recently graduated, engineer daughter.”
- “I have become the go to guy amongst my friends about science opinions.”
- “In discussions with others.”
- “In discussions with friends and family.”
- “I’ve applied it personally in my own home, researching how else I may contribute to helping the planet, by composting, buying organics more, hyper-milling, etc.”
- “Personal growth.”
- “As a starting point of discussion with my students.”

#### Applications of Technology Knowledge (N=57)

- “I have engaged in many discussions with friends and family and regularly forward the link to them.”
- “I think about the effects of the technology I use.”
- “Own curiosity.”
- “I am thinking of using some of the information in my classes.”
- “I regularly write about alternative energy for my copywriting job, and use The World as one of my sources for staying informed.”
- “Discussed ideas with friends.”

- “Enhanced knowledge.”
- “Used info. in patient care.”
- “Discussed opinions with others or forwarded online info.”
- “Already a member of IEEE and ACM, so interest is mainly in seeing how non-specialists perceive things.
- “Homework, topics of conversation.”
- “Learnt a lot about internet scams.”
- “I enjoy hearing about the latest devices in use.
- “General interest and conversation with others.”
- “I use technology in my classroom and pass on what I learn.”
- “I check out stories and products I hear about by Googling for more information on them.”
- “Improved my productivity at work by pointing to new tech tools.”
- “It informs my charitable giving (technology in the developing world) and related activities.”
- “In conversation.”
- “I started my own podcast because of their influence. I focus on gadgets, but The World has been kept in mind.”
- “Clean energy investing, brainstorming with architect/engineer friends about cheap portable energy products that would work in impoverished areas.”
- “Discussion with friends, children, colleagues.”
- “I discussed it with my wife.”
- “Share it with coworkers and friends.”
- “General discussion.”
- “Talked about it with colleagues and friends.”
- “Mainly sharing what I have learned with others and having discussions about the impacts.”
- “It makes me understand better the current technological innovations.”
- “I have used it to help flesh out what I hear from other sources.”
- “I am more aware of state-of-the-art developments in technology that help in my patent analysis work.”
- “Being well informed and up to date on technology and science is important for my professional and personal life.”
- “I have brought up technology topics with colleagues and friends during meetings and casual conversation.”
- “Conversations.”
- “Improved general knowledge.”
- “General input into my work.”
- “Exploring new technology applications.”
- “Career choices. Research for implementing computers in education project for young people from Burma.
- “To broaden my own knowledge.”
- “I used it as cocktail chatter.”
- “I work in an arts and new media context – so this enriches my daily practice.”
- “Show off to friends.”
- “I’ve written blog posts on Technology subjects introduced by The World.”
- “Making consumer electronics choices.”
- “Most all tech stories interests me. If I am familiar with a topic which The World covers, which is often, then I am curious how it is being reported.”
- “To my general knowledge base.”
- “Conversation with others; making connections and drawing conclusions in my personal life.”
- “I use this to do research and discover new ways of improving life.
- “Implement environment friendly tech at home.”
- “I bring up random technological events at dinner conversations.”

- “I mostly use the information for random conversations. However I've used the information in my team meetings (I'm in graduate school studying science policy). I've used a lot of the information about technology in the developing world. VERY GOOD.
- “I discussed several items with colleagues.”
- “Indirectly: conveyed some information to my college sophomore son.”
- “I have become the go to guy amongst my friends about technology opinions.”
- “In discussions with others.”
- “In discussions with friends and family.”
- “Becoming chagrined in discovering that all my beloved Apple products were being manufactured in a Chinese company, ‘FoxCon’ which has had so many suicides of late. How can Steve Jobs live with that? I don't know. I've also discussed issues in tech. matter with my parents while visiting them this past week. (They weren't aware of how much data mining there is, and how insecure their network really was. I helped them, to the best of their ability.”
- “Personal growth.”

We value your thoughts and suggestions regarding *The World* radio broadcasts,, podcasts, and website. Your feedback will help us fine-tune the format and create the content that best meets your needs.

1. How much have you learned about science and technology from listening to *The World*?

**Science**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Nothing

**Technology**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Nothing

2. How much have you learned about science and technology from *The World's* online resources (e.g., *The World Science* and *Technology Forums* or *theworld.org*)?

**Science**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Nothing

**Technology**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Nothing

3. Please rate, on a 5-point scale, how much has *The World* has increased, if at all, your interest in science and technology and how they impact your life?

**Science**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Not at all

**Technology**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Not at all

4. What three science/technology topics have you learned most about from *The World*?

- a.
- b.
- c.

5. How strongly has *The World* motivated you to learn more about science and technology, if at all?

**Science**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Nothing

**Technology**

- <sub>1</sub> A great amount
- <sub>2</sub> A lot
- <sub>3</sub> A moderate amount
- <sub>4</sub> A little
- <sub>5</sub> Nothing

6. Which of the following ways, if any, has *The World* motivated you to learn more about global news events associated with science/technology?

- <sub>1</sub> Read an article or book about science/technology
- <sub>2</sub> Listen to another science/technology radio program
- <sub>3</sub> View a science/technology television program
- <sub>4</sub> View a science or technology film
- <sub>5</sub> Participate in a science- or technology-related event
- <sub>6</sub> Become a member of a science or technology-related organization
- <sub>7</sub> Enroll in a science or technology course
- <sub>8</sub> Discuss science or technology with someone
- <sub>9</sub> None of these
- <sub>10</sub> Other (*Please describe.*):

7. How strongly has *The World* enhanced your knowledge about the connections between science and technology developments, and larger societal issues?

**Science**

- 1 A great amount
- 2 A lot
- 3 A moderate amount
- 4 A little
- 5 Not at all

**Technology**

- 1 A great amount
- 2 A lot
- 3 A moderate amount
- 4 A little
- 5 Not at all

8. How strongly has *The World* motivated you to discuss/share perspectives and insights about science and technology with others, whether in-person or online?

**Science**

- 1 A great amount
- 2 A lot
- 3 A moderate amount
- 4 A little
- 5 Not at all

**Technology**

- 1 A great amount
- 2 A lot
- 3 A moderate amount
- 4 A little
- 5 Not at all

9. Please describe how you have applied information you acquired from *The World's* broadcast, podcast and/or online resources, if at all (e.g., I used the information for a homework assignment).

**Science:**

**Technology:**

***The World's Science and Technology Forums***

*The World* Science and Technology Forums are online discussions where audiences can discuss a range of science/technology issues with experts featured on *The World's* broadcasts and podcasts.

10. Which of the following statements describes your use of *The World's* discussion forums?

- 1 I have viewed but not commented in a *World* Science/Technology Forum.
- 2 I have commented in Forum discussions.
- 3 I have not viewed or commented in any Forum discussions. (Skip to Question 18)

11. If you have viewed *The World* Science or Technology Forum but not commented, why haven't you commented?

12. How did you learn about *The World* Science and/or Technology Forum?

- 1 I heard about the Forum(s) on a radio broadcast.
- 2 I heard about the Forum(s) on a podcast.
- 3 I learned about the Forum(s) on a blog.
- 4 The Science and/or Technology Forum was referred from someone I trust.
- 5 I learned about the Forum(s) from Facebook.
- 6 I learned about the Forum(s) from Twitter.
- 7 Search
- 8 Other (*Please specify*):

13. What prompted you to come to *The World* Science and/or Technology Forum?

- 1 I wanted to share my ideas.
- 2 I was interested in the topic(s).
- 3 The story/interview that launched the discussion was really gripping.
- 4 I wanted to acquire information not easily obtained elsewhere.
- 5 I wanted to engage in a discussion with the featured expert/author.
- 6 Other (*Please specify*):

14. Have you checked out more than one of *The World* online discussions?  
1  No  
2  Yes (*How Many*)?:
15. Overall, how informative are *The World* discussion forums?  
1  Very informative  
2  Informative  
3  Average  
4  Slightly informative  
5  Not informative
16. How distinctive are *The World* discussion forums compared to other online discussions?  
1  Very distinctive  
2  Moderately distinctive  
3  Average  
4  Slightly distinctive  
5  Not distinctive
17. What is the most interesting/compelling aspect of *The World* Science and Technology Forums?

**Please help us understand how we can make our overall service more Valuable to you by taking another moment to answer a few more questions.**

18. What first led you to theworld.org?  
1  I heard about it on a radio broadcast.  
2  It was referred to me by someone I trust.  
3  It was referred from another website.  
4  Podcast  
5  Facebook  
6  Twitter  
7  Search  
8  Other (*Please specify*):
19. How frequently do you listen to *The World*?  
1  I have never listened to *The World*.  
2  Once a month or less frequently  
3  A few times a month  
4  At least once a week  
6  Almost daily
20. How do you typically access/listen to *The World*? (*Check all that apply.*)  
1  I have never listened to *The World*.  
2  Radio broadcast  
3  Online (e.g., streaming)  
4  *The World's* podcast(s)  
5  Facebook  
6  Twitter  
7  RSS feed

21. What is your gender?  
(*This information is used to assure learning equity.*)
- Male
  - Female
22. What is your age? (*Optional*)  
(*This information is used to assure learning equity.*)
23. What is your race/ethnicity?  
(*This information is used to assure learning equity.*)
- Asian
  - Hispanic or Latino
  - White or Caucasian
  - Black or African American
  - American Indian or Alaska Native
  - Native Hawaiian/other Pacific Islander
  - Other (*Please specify*):
24. What is the highest level of education you have completed?
- Some high school
  - High school
  - Some college
  - College
  - Graduate or professional degree
  - Other (*Please specify*):
25. If you live in the U.S., what city/town and state do you live in?  
If you live outside the U.S., what country do you live in?

**THANK YOU FOR YOUR HELP.**