

Science Café Online Workshop

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THIS IS A FORMATIVE EVALUATION REPORT

Formative evaluation studies like this one often:

- **are conducted quickly**, which may mean
 - small sample sizes
 - expedited analyses
 - brief reports

- **look at an earlier version** of the exhibit/program, which may mean
 - a focus on problems and solutions, rather than successes
 - a change in form or title of the final exhibit/program

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Overview

In September 2010, the Nanoscale Informal Science Education (NISE) Network delivered an online professional development workshop to support partner institutions in hosting nanoscience cafés. This was the second online workshop delivered by the network and builds on the findings and lessons learned from the NanoDays workshop held in February 2010. The online workshops are designed to directly support the professional audience impacts of the network by increasing professionals' knowledge and skills for engaging the public in the topics of nanoscience, engineering, and technology (NSET). The target audience for this workshop was museum professionals from NISE Network partner institutions (all involvement tiers¹). The archived version of the workshop can be found here: <http://connect.astc.org/course/view.php?id=52>. The outcomes and indicators identified by the team are shown in Table 1.

Table 1. Workshop outcomes and indicators for success

Outcomes	Indicators	Results
1. Participants will represent a broad group of NISE Network professionals.	Participants will be representative of NISE Network partner institutions by geographic distribution and organization type.	Successful: No more than 30% of participants were from any one of the nine regions, and no more than 40% of participants were from any one of the three types of organizations.
2. Participants will have the knowledge to deliver science cafés in their communities.	At the conclusion of the workshop, 80% of participants will strongly agree or agree that they have the knowledge to deliver science cafés.	Successful: 80% of participants agreed or strongly agreed that they had the knowledge.
3. Participants will be familiar with nanoscience topics that could be presented through a science café.	At the conclusion of the workshop, 80% of participants will strongly agree or agree that they are familiar with potential nanoscience topics that could be presented through a science café.	Potential for improvement: 70% of participants agreed or strongly agreed that they were familiar with topics.
4. Participants will report that the workshop has met their expectations.	At the conclusion of the workshop, 80% of participants will strongly agree or agree that the workshop has met their expectations.	Successful: 82% of participants agreed or strongly agreed that the workshop met expectations.
5. Participating institutions will apply for stipends to deliver science cafés during NanoDays 2011 ² .	After the workshop, 10 participants will apply for the stipend.	Potential for improvement: 2 participants applied for stipends.

¹ In year four of project, the network developed a framework for describing the organization of partner institutions according to "involvement tier." These tier definitions have been used to categorize institutions (not individuals) based on the level of resources that the network has committed to the institutions and their level of involvement in delivering nano education experiences. The primary three involvement tiers are: 1 core partners, 2 nano-infused partners, and 3 broad reach partners.

² Long term: stipend recipients will deliver science cafés on a collectively identified nano topic during NanoDays 2011.

Methods

Survey Participants

The online workshop officially began with a welcome and introductory post on Thursday, September 9. A final closing message was posted on Friday, September 24. Seventy-seven participants enrolled in the workshop and received the online follow-up survey. Forty-four individuals completed the entire survey and five partially completed the survey. Only one of these partial responses was considered complete due to the extent of information provided. Thus, there was a 58% return rate.

Evaluation Methods

The primary evaluation methods were:

- A brief post-workshop online survey for participants administered through Survey Gizmo
- Basic tracking of workshop participation (e.g., number of posts per participant and per discussion thread)
- Debrief discussion with project team to summarize evaluation findings

The post-workshop online survey for participants contained 10 questions pertaining to the participants' experience with the online workshop. Individuals who signed up for the online workshop received an e-mail at the close of the workshop with a link to the online survey. In addition to collecting demographic data (such as institution, job title, and location), participants were asked to rate the usefulness of several aspects of the workshop, as well as provide open-ended feedback. The survey, hosted by SurveyGizmo, was open to participants for about two weeks. Subsequently, this data was downloaded and aggregated for the workshop team to examine for important trends and patterns.

In addition to the information provided by participants in this post-workshop survey, data was collected via observation of the online forums. The evaluation team tracked the number of posts from participants, the number of posts that appeared on each thread or topic, and the general subject matter of that post. Participation in the webinar was also tracked in this same manner. These numbers were included in evaluation.

The evaluation was carried out in collaboration with the project team. Before the workshop, project team members worked together to identify outcomes and indicators. After the survey had been administered, evaluators facilitated a meeting with the workshop team to discuss patterns, trends, and important implications. Team members also reviewed an initial summary of this discussion and the evaluation report was updated in response to their feedback. This report, therefore, reflects the conclusions reached by the workshop team as a whole.

Results and Discussion

The key findings discussed below reflect the ideas that emerged from the debrief phone call with the workshop team. A summary of the data from the post-workshop survey and the participant tracking is included in Appendix A.

Online participation was strong compared to the February workshop

While fewer individuals signed up for this workshop than for the previous workshop, the team felt that the rate of active participation was much stronger during the science café workshop (Table 2). Even many of the individuals who did not actively post to the discussions still reported learning a great deal and finding the workshop extremely useful. The workshop team suggested that participation rates may increase over time as potential participants become more familiar with the online discussion format.

Table 2. Workshop Participation Rates

	February NanoDays workshop (n=86)	September science café workshop (n=77)
Did not post at all	50%	26%
Posted only an introduction	40%	45%
Posted at least one comment on threads other than the introduction thread	8%	29%

Note. Percentages represent proportions of workshop participants.

Interestingly, only four of the science café workshop participants were also involved in the NanoDays online workshop in February. The workshop team hypothesized that this may have been because many of the respondents were graduate students affiliated with universities and that these individuals were less likely to remain in the same roles for multiple years.

There was a marked drop-off in participation rates during the second week of the workshop. All discussion posts in the first week had upwards of 12 responses to the discussion topic, while all discussion posts in the second week had no more than four responses to the discussion topic. Although the workshop team had chosen to lengthen the workshop in response to feedback from the February NanoDays online workshop, two weeks may be too long.

Participants represented a broad group of NISE Network professionals

Overall, the workshop team felt that this outcome (outcome #1) had been achieved. The participants reported many different job titles and organization types. The workshop team was surprised by the large number of individuals (40%) from colleges and universities. Other types of organizations that participated included zoos, public

broadcasting organizations, independent consultants, corporate organizations involved in nanotechnology, elementary schools, and governmental research organizations.

Participants also came from a variety of network regions. In general, the geographic location of participants was reflective of the geographic location of NISE Network partners, although the Southeast was more heavily represented in the workshop than in the overall network, while the Southwest seemed to be slightly underrepresented. Anecdotally, the workshop may have been more heavily promoted in the Southeast region.

Participants gained the knowledge to deliver science cafés in their communities

Prior to the start of the workshop, the team set the goal that 80% of participants would report having the knowledge to deliver science cafés in their communities (outcome #2). The members of the workshop team agreed that the data supported the conclusion that this indicator had been reached. Approximately 80% of participants agreed or strongly agreed with the statement, “the workshop provided me with the knowledge I need to deliver science cafés in my community in the near future.”

The workshop met participant expectations

Again, the workshop team hoped to reach an agreement level of 80% as an indicator of success that the online workshop met participants’ expectations (outcome #4). The data from the post-use survey indicated that approximately 82% of participants agreed or strongly agreed that the workshop met their expectations. Overall, based on the open-ended responses, the majority of respondents felt the workshop was helpful, well done, and enjoyable. The workshop team was gratified to see that the majority of participants valued the interactions with moderators and with their peers. Hearing from individuals who had already conducted a science café, or who were at varying stages in the planning phases, seemed to also be helpful to the participants, more so than the resources that were posted on the website. The multiple moderator format also was a success, for both the participants and the moderators. Participants seemed to feel that there was a good dialog and that they got to know their moderators, while moderators felt like the shared load made hosting the workshop a manageable task.

The fact that the workshop was archived was also popular. Many participants noted that they planned to access the archived discussions and resources at a later date in order to apply the knowledge when they were ready to conduct a science café. The workshop team discussed ways to archive the material elsewhere and make it available to a wider audience through a variety of channels.

Fewer participants than hoped became familiar with nanoscience topics

The workshop team determined that an 80% agreement level would be an indicator that participants felt familiar with nanoscience topics that could be presented in a science café (outcome #5). Data from the post-workshop survey indicated that about 70% of participants either agreed or strongly agreed with this idea. Several members of the

workshop team commented that they had been unsure if this was an appropriate goal for the workshop. Many of the workshop participants had little experience with science cafés and were interested in basic details (what it is, where it can be held, who could lecture, why it is important to have, etc.) more than specific topic ideas. Thus, it was a difficult challenge to educate individuals on nanotechnology topics when they were just beginning to think of science cafés at all. Given this issue, however, a 70% agreement rate with familiarity with nanoscience topics is relatively high.

Another explanation for this finding may stem from the participant group. The participants for this workshop came from a group of individuals who are much more aware of nanoscience than the average person. Thus, a “neutral” response to the question, “After participating in the workshop, I am more familiar with nanoscience topics that could be presented through a science café” may indicate that the individual was already highly familiar with nanotopics and that the workshop simply did not add to their already extensive knowledge. Without further study, it is impossible to tease this apart.

Only a few institutions applied for the science café stipends

Approximately 20 \$500 stipends were available for the purpose of supporting science cafes on the topic of “Nano in Food” to be delivered during the time period of March 1 to April 30, 2011, (in order to be associated with NanoDays). All online workshop attendees who were affiliated with a nonprofit, educational organization or community group were eligible to receive the stipend. Funding was available to cover direct costs associated with organizing a nano science café and required that an activity report be submitted after the conclusion of the science café. Prior to the start of the workshop, the workshop team set a goal that 10 science café workshop participants would apply for science café stipends following workshop completion. In order to raise awareness of the availability of these stipends and the application process, the moderators made several posts regarding the funding opportunity and mentioned it several times in online discussions. Unfortunately, only two applications were completed, while another two were begun and then abandoned. Additionally, only 17% of participants agreed or strongly agreed with the phrase, “I intend to host a science café as a part of the Nano in Food national science café event in spring 2011.” The majority of participants (59%) marked “Neutral” for this option.

The workshop team discussed several possible explanations for these results. One potential explanation may be the restrictive terms of the stipend. The stipend was intended for individuals who had not yet held a science café, and the stipend was to be used for a specific topic (nano in food) during a specific period of time. Some of the qualitative responses, as well as informal discussions with the two individuals who submitted incomplete surveys, led the workshop team to hypothesize that many workshop participants may have already been active in science cafés, may have been uninterested in the very specific topic, or may have felt unable to complete a science café within the time period allotted. Any of these reasons would make them ineligible to apply for the stipend. Thus, it may be that individuals do intend to deliver science cafés in the near future and, thus, the number of stipend applications is not reflective of the number of science cafés that will be created as a result of this workshop.

Lastly, the workshop team speculated that the lack of applications may be due to the amount of the stipend. Workshop participants may have felt that the amount of work required to complete an application was not worth the relatively small amount of money available, should they be awarded the stipend.

Additional information gathered from open-ended questions

Although the workshop team designed the workshop to appeal to individuals at all levels of knowledge regarding science cafés, there was some indication that many participants felt that the information provided was too complex for those who had not yet held a café. Based on participant feedback, the workshop team came to the consensus that participants would like to see two separate workshops: one aimed at individuals in the information gathering stage and another at individuals in the planning stage.

Other open-ended responses indicated that participants struggled with the format of the workshop, particularly with the delivery of information. While the workshop team made an effort to guide participants on how to participate in online forums on the ASTC site, it appears that more explicit instruction may be needed. Other open-ended comments also indicated that participants had trouble finding or accessing resources on the ASTC site. The workshop team concluded that these resources may need to be identified in a different way or made more prominent for individuals to access.

Open-ended responses indicated that participants wanted more synchronous, real-time, interactive events to occur throughout the course of the workshop. Future workshops should look into having several synchronous elements, set at a variety of times to accommodate scheduling conflicts, and provide transcriptions, recordings, or records of them for individuals who are unable to make the specified time but who still want to obtain the information. Visual elements were also highly desired. While some individuals felt that the real-time discussion with Richard Taylor was very useful, others felt that it was too slow and too impersonal without seeing him. It seemed that video chat makes the experts seem more personable and “real” and thus was highly desired.

While this workshop was a distinct success, the workshop team determined that we have not yet been able to take full advantage of the medium of an online workshop. In the future, the team is interested in exploring ways to take full advantage of the design of online workshops. Examples would include stimulating active discussion between participants, having assigned videos or readings before discussing them, and more synchronous events.

Questions for future evaluation

The workshop team mentioned several issues that they would like to explore more deeply in future evaluations of online workshops. These included the impact of the workshop on individuals who read the posts but did not participate (“lurkers”); what participants expectations are for the online workshops, in addition to whether or not the workshop met their expectations; and whether or not the knowledge that participants gain through the workshops is sufficient to support them in actual implementation of science cafés and other programming.

Conclusions

The post-workshop and participant tracking data support the conclusion that this online workshop was useful for participants and that the science café workshop was an improvement over the February NanoDays online workshop. Many of the outcomes specified by the workshop team were met, and others were very close. The team also identified many suggestions for improving future workshops. It is probable that participants of the science café online workshop will be more capable and more likely to offer a science café on nanoscience in the near future.

Appendix A: Summary of Results

Survey participants

The online workshop officially began with a welcome and introductory post on Thursday, September 9. A final closing message was posted on Friday, September 24. Seventy-seven participants enrolled in the workshop and received the online follow-up survey. Forty-four of these fully completed the survey. Five participants partially completed the survey. Only one of these partial responses was considered complete due to the extent of information provided. Thus, there was a 58% return rate.

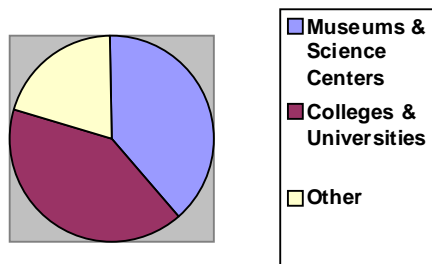
The participants had many different job titles, indicating that the audience is quite varied (n=43). Here are a few examples:

- Director of Education
- Graduate Research Assistant
- Independent Consultant
- Student
- Research Associate
- Coordinator
- Manager
- Assistant Professor
- Exhibit Project Manager
- Math Teacher
- Curator
- Collections Manager
- Assistant Director
- Director of Programming
- Lecturer
- Facilitator of Learning
- Outreach Coordinators
- Zoo Educator

The participants came from a variety of types of organizations (n=44):

- 38% (n=17) from museums/science centers
- 40% (n=18) from colleges/universities
- 20% (n=9) other (independent, unknown, zoo, etc.)

Figure A1: Participants by Organizational Type



Survey Responses

What is the primary way you learned about the “How to Start a Science Café” workshop? (n=43)

- 20% (n=9) from the NISE Network Subawardee e-mail list
- 16% (n=7) from the MRS e-newsletter, Materials 360
- 13% (n=6) from the NISE Science Collaborators mailing list
- 13% (n=6) from the NISE Network e-newsletter, NanoBite
- 9% (n=5) from the NanoDays participant e-mail list
- 9% (n=5) from other sources
- 7% (n=3) from nisenet.org
- 4% (n=2) from the MRS volunteer e-mail list

For those who checked “other” as a response to this question, they were asked to describe how they heard about the workshop. The five “other” responses were:

- ASTC Connect website
- Forwarded from supervisor
- Planning meeting
- Told by other person
- Outreach staff from MRS and WGBH

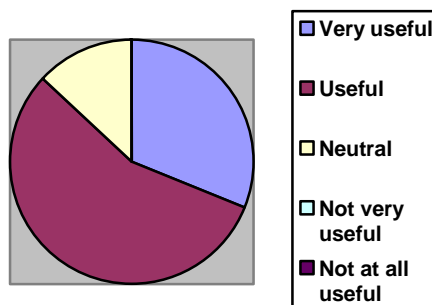
Did you participate in the “NanoDays Online” NISE Network online workshop in February of 2010?

- No: 90.9% (n=40)
- Yes: 9.1% (n=4)

How useful was the “How to Start a Science Café” workshop overall in preparing you to deliver science cafés? (n=45)

- Very useful: 31.1% (n=14)
- Useful: 55.5% (n=25)
- Neutral: 13.3% (n=6)
- Not very useful: 0%
- Not at all useful: 0%

Figure A2: Usefulness of Workshop



Note: In a survey sent to participants of the February NanoDays online workshop, 75% of respondents (24 of 32) rated the workshop as either useful or very useful.

Table A1. Please rate the usefulness of each element of this workshop for helping to prepare you to deliver science cafés. (n=45)

	Very useful	Useful	Neutral	Not very useful	Not at all useful	Did not participate
Information from workshop moderators	37.8%	46.7%	8.9%	2.2%	0%	4.4%
Online discussion with other participants	20%	55.5%	6.7%	4.4%	0%	13.3%
Resources provided in workshop (e.g., planning guide, websites, example presentations)	26.7%	40%	17.8%	2.2%	0%	13.3%
Real-time discussion with a scientist/café presenter	2.2%	17.8%	13.3%	2.2%	2.2%	62%

Note: In the survey assessing the February NanoDays online workshop, 63% (19 of 30) of respondents said the online discussion forum was useful or very useful and 84% (19 of 23) said the live webcast of activities was useful or very useful.

Table A2. Please indicate your level of agreement with the following statements. (n=44)

	Completely agree	Generally agree	Neither agree nor disagree	Generally disagree	Completely disagree
The online workshop met my expectations.	31.8%	50%	15.9%	2.3%	0%
The workshop provided me with the knowledge I need to deliver science cafés in my community in the near future.	25%	54.5%	15.9%	4.5%	0%
After participating in the workshop, I am more familiar with nanoscience topics that could be presented through a science café.	27.3%	43.2%	27.3%	2.3%	0%
I intend to deliver a science café before September 1, 2011.	25%	31.8%	31.8%	6.8%	4.5%
I intend to host a science café as a part of the Nano in Food national science café event in spring 2011.	9.1%	6.8%	59.1%	6.8%	18.2%

Open-Ended Responses

What were the most valuable aspects of the workshop? (n=39)

- The voices of experienced practitioners.
- I am excited that I now have a huge database of reference materials for enhancing my science café. I did not have the time to review all of the discussions and posts during the class, but I look forward to digesting them slowly in the future. Thanks!
- Discussions on finding a venue, trivia questions (helped to understand type of questions) and useful links on Nano in Food.
- The lively discussions with other workshop participants were very useful and brought up a lot of interesting aspects.
- Networking and over one hundred e-mail discussion dialogs.
- Finding links to others with established science cafés in my area I may visit next time they run it. I could not connect at the time of the live chat, but reading the transcript was very informative.
- Reading what other nanoscientists said about organizing events.
- Lots of discussion.
- NA—did not have time to participate.
- Reading other comments and insights.
- Interesting perspectives on science cafe methodology.
- The most valuable aspects of the workshop were: presenting and defining science cafe; explaining how, where, and for what purpose holding a science cafe; giving links to useful websites; communicating with experienced persons.
- Unfortunately my schedule changed and I did not have time to actively participate in the workshop. Early on, reading discussions about audience, it became clear to me that we are not likely to develop a cafe that reaches our primary audience (kids age 2–11) in the near future and that we do not have the time/resources needed to do a cafe well for an older audience. We have been revising our strategic plan and refocusing our efforts to achieve our mission and this has meant having to say no to great ideas. Although it's hard to pass up the opportunity, it was valuable for me to get that insight before investing more in the process. We are still very excited about hosting Nano activities for kids and would welcome a cross-promotional opportunity with another organization interested in starting a cafe for the parents.
- Speaking with others who are in the planning stages of a nano cafe.
- Seeing what other institutions were offering for their events and comparing their process with what we already use as our process.
- Learning of others' experiences in hosting cafés; what worked, what didn't work.
- I loved to see how much was already out there that people are doing now, I would love to see an update next year to see how many more there are. Updates are key in keeping this in the minds of the participants.
- Hearing ideas of what others do was really helpful in sparking ideas. However, I really liked hearing from the moderators. They were really great with the few questions I asked.
- The moderators did an excellent job of posting useful information and keeping discussion going and on track.
- The how-to guide was very thorough in its layout and elaboration. I think that the moderators expanding further on these points was tremendously helpful.

- The most valuable aspect for me was to hear ways that other workshop organizers make their cafe unique—adding trivia, etc.
- I liked that I was able to catch up on the conversation strings when I had time instead of having to be logged on at a specific time to be part of the conversation.
- Feedback from moderators on questions/concerns presented by participants.
- I hardly had time to read all the e-mail information, let alone get into a discussion but the information was useful and I will try to imitate both the on-line discussion and science pub/cafe idea in the next year.
- It was really nice to get feedback from people with experience in running science cafés.
- The information provided by the various participants on past experiences on topic, venues, and formats. Also, that I could just read the daily summary even though I did not have much time to participate.
- The resources available on the homepage on the workshop.
- The forum gave me a great amount of information and resources with which to brainstorm science cafe events. Not only did the moderators offer their tips and feedback, but so did the rest of the NISEnet members who were part of the workshop.
- Finding out all of the other people involved in science cafés. Finding out what works well. I must note that I did not actively participate in the online workshop because another faculty member here was taking on that role.
- Discussions from participants that had delivered a workshop before. It is nice to have an insider perspective from people who have already faced the same bumps that we might be facing to start a science cafe.
- Group effort, altruistic intentions, public forum, online collaboration....
- The answers given by moderators to participants' questions.
- The discussion.
- I was not able to attend many of the sessions, however, I do appreciate the ability to go back and look at the discussion now and in the future.
- Information and tips on how to plan for one; steps to take to prepare for one and how to do one.
- Discussion threads—keeping these posts available after the workshop through ASTC connect; very knowledgeable group of presenters.
- Seeing the exchange of ideas on each of the questions presented. Thinking about trivia questions. Ideas and discussion about evaluation.
- We have never had a science café. Gave me food for thought on how to set one up.
- The extra resources on the website were great for learning more about nano applications. It was also nice to read about what was working for people who have already hosted a science café

How could the workshop be improved? (n=33)

- Not sure. I did not do everything possible yet and I need to follow up where I am weak.
- Have more topics to discuss, like finding speakers and arranging with café that will host the event.
- I realize that this was a workshop, but more organized background information, maybe short presentations, or write-up would be useful for future reference and to frame the themes during the workshop.
- Well, my participation dropped off. I would need to be engaged with a local group rather than attempting a solo effort, to improve my commitment to a cause.
- Don't know how it can be improved, it was spectacular as it was!
- Having links to videos showing nanocafés or interviews with scientists on YouTube.
- The outline and the planning of the workshop could be given before. It is sometimes really hard to distinguish the moderator e-mails from the participant's e-mails when you have one concentrated e-mail of all the messages.
- NA—see above.
- More resources.
- Summary statements of previous comments for latecomers (I didn't hear about the workshop until it was halfway through).
- I would like to have it formatted as 3 live synchronous webinars with a few days to a week in between to discuss in web forums and give feedback that way. It helps to keep the workshop on your agenda.
- It took me a while to adjust to the format.
- I did not attend the online workshop, but I thought the e-mails worked great.
- The way I participated was by receiving a daily e-mail. This was easiest; however, it was hard to follow a string of conversation. I would read something from a moderator like “good question, Bob!” (followed by an answer to the question), but Bob may have asked the question in the e-mail I got the previous day, and I didn't remember it. The solution, of course, was to not be lazy and check each one of the topic threads on the actual website, but it would have been nice if there was an easier way to follow via e-mail. Perhaps the moderators could respond with “Yesterday, Bob asked about... These are good questions” (followed by answers). A little redundant for those reading the threads on the ASTC website, but easier to follow in e-mail form.
- I found the live chat to be less helpful. It would have been better as a video presentation with a chat thread for questions, but as it was it was a little too slow and boring.
- I felt that the questions from the workshop were geared toward groups that had already gone through an intro course or hosted a Science café and then were trying to improve or fine tune from there. These were extremely helpful questions to be thinking about, but in order to full utilize the forum, you already needed know how and what you were going to do and then discuss from there. It's possible that the workshop could actually be broken into two separate ones—one with the “how-to” and one for a “now that you know what goes into it” planning dialogue.

- I think the workshop content was well organized. I didn't try the "digest" version of the workshop, so sometimes getting a steady stream of e-mails that jumped between different subjects within the workshop was just a little hard to follow.
- Better organization of comments into defined categories rather than simply listing all comments in order posted.
- Somehow I missed the start and was not so comfortable in the online format but I will be better next time.
- It would be nice to have the option of receiving digest version of e-mails 2 times a day, so there is still a chance to participate in the discussion while it's fresh.
- I'm not sure.
- More relevant discussion. Too many of discussion threads were not worth reading.
- It was a great workshop—I was just swamped with beginning of the academic year issues. (We are on the quarter system.) I intend to browse through the material more later. I'm not sure whether the other faculty member will be running a nanocafe or not, but I hope that he will take advantage of all of this material!
- I think I would have liked another live chat. That was a really useful tool and it was nice to have everyone all in one place at the same time.
- Pretty well done, as it was.
- The live chat with a scientist experienced at cafés could have been a web video moderated chat—with a stream of questions posted—it may have been more engaging.
- Separate people into those that have done this before from those who have not.
- No suggestions at this time.
- I thought it was well done.
- I lurked in the background of discussion due to schedule, but I know many others did the same, be it schedule or shyness. Maybe more "assignments" or other ways/expectations for the group so everyone stays in the conversation?
- I am not sure the overwhelming number of introductions was helpful for me, but it sure overloaded my e-mail.
- I would love copies of the condensed breakdown sent at the start/end of each session.
- I felt like I would have gained more from the workshop if I had already hosted a science café, or had one completely planned out. Because the idea of hosting a science café is new to our organization, we hadn't put any of the pieces together before starting the workshop. Many of the questions for beginners were hard to answer because we had not decided who our target audience was, where the event would be hosted, and who potential speakers might be. It was helpful, however, to read comments from experienced science café hosts.

Please use the space below to provide any additional feedback to help inform future online workshops. (n=20)

- Do the introductions in a different way...make it clear somehow who the experienced folks are apart from the novices.
- I'm really interested in the economic development and commercialization aspects. I understand the current heavy regulatory posture, but when we begin to turn the corner on venture capital investing, I'd like to be involved in the socialization (through science cafés) on the opportunities for prosperity. Please continue to invite me to future café starters and e-mail forums.
- I would love to find out about future workshops, though all the information from this one will keep me busy for many years.
- Need to have video and/or real-time collaboration where can see and talk with each other.
- Maybe spread out the workshop over a longer time period. It felt like too much info coming in too close together in time.
- The moderators had great personality, which I think helps enormously in a venue like an online discussion forum where things can get very impersonal and very distant. Being able to think of the moderators as individuals and not just the originators of text on my screen was very useful.
- Please keep me on your mailing and e-mail list.
- It was much easier to follow along after figuring out how to receive the digest version at the end of each day.
- This is just a problem with my company, that the website(s) for these things are blocked so it keeps me from attending online workshops. However, GoToWebinars shows up as a regular website and I don't need a phone connection to hear, if anyone else has similar issues you could use them.
- Keep up the good work. I think NiseNet is a true model of effective outreach. You all have done some amazing things that are really making an impact.
- I joined this workshop to find out more about conducting future online workshops for NISE net. It was extremely helpful for this purpose!
- Thank you so much for providing free workshops like this. We all want to widen our audience in science education, and it is so helpful to not only collaborate on how to put those thoughts into action, but also to get ideas in the first place!
- No comments at this time.
- Encourage moderator to ask big-picture questions instead of just a series of back and questions and responses with individuals.
- I think this was a great workshop that allowed all of us to get a feel for what a science café is and how it works. Plus, it is always good to get feedback from others who have done it successfully before so that we can use some of their ideas in our own science café.
- As I have stated in to the forum discussion, I came in not knowing what it was about. I have come away with a source for inspiration. I hope to put it into action sometime soon in my neighborhood.
- No suggestions at this time.
- Topics seem right on with where people are having questions. Possibly more visually demonstrative shares-photo or video of activities, as partners are sometimes hesitate to try activities without hearing about and seeing good

examples. NanoDays video demos seemed very popular, as well as training videos in the catalog—more instruction resources like these.

- This continues to be a great resource and a good way to keep the topic on our radar when so many things during the year can distract us.
- I loved the NanoDays workshop better—loved the videos

Online Discussion

The first thread posted on the online discussion forum was a welcome and introduction. Nearly everyone (53 of 77) responded to this post. Thirteen discussion forums and one real-time webinar followed. In total, there were 175 responses to the 14 discussion threads (including the webinar), consisting of 107 moderator posts and 68 participant posts.

Table A3. Participation in the online discussion portion of the workshop

	Percent of participants (n = 77)
Only posted an introduction	45%
Posted at least one comment on threads other than the introduction thread	29%
Did not post at all	26%

Note. In the February NanoDays online workshop, 40% of participants (34 out of 86) only posted an introduction, 8% posted an introduction and at least one other comment, and 50% did not post at all.

Table A4. Participation in online discussion portion of the workshop, by thread

Name of thread	Date posted	Total replies	Total replies minus all moderators ¹	Total unique participant replies
Welcome and introduction	9/10/2010	60	56	53
Science café movement	9/13/2010	16	8	6
Who is your audience?	9/14/2010	15	8	8
Finding a venue	9/15/2010	18	10	7
Moderator and scientist prep	9/16/2010	12	6	5
Nano topics and speakers	9/17/2010	20	12	11
NanoScience café week 2	9/20/2010	0	0	0
Stipends for NanoScience Cafés	9/20/2010	1	0	0
Webchat reminder	9/21/2010	1	0	0
Marketing your café on a budget	9/21/2010	3	1	1
Webinar	9/22/2010	76	19	6
Nano in Food: A national nanoscience café	9/22/2010	4	2	2
Tips and tricks!	9/23/2010	2	0	0
Assessing your success: evaluations	9/23/2010	3	2	2
Workshop “soft” closing	9/24/2010	4	0	0
Totals (including the welcome and intro thread)		235	124	57
Totals (not including the welcome and intro thread)		175	68	22

¹ The term “moderators” here included forum moderators Jen Larese, Brad Herring, Amanda Thomas, as well as any posts by evaluation members or Margaret Glass.