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Supporting would-be "competitors" creates an atmosphere in which all participatory projects can benefit.<sup>4</sup> Furthermore, all citizen science and crowdsourcing projects can improve from information sharing, feedback, and evaluation of approaches. Additionally, as volunteers become more skilled in digital literacy and learn about science and history, those skills and knowledge sets are carried forward into other projects. Do not be afraid to share related updates, events, and collections from outside your organization. You may connect with peers while expanding your audience.

### **Sharing Is Caring: Communication Tactics and Tools**

In the sections above, I have described gathering and setting expectations for interacting with volunteers. In the sections that follow, I share the ways I actually communicate with volunteers about TC projects and activities. Specifically, I reflect on authentic communication and inclusive rhetoric as foundations for engagement, creating opportunities to meet many motivations, and guiding volunteer behavior. Then I reflect on campaign tactics that are part of a wider communication strategy.

Communicating in an authentic way is central to my strategy; for me, being authentic includes being vulnerable and expressing real enthusiasm. It also entails revealing my lack of knowledge while learning alongside #volunpeers. I had no previous experience as a cultural heritage professional when I began my role as TC project coordinator. As a result, I am constantly learning about Smithsonian collections and history as well as museum and archival practices and workflows. This continued state of learning allows me to keep a sense of wonder and authentically learn alongside with volunteers. With curiosity sparked with and about volunteers, I ask them about their interests and discoveries. And it is amazing when they connect SI collections to their personal experiences and existing knowledge.

My strategy incorporates an inclusive attitude with the intent of shortening the distance of institutional authority and public positioning. This philosophy aligns

with a kind of “radical trust” in public participation (Fichter 2006 and elaborated by Russo et al. 2008). Using and thinking through the lens of collective language—we, (inviting) you, and asking how, why, and what is interesting to volunteers—prepares me to enact tactics that are informed by a holistic perspective of learning, motivation, and information sharing. Therefore, this strategy includes the tactic of inviting specific feedback and input at particular moments and then responding to that input. Some small ways I generate action around public input include surfacing volunteer discoveries as the basis for #TranscribeTuesday posts and also interpreting feedback into development requests and system updates. I also provide feedback by answering individual questions via e-mail and social media, providing project and system status updates, and pointing volunteers to download the PDFs of work they completed.

In my role, it is imperative that I generate opportunities for individual goals to be achieved while chasing collaborative group goals—ensuring that all can feel that their contributions are valuable. It is also essential that my management style create space for productive and supportive communities to blossom. When volunteers describe their activities, they typically communicate asynchronously and in various spaces: via direct e-mail, via the *Notes on Transcribing This Page* field, and via social media. It is clear that not all volunteers have the same motivations or objectives, yet the success of the TC has been in creating an environment in which multiple “imagined communities” can flourish.<sup>5</sup> A volunteer may describe her goals and values and simultaneously evoke a group of imagined peers who share her values. She may behave within projects with the expectation that another volunteer will be approaching the project in the same way. The “community” that volunteers cite may be temporal—emerging only in relation to a particular project or a brief, cooperative moment—but it remains a draw for ongoing volunteers.

Finally, it is important to give the best guidance and feedback. By and large, new volunteers get in touch via the feedback button or the TC’s e-mail account (transcribe@si.edu) to ask clarifying questions when they are new to a TC project. This indicates that mistakes in transcription are most commonly the result of not fully understanding the instructions. When a pattern of errors emerges, I use several tactics that could be helpful for individuals managing similar situations. First, spin this error into a learning opportunity: Remind all participants of the instructions. Emphasize the collective experience and helping one another rather than presenting an admonition. Simultaneously, ask frequently contributing volunteers to help shape on-site behavior through notes, review, and reporting. Then, if he or she may be identified, I attempt to directly contact the volunteer to surface details about well-meaning but problematic activity. Finally, if behavior continues, move to block the offending party and send an e-mail message to encourage the party to contact for reinstatement following discussion and assessment of their activity. I have enacted this blocking step only one time; the situation was resolved through contact with the volunteer, who was acting in good faith but had misinterpreted

instructions. We worked together to address this misunderstanding and create a plan for verifying activity. Trusting in the well-meaning potential of the crowd is risky but offers great rewards.

### ***Crafting a Social Network and Campaigns***

The Smithsonian Institution archives, museums, libraries, and galleries have many existing vehicles of communication, such as blogs, newsletters, and social media accounts. When the TC was established and through the beta (trial) period, its audience was very small. Rather than try to draw volunteers in, communication about the TC could be achieved within a wider ecosystem of institutionally affiliated social media accounts. In these spaces, cross-promotion benefited the TC tremendously; by mentioning the museum or archive that has shared their collection (the subject of the social media post), we can connect TC audiences with those units.

The communication strategy I adopted integrated microblogging and social networks in which potential volunteers already operated including Twitter, Facebook, Tumblr, and, later, Instagram. Twitter, along with Tumblr and Facebook, supports cross-promotion by mentioning the handles or URLs of the participating units in the TC.

The success of our project stems from “being there” and taking time to hear the feedback, concerns, and experiences of volunteers and then acting on those brief communications. Based on our Twitter account metrics, for example, I tweet 10 to 12 times per day.<sup>6</sup> Two or three of those tweets are scheduled content-related tweets, while the others are direct exchanges with volunteers, other unit accounts, and interested parties. Active listening also makes it easier to recall project details and volunteer discoveries and to connect to related resources and relevant news.

I craft intermittent campaigns to draw attention to projects and the transcribed data. For example, #TranscribeTuesday highlights text that has already been transcribed by volunteers. Sharing the context of the transcribed text calls attention to the Transcription Center and allows completed projects to be resurfaced. It also allows me to explain that PDFs of TC projects may be downloaded and explored for free. Finally, it serves as an additional opportunity to invite potential volunteers to review the project if it has not been completed. The Iowa Women’s Archives Tumblr inspired this approach. The #FridayFinalLines campaign is similar to #TranscribeTuesday but focuses on the closing lines of the collection featured in the TC project. The Penguin Books Tumblr inspired this approach. Additional intermittent campaigns are #MyTCdiscovery, inviting volunteers to share their recent discoveries in the TC; #HowToByYou, asking volunteers to share review tips; and #Wednesday-Wander.<sup>7</sup> This latter campaign highlights other transcription, citizen science, digital humanities, and participatory projects that might interest volunteers.



**Figure 1.** Tweet about #7DayRevChall, a time-bound approach to create collaborative competition. On day 1 of one such challenge, November 14, 2014, a total of 420 pages were transcribed.

I also run campaigns to achieve particular TC project objectives. These time-bound participation campaigns feature various task-based objectives. Campaigns at the TC have the added impact of increased engagement during the campaign and elevated engagement in the following week as well. I hypothesize that targeted campaigns help to sustain regular activity in the TC. These campaigns have different goals but share a collective goal-setting approach. The first campaign approach was based on early surveys of volunteers' motivations; specifically, volunteers indicated they were seeking increased behind-the-scenes access as a reward for participating rather than discounts or merchandise from Smithsonian vendors. Devised by Presidential Innovation Fellows (PIFs), a #ContributeandConnect campaign meant that volunteers who contributed to a specific task would be connected to Smithsonian staff. The #ContributeandConnect campaign challenges volunteers

to complete tasks in a specific target and time range and rewards them with a virtual behind-the-scenes experience. For example, complete a 300-page project in three weeks and have a talk from a curator about the item. This prototype lasted for three weeks and was held in November 2013. I have since sponsored this campaign style twice with similar great results. I also run collaborative campaigns with Smithsonian groups that do not have TC projects but do have material related to other TC projects, developed from the #ContributeandConnect model.<sup>8</sup>

A second campaign approach has evolved since I began my role: the 7 Day Review Challenge, or #7DayRevChall. Typically launched when projects needing review have stalled, this approach asks volunteers to accurately review as many pages as possible in a seven-day period. The time-bound approach creates collaborative competition; volunteers work together to surpass the total number of completed pages from previous #7DayRevChall events. After launching via campaign e-mail, I provide daily updates of progress on projects via social media (Figure 1). I also reengage volunteers for a final push on the fifth or sixth day of the challenge. In the more recent #7DayRevChall events, I have suggested specific projects of the day. This resulted in an increase of activity across projects and every open project touched in the most recent #7DayRevChall. These campaigns have resulted in 2,500 to 3,000 pages of the more complex materials completing in one week.

### ***Some Tools for the Job***

I use a collection of tools to support communicating around the TC. Before a social media presence was established for the TC, the PIF leading community development for the TC slowly built a foundation for the audience through direct mailing to volunteers using the e-mail marketing service provider MailChimp.<sup>9</sup> Now, MailChimp remains an important tool to manage TC group communication. A clear change in the pace of communication with some volunteers emerged when I started using Twitter in January and February 2014. Doing so allowed me to speak to a small portion of very active volunteers and quickly provide feedback to questions. There are a number of tools that allow you to draft, schedule, and share digital media content, including HootSuite. In general practice, I use Tweetdeck and track activity around particular hashtags, accounts, and terms. I typically schedule two or fewer tweets during the course of the day. I complement that with checking in several times a day on our Twitter, Facebook, and Tumblr accounts. I also post content several times a week with Instagram. Connecting other content from our units' social media accounts to the projects in the TC offers opportunities to match audiences and stories and seed ongoing cross-promotion. I also reuse and showcase collections content in my outreach.<sup>10</sup> I retweet, like, and respond to content from other non-SI entities as well to connect a web of knowledge to our TC projects and support overarching TC goals.



Suggestions for leveraging this set of tools include experimenting with content and audiences, matching techniques for communication and platform selection with resources, and using content calendar and scheduling but not forgoing actively checking in! You may also decide to use one social networking tool or means of communication or maybe decide to communicate visually with primarily images or perhaps adapt to built-in smartphone editing tools if using mobile devices to manage communications. Then again, these strategies and tools may be insufficient for your goals. Indeed, adopting this strategy requires resilient energy to combat burnout from communications that last around the clock and are received from around the world. In practice, it has become clear that assessing what works well and what does not also means being creative and willing to tailor tactics quickly when necessary.

### Continued Learning and Ways to Improve

As with any participatory project, the TC must continue to evolve by integrating lessons learned from the strategies and tactics described above, determining factors of success, and then measuring activity from several angles. What defines “success” for a crowdsourced transcription project? Do you measure success based on tasks? How can you make measuring manageable and the analysis applicable or useful for strategic decisions? Each answer should be articulated based on the goals and strategies of your specific project. The best approach is to keep it small, planned, comparable, regular, and replicable.

I assess performance of the wider TC, units, projects, campaigns, and growth in several ways. Google Analytics (GA) is useful to understand the time spent on-site in relation to particular projects, movement of visitors through particular pages in relation to campaigns, and the impact of social media cross-promotion, among many other insights. Using GA presents opportunities to explore periods of time as well as “live” data and to investigate and compare behavior, acquisition, movement, and location of our audience (visitors) as well as the time that volunteers spend on-site. Of course, a tool such as GA is useful based on metrics you have already benchmarked.

For a comprehensive picture of the TC, I combine GA data with audience information from our TC metrics and other social media analytics. I also make informed decisions based on calculated metrics, such as *completed projects and pages*, *available projects and pages*, *active volunteers*, *pages and projects in the system*, and *total transcription events*. I explore these numbers cumulatively as well as on a unit-by-unit basis. I analyze weekly metrics created from a system database query regularly and also in new ways to answer questions as they arise (e.g., *How many weeks did it take for those projects to finish, and, therefore, what can we expect for this similar project?* and *Did an increased number of volunteers join and per-*

*form more than 20 transcription and review events between January 1 and March 31 based on this campaign?*). I determine the effectiveness of campaigns with GA data points as well as event-based metrics, such as activity after campaign e-mails. Finally, long-term analysis can be performed with monthly summarization and comparison against preceding months and similar time periods.

Improving also includes learning from challenges. There are some trials in sustaining some TC strategies and tasks. Resources are limited. I have been able to collaborate with unit representatives and work on precise issues with SI developers, yet I work primarily individually to manage the activities described in this article. Keeping a tight budget and flexible approach has included awareness that tools to support engagement must be free and adaptable or low cost. Other challenges include managing the frequent pace of communications as the TC is accessed around the world at all times of day and projects are regularly completed. Since each unit controls the selection, preparation, and release of materials, it is not always known when projects might be made available to the public. Creating solid engagement has also generated high levels of activity by smaller numbers of dedicated volunteers. The pace of volunteer activity is tremendous, but this also means that it can be difficult to maintain a queue to offset completed projects. Another challenge is catching the careless. Some participants on this open, public project may be distracted, not familiar with the instructions, malicious, or some combination of the above. This sometimes means waiting for a questionable pattern to emerge before taking action. Volunteers may shape their own behavior—and that of fellow participants—and self-correct; alternatively, I can use the feedback tactics outlined above to address careless activity.

The TC can also improve by considering tactics other systems have implemented, including creating and displaying earned status, offering discussion forums or boards, and breaking tasks into smaller components (though risking the loss of context). Most of these practices were not integrated into the first phases of the TC. I believe that these system elements—particularly discussion spaces, breaking second or additional passes across data into smaller components, and advanced status as it relates to on-boarding peers or specialized data review—may now be more successfully applied as opt-in TC features and tasks. Furthermore, the TC could be expanded to increase projects on-site, incorporating tasks such as image identification, decision trees, and audio transcription. Finally, improving the TC demands continued integration of the robust feedback we receive from volunteers and the public.

As the TC continues to grow, I will need to seek out and implement tactics for more efficient management and increased volunteer participation. You may consider these additional decisions around project management: making choices about the pace or frequency of project availability, using and pursuing particular subsets of metrics, breaking down the complexity of tasks and modifying instructions, integrating experts in the workflow as early checks on quality, or even scaling back on one's activity if management becomes unwieldy.

## Final Thoughts

It is no exaggeration that I learn something new every day as TC project coordinator. I would characterize this as “end-to-end” learning about collections, disciplinary conventions, museum and archive workflows and technologies, efficiency and time management, and the endless curiosity and goodwill of the public. This discussion has demonstrated how I manage the Smithsonian TC: by balancing multiple unit goals and timelines within an evolving transcription platform that is embedded within a wider ecosystem of SI enterprise systems while meeting diverse volunteer motivations with specific strategies and tactics.

The TC was designed to accommodate the needs of many different units within the organization, with each unit reaching different but related audiences in pursuit of their specific goals. As you might guess, neither simply building a tool nor merely inviting participation is enough to sustain and grow a digital project, whatever the scale. These tools and participation must be matched with intentional, iterative, and engaged planning. To manage a project of this scope, one must understand and troubleshoot the system and unit workflows as well as work with unit representatives to select content and set objectives for their projects. Communication styles should be approachable yet trustworthy to cultivate an atmosphere that supports individuals and allows community to thrive. Success also hinges on creativity and frequent problem solving to create fulfilling experiences for all. Finally, integrating reflection on successes and mishaps to improve the project is an essential best practice.

Planning strategy and tactics with a flexible, curious, and thoughtful approach can lead to project success, marked by utility and adventure. By presenting the range of tasks that I manage and the strategies that I employ, I hope that individuals and teams seeking to implement participatory projects will be able to adapt these tips to meet their careful analysis and participatory project goals—and then make history (or science, art, or culture!) in the process.

## Notes

1. See the Collections Search Center summarization of catalog and collections from the Smithsonian Institution’s museums, archives, galleries, libraries, and research centers in “About—Technology,” <http://collections.si.edu/search/about.htm> (accessed January 18, 2016).
2. For a more detailed account of developing this term on a social network, please see Meghan Ferriter, “Volunpeers: Hashtag, Identity, & Collaborative Engagement.” April 5, 2016, <http://meghaninmotion.com/2016/04/05/volunpeers-hashtag-identity-engagement/>.
3. The project and page PDFs are available for use by the public and internal staff; currently, units are investigating the ways in which they might further purpose the PDFs, including potentially attaching PDFs to archival finding aids, and also use the text for alternative display or additional item metadata. Collections management staff are most likely to use the CSV format to populate their databases. This format is envisioned to support ingest and display in unit CMS, particularly as finding aids are made more digitally navigable. Our examples of projects best suited for CSV

export include logbooks and biodiversity specimens. The XML format can also be used to dictate asset arrangement in corresponding ways to the text that has been transcribed as a final output for each project. Projects that have benefited from the XML output include artists' letters, as the transcripts will be bundled and included at the back of publication. All of these outputs are informed by the JSON data that are indexed against the asset images ("pages" in TC parlance).

4. See WeDigBio as an example of collaborative campaigning with other transcription projects, with the goal of increasing access to biodiversity specimens through transcription; the global WeDigBio challenge was held October 22–25, 2015 (<http://wedigbio.org>).
5. See Anderson (1991).
6. As of July 27, 2016, I have tweeted from the @TranscribeSI Twitter account 11,569 times.
7. Smithsonian Institution Archives interns Justine Rothbart and Jenna Tenaglio created #MyTC-discovery and #HowToByYou. Other tactics to support specific unit and wider TC goals include integrating interns in the TC workflow.
8. See #FWTrueLove and #DigIntoDyar—as well as a summary here: Lesley Parilla and Meghan Ferriter, "The Impact of Coordinated Social Media Campaigns on Online Citizen Science Engagement" February 18, 2016, <http://blog.biodiversitylibrary.org/2016/02/the-impact-of-coordinated-social-media.html>.
9. MailChimp, <http://mailchimp.com> (accessed September 11, 2015).
10. Using the services at <http://gifmaker.me> and <http://canva.com> (accessed September 14, 2015).

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