

COLLECTIONS

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From the Practical to the Philosophical

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Cover: Making Time for Moynihan in the Morning: Volunteering with the Transcription Center. Courtesy of Christine Rosenfeld.

Inviting Engagement, Supporting Success

How to Manage a Transcription Center



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Abstract This article lists and examines the practical considerations and proven approaches for managing a participatory project focusing on transcription of digitized materials and engagement with the public. Using the Smithsonian Transcription Center as a case study, this article offers tested techniques to prepare for transcription, training and resources, appealing to volunteers with specific communication tactics, and tracking challenges. In addition, this article addresses the ways in which volunteers serve important roles as peers in this crowdsourcing effort and thus serve as “volunpeers” or volunteers/peers where communication between all participants is grounded in trust and collaboration. Throughout the article, where possible, suggestions for scaling based on resources, materials, objectives, and time scales are included.

Designing a participatory project that invites sustained public engagement requires a combination of tools and tactics. In this article, I discuss the practical and proven approaches for managing a public transcription project in a way that fosters engagement and success.

The sections below offer some resources for assessing your project needs and details the relationship between the Transcription Center (TC) and unit goals and the Smithsonian Institution mission before laying out selection and planning processes. Then I reflect on the ways I support staff as they administer TC projects and suggest a series of strategies for creating an environment in which volunteers can grow. The article closes with a description of communication tactics and tools as well as ways in which the TC will continue to improve by integrating lessons learned. When possible, I try to include suggestions for scaling these approaches based on resources, materials, objectives, and timescales.

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As a prefatory note, the Smithsonian Institution consists of 19 museums, archives, galleries, and libraries; nine research centers; and a zoo. Among these entities, 15 Smithsonian groups share collections in the TC; these groups are referred to as “units” throughout this article and throughout this issue of the journal.

Participation, Motivation, Communication: Places to Start

As a participatory program, the Smithsonian TC shares design elements and broad goals with other citizen science and GLAM crowdsourcing projects. For example, the design and management of the system reflects the planned activity type and desired product (Bonney et al. 2009; Haythornthwaite 2009; Liew 2014; McKinley 2015; Oomen and Aroyo 2011; Owens 2013; Reed et al. 2013; Ridge, 2013; Russo et al. 2008; Wiggins and Crowston 2011). Motivations and activity styles of would-be participants are also necessary considerations when building strategies of engagement (Alam and Campbell 2012; Batson et al. 2002; Causer and Wallace 2012; Curtis 2015; Dunn and Hedges 2012; Ellwood et al. 2015; Eveleigh et al. 2013, 2014; Preece and Shneiderman 2009; Raddick et al. 2013; Reed et al. 2013; Ridge 2013; Rotman et al. 2014).

These studies and models offer the pieces for successful participatory programs, yet fitting them together to implement strategy can be a puzzle. This article is a comprehensive, integrated overview of one way to manage a complex participatory project: acting intentionally to leverage system design and create an optimal product, achieve unit goals and support staff, and communicate effectively to address participant motivations through a range of tactics. The article is divided into discussion of internal project planning and staff support in the first half, followed by community management and communication tactics in the second half.

Matching Goals and Strategies with a Mission to Share Knowledge

When the TC launched, there was one main stated goal for transcription in the TC. That goal was to index the text that has been created in a peer review process to a record for digitized collections in the Smithsonian’s Enterprise Digital Asset Network (EDAN) so that it might be used to improve search and discovery within the Smithsonian’s Collection Search Center. However, this stated central TC goal is connected to unique unit goals. My role as TC project coordinator includes pursuing specific project objectives using general and bespoke strategies to best align central TC goals, unit goals, and existing unit strategies while achieving the main TC goal. Oppor-

Table 1. Smithsonian TC: Mission to Tactics

Mission	To increase and diffuse knowledge	
Goal	To create indexed, searchable text	
Goal	To showcase collections in archive	To create searchable database with resulting data
Strategy	Connect selected projects to inter/national and subject matter significance	Select collection and break into projects
Strategy	Provide context about projects and their place in wider collection	Ensure data are high quality
Objective	Create understanding of audience and interests through transcription	Have TC projects transcribed within target time frame
	Generate buy-in from curators and other staff	TC project will need as little editing of data in approval pass as possible
Tactic	Send e-mail to volunteers with list of events or people to watch for to underscore significance of project	Launch project with community e-mail explaining significance of data in project to scientific research
Tactic	Ask volunteers what they find interesting or curious about project via social media channels	Share resource for checking location details in project instructions
Tactic	Offer curator talk for volunteers who transcribed the project	Create hashtag for volunteers to use when questions arise while working on this project
Tactic	Create a time-bound campaign to generate attention on the project	Provide ongoing updates on total project progress in social media as well as project description
Tactic	Create project report: number of volunteers and activity, time on pages transcribing and reviewing and location, and comments and questions from volunteers	Create project report: number of volunteers and activity, time on pages transcribing and reviewing and location, and comments and questions from volunteers

tunities abound in the TC to connect the Smithsonian Institution mission of *the increase and diffusion of knowledge* to a constellation of goals and strategies (Table 1).

However, unit goals are supported by strategy and specific TC project objectives. These may include leveraging the text for enhancing records, using the text for databases or additional research, showcasing rarely seen or recently digitized collections, and increasing specific engagement with the public. Unit TC strategies may be guided by the existing digitization workflow needs of the unit, curators’ interest, or directors’ guidance—or any combination at the same time. The TC’s organization reflects the diversity of units and unit needs and the simultaneous autonomy of these museums, archives, and libraries. So my role must blend these tactics and objectives in a way that as seamlessly as possible supports projects from multiple units in the same digital space.

Selections, Planning, and Preparing for Transcription

Many months before the curtain is lifted on a TC project, the planning begins. This planning helps to set the stage for specific engagement for projects as well as the general and ongoing aspects of maintaining the Smithsonian TC. Several questions guide selecting material for transcription and goal setting with units as well as establishing objectives for particular projects. The next section addresses these questions. Furthermore, before a TC project is made available to the public, the collections material it comprises must be prepared for transcription in digitized format with a record that descriptively conveys the significance of the project.

From Collections to TC Projects: Selection and Planning

The digitization and prioritization strategies in play impact the ways we create a diverse yet balanced environment in the TC. Frequently, I am asked, “How do you decide what projects to showcase, and in what order?” As project coordinator, I do not make the decisions about what is selected for the TC. Rather, the museums and archives (units) decide what materials are their best candidates for transcription. Each participating unit selects items and prepares digitized collections for transcription based on considerations including their digitization strategy and wider priorities. You may see examples of these strategic plans and priorities as they are enacted at the departmental or unit level in Bellizzi; Ferrante; Hursey and Horton; Kapsalis; Morris; Orli and Bird; and Savig (in this issue). I do, however, provide guidance based on data from similar projects, including feedback about ease of transcription and anticipated timelines for completing TC projects consisting of material such as handwritten scientific field notes, scientific catalog cards, and specimens labels. I assist staff as we optimize the proposed TC project with template modifications and specific instructions and connecting the TC project objective with volunteers’ interests.

Our participating units may have many objectives when they bring an item forward for transcription. With TC project planning, I guide unit representatives through a process to identify how the main goals should be integrated into the design (template and project size), campaign (description and engagement), and export of data.

We typically begin by discussing the state and objectives for the collection materials. *Is the item digitized? Does it have a collection record? Where will the data be stored once the TC project is completed?* If the first two questions are answered with “not yet,” we can continue to plan with an understanding of a longer timeline. Next, I ask questions about the collection details: *What is the format? What is the subject matter? Is it a logbook or list of specimen notes or lacking narrative? What will the data represent? What challenges are anticipated (legibility, tables, lists, foreign*

languages)? Finally, it is important to articulate early whether there is a preferred timeline for the TC project's completion and whether it is related to other events or exhibits on the horizon. The answers to all of these questions inform whether we will create or modify a transcription template. The answers also guide to what degree and specificity we will need to generate instructions and what kind of story could be told about the project. The item's story or potential to be transformed into something more useful is what typically compels its inclusion in the TC.

I recommend keeping detailed notes in the planning and questions phase. Having this information at hand may allow you to better plan communications around projects, anticipating issues with transcription, and leveraging solutions created around one project for another's challenges. Maintain a manageable scope to start: You might decide to support only a single content type, limiting the amount of time spent planning and developing prior to launching a transcription project. Similarly, electing to support a single project objective may be suitable for your resources.

Preparing TC Projects and Telling Smithsonian Stories

There are a number of steps for preparing the material for transcription, including digitization, gathering descriptive data such as narrative and metadata, and consideration of the place of the material in wider collection contexts. For crowd-sourced transcription, items must be digitized. For TC purposes, "digitization" means digitally capturing a facsimile of an item (photograph in TIFF, JPEG, or PNG format) and embedding basic metadata, including title, creator, copyright notice, and source.

We have a TC Administrative Dashboard featuring several administrator permission levels. This space supports self-service activity for staff. Here staff can import, edit, queue, turn on projects, review and approve pages, export the final text product as CSV or XML files, and get statistical information about their TC projects. It also allows unit administrators to divide tasks to integrate other staff, interns, and volunteers into unit TC workflow.

Another way to set the stage for encore success is to prepare related projects at the same time by using queuing approaches. Self-service import, built into the TC Administrative Dashboard, allows a unit representative to query Smithsonian's EDAN system and pull together images and metadata in a gallery slide show.¹ This slide show can be loaded into the TC and, once turned on, is delivered to the public volunteers. Preparing many or related projects at the same time creates a queue of projects that can be turned "online" and released in coordination with a unit's plans, events, or completion of other preceding projects.

For your project, you may consider summarizing the steps of project data and preparation and at which points responsibility could be shared across a team.

Outlining these steps serves as a basis for knowledge management of the systems involved for future improvement, integrating new team members, and assessing workflows.

Making the Case and Showcasing Collections

Once collection items have been digitized and selected for transcription, it is important to concisely convey to volunteers why and how they can help with the particular project they have selected. Every collection item has a story to tell. Some have many stories that intersect, some foreshadow great discovery, and still others have lesser-known tales hidden within. We need to tell the stories that we *do* know with brevity to explain the importance of the project at its outset. The story may be more than merely what is contained within the TC project; then there are opportunities to connect the project to its significance in history, science, and other related SI and cultural heritage collections. With the story in mind, we can gather supporting contextual images, links, and more to better catalyze the objective of the TC project. Varying content types and project objectives across the TC may require that context be conveyed in different ways: as part of a challenge, at the start of a project, as rewards and enticing further completion, and so on. Updating volunteers on TC project progress is also imperative, as it provides volunteers chances to celebrate their collaboration.

Projects are often completed more quickly when volunteers can connect quickly with their scientific, social, artistic, and/or historical contexts—frequently via social media and e-mail. Similarly, there is strong evidence that projects with explicit calls to action for scientific or historical research purposes resonate more strongly with audiences; these well-articulated objectives spur action and support progress through the project.

The following are some of the tactics I use that extend from the questions and planning described above. Start by building a loose strategy including project launch announcement and draft communications, including advising on project size to match pages to optimal performance for unit objectives. Take time to understand and build narrative for your projects so it can be built into an effective communication strategy. Integrate this planning into the project creation and selection process; this will allow you to maximize your time with this material. I have learned that keeping a list or spreadsheet of projects allows you to keep track of what you have shared and of volunteer input and interests and also keeps narrative building manageable. You can also focus on sharing prepared narratives on the time scales that suits your needs, such as one or two projects per week rather than daily. Other tips to match your resources for communicating around projects are presented below. First, however, you will want to consider your resources and staff capacity for project administration. The following section discusses the ways

that I support units with tactics that support their specific TC project objectives and strategies to achieve their wider TC goals.

Supporting Staff: Training and Resources

Another significant element of creating a successful transcription project is supporting internal participants in the best ways to meet their goals. This is particularly the case with the TC, as activity at each unit is grounded in varying selection strategies, workflows, and resource allocation. I also support units with in-person or individual training after we define the style of administration for their projects (e.g., queuing all projects at one time or rolling project import) and the extent to which they will need central TC support. This relates to the questions asked when planning a project, including TC project plans, unit capacity, and other workflows. Additionally, team training can help units identify the best ways to distribute the tasks of TC management. Typically, the session includes an overview of the front end of the TC to explain the experience of volunteers, followed by in-depth training on the TC Administrative Dashboard. In these sessions, I can recommend the permission levels and responsibilities most appropriate to team size and resource constraints. Finally, this support and troubleshooting allows me to surface points and features that could improve the system as well as the experience of units seeking to share collections in the TC.

To assist unit administrators and teams managing the TC projects, I created checklists and project management spreadsheets. I also provide checklists to compile information necessary for import, creating user profiles, and documentation for approval, import, export, and editing projects. The purpose of these aids is to help integrate the TC project management more seamlessly into their existing workflows and as a result make it as easy as possible for units to participate in the TC. I also perform the steps of tasks to create and update documentation. This immersion keeps me close to the needs, challenges, and workflow constraints of internal staff. When a staff member faces a challenge with a task such as importing or thumbnail display, I ask that person to walk me through his or her process. As I discover a preferred workflow from staff, I can improve instructions that mirror unit practices but also support elements of our TC workflow.

While this approach is possible based on the TC centralized responsibilities and decentralized workflows of units, it might not be appropriate for your model. The takeaway, however, is that being involved in performing the tasks on-site can surface system enhancements, improve troubleshooting, and inform ways to augment workflows at many levels.

Another way that I support staff is by collating, analyzing, and sharing the approaches that have worked well in the context of other museums and archives as well as other crowdsourcing and citizen science projects. To benchmark with

units, we can match the unit's goals, preferred timelines, and resources (staff and interns and in-person volunteers); then I may advise on strategies that have worked for other projects or units to meet this particular unit's primary goals. Examples include breaking out the approval work among several staff members, integrating interns and volunteers into the project preparation and review, and choosing an optimal project size based on the page type, format, and legibility of text (handwritten or typewritten) and general content. To surface these best practices, I frequently check in with unit administrators. I ask for feedback on the quality of transcription, the process of approval, and experiences of interns and volunteers. I also try to surface barriers to smooth workflow with the TC product and determine how those may be addressed by modifications to TC project templates and instructions. All of these approaches may be used to create the most efficient and effective space that brings together capabilities of staff and interests of the public. Therefore, I recommend hiring a project coordinator to hear the needs of and intercede with staff.

Appealing Invites: Bringing in the Public and Making #Volunpeers

Once the system has been created and content selected and goals have been established, it is time to recruit, support, and sustain the people who will collaborate with you and participate in your projects. The TC launched "softly" with minimal promotion in June 2013. As it has grown, it has become clear that we entice new participants first through brand reputation and social referral and then through media coverage and by sharing site and project updates in social media. Existing TC volunteers have explained that they heard about or were encouraged to try the TC from three main ways: from friends or family, through social media, or by searching online for opportunities to volunteer. This social referral represents trust and support in the Smithsonian brand. It also reveals perceived personal interest from friends and family of would-be volunteers. Other tools of recruitment include subject matter listservs, lists of crowdsourcing and citizen science databases, wider press coverage, and in-person events.

#Volunpeers

The term "#volunpeers" incorporates the breakdown of authority between Smithsonian staff and volunteers in an array of interactions. Using our Twitter account @TranscribeSI in April 2014, I described participants in our 7 Day Review Challenge as "volun-peers" while asking them to share knowledge of projects with one another.² Then I began using the hashtag #volunpeers mindful of the structural affordances of hashtags (Mechant and De Marez 2012). On Twitter, tagging tweets

with #volunpeers means that these tweets can be discovered through search; therefore, there are increased opportunities for interactivity and connection over tasks and content. More than merely a phrase, “volunpeers” indicates the ways unit administrators and Smithsonian staff experience the TC along with volunteers: They (re)discover and answer questions as part of a collaborative learning exercise. “Volunpeers” underscores the values articulated by volunteers describing their activities and personal goals on the TC, including to learn, to help, and to give back to something bigger. Finally, “volunpeers” resonates with me as project coordinator. I believe that establishing a collaborative space that uses peer review means foregrounding what is being done *together* rather than exclusively highlighting what is being done by particular individuals.

Designing Engagement and Cycles of Participation

It is important that any visitor to the TC can quickly and easily become a volunteer; it indicates that we created the lowest barriers to entry. These include making the site navigable from all browsers, permitting “anonymous” contribution capabilities, and using template design to clarify tasks and activities just in case the volunteer does not read the instructions. These decisions are design oriented and are not without consequence; some crowdsourcing programs may not be able to implicitly trust new volunteers to behave appropriately or rely on collective volunteers to catch errors created by anonymous participants. It is also important to make it clear that all contributions are valuable and remain generous toward the learning curve affecting projects. There are other features the TC does not have, including a sitewide leaderboard; instead, we have created a “My Work” section available to registered volunteers. With the “My Work” section, accessible in the top-right corner of the home page, volunteers can track their progress and activity on projects, arranged by project (“My Projects”) and by specific activity performed in the TC (“My History”), which can be filtered by date range. Finally, the “Latest Updates” section provides a window on what other people are doing on-site at any given time; volunteers report that they can find the latest projects and identify new interests with this feature.

For the TC, “active participants” are individuals who have performed at least one transcription event, which could be either transcription or review. Indeed, a portion of registered users have not (yet!) moved to action on transcription. Levels of active participation in the TC may change over time, which is to be expected. Being aware of and preparing for cycles of participation in the TC, however, allows us to consider two things: making instructions more intuitive and how to improve ways to communicate to encourage activity.

As a program of engagement, we have to be comfortable with the volume and length of participation from volunteers. Some volunteers visit the TC daily

Table 2. TC Participation Cycles: Transcription Events, Numbers of Volunteers, and Days from First to Last Activity, June 2013–December 2015

Total Transcription Events	Cycles of Participation		
	Number of Volunteers	% of Volunteers	Days Participating
500+	178	3.07	357
100–499	450	7.76	167
51–99	424	7.31	105
21–50	830	14.31	62
11–20	880	15.17	34
5–10	1,125	19.40	22
1–4	1,913	32.98	6

or weekly over many months. Other volunteers may ever contribute on only one day. All of these cycles are “acceptable” and welcome. There are also opportunities to extend these cycles by analyzing the data we capture about participation (Table 2). For example, we know that 3,918 of our total 5,800 volunteers have performed between one and 20 transcriptions. The average length of time between first and last activity for these volunteers is 20 days. However, volunteers who have only contributed between one and four transcriptions are typically only active for four days or less. With this information in mind, a solid strategy would be to contact new volunteers directly within three days of their first contribution to the TC, followed by another communication ideally within 15 to 20 days. Yet the cycle of participation for volunteers who have pushed past 20 contributions nearly doubles from those who have done 20 or fewer: 62, up from 34.

These data suggest that it is critical to check in on the cycles of participation in your project. In building a communications strategy, you may want to ensure that volunteers receive regular communications as a means of inviting more contribution.

The main stated goal of the Smithsonian TC is to create indexed, searchable text. The commitment we make to volunteers is that, once completed, every project is available for download as a PDF. TC data outputs come in three other formats, made available at the end of the project’s transcription and review life cycle: Indexed Text, CSV, and XML.³ Once a project is completely transcribed and reviewed by volunteers, the text is indexed within EDAN. Volunteers can immediately access their efforts in a PDF download; I highlight this aspect of the TC with social media campaigns and also demonstrate the effectiveness of search within the Collections Search Center using keywords.

One of my strategies is to make the TC an environment in which all volunteers are challenged and also have opportunities to explore according to their

interests. Part of that strategy is supported by an extending tactic: sharing opportunities to join in other Smithsonian citizen science and crowdsourcing projects and other external projects. In social media and in campaign e-mails, I have been able to highlight Biodiversity Heritage Library, Atlas of Living Australia's DigiVol, Citizen Archivist (National Archives and Records Administration), Zooniverse projects, DIY History, TranscribeBentham, Letters of 1916, New York Public Library projects like Emigrant City and What's on the Menu?, FromThePage, MicroPasts, and Wikipedia. Sharing external projects with TC volunteers may appear at first glance to threaten a stable volunteer base. Using this tactic, however, enables TC volunteers who are seeking lifelong learning opportunities to pursue many interests within and beyond the TC. In this way, the TC serves as a place of delightful discovery and opportunity in more ways than one.

Supporting would-be "competitors" creates an atmosphere in which all participatory projects can benefit.⁴ 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.⁵ 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.⁶ 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.⁷ 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.⁸

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.⁹ 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.¹⁰ 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).

References

- Alam, Sultana Lubna, and John Campbell. 2012. "Crowdsourcing Motivations in a Not-for-Profit GLAM Context: The Australian Newspapers Digitisation Program." In *ACIS 2012: Location, Location, Location: Proceedings of the 23rd Australasian Conference on Information Systems*, 1–11.
- Anderson, Benedict. 1991. *Imagined Communities: Reflections on the Origins and Spread of Nationalism*. 2nd ed. London: Verso.
- Batson, C. Daniel, Nadia Ahmad, and Jo-Ann Tsang. 2002. "Four Motives for Community Involvement." *Journal of Social Issues* 58, no. 3: 429–445.
- Bonney, Rick, Caren B. Cooper, Janis Dickinson, Steve Kelling, Tina Phillips, Kenneth V. Rosenberg, and Jennifer Shirk. 2009. "Citizen Science: A Developing Tool for Expanding Science Knowledge and Scientific Literacy." *BioScience* 59, no. 11: 977–984.
- Causser, Tim, and Valerie Wallace. 2012. "Building a Volunteer Community: Results and Findings from Transcribe Bentham." *Digital Humanities Quarterly* 6. <http://www.digitalhumanities.org/dhq/vol/6/2/000125/000125.html> (accessed January 20, 2016).
- Curtis, Vickie. 2015. "Motivation to Participate in an Online Citizen Science Game: A Study of Foldit." *Science Communication* 37, no. 6: 723–746.
- Dunn, Stuart, and Mark Hedges. 2012. "Crowd-Sourcing Scoping Study: Engaging the Crowd with Humanities Research." <http://www.humanitiescrowds.org>.
- Ellwood, Elizabeth R., Betty A. Dunckel, Paul Flemons, Robert Guralnick, Gil Nelson, Greg Newman, and Sarah Newman. 2015. "Accelerating the Digitization of Biodiversity Research Specimens through Online Public Participation." *BioScience*: biv005.
- Eveleigh, Alexandra, Charlene Jennett, Ann Blandford, Philip Brohan, and Anna L. Cox. 2014. "Designing for Dabblers and Detering Drop-Outs in Citizen Science." In *Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems*, 2985–2994.
- Eveleigh, Alexandra, Charlene Jennett, Stuart Lynn, and Anna L. Cox. 2013. "I Want to Be a Captain! I Want to Be a Captain!: Gamification in the Old Weather Citizen Science Project." In *Proceedings of the First International Conference on Gameful Design, Research, and Applications*, 79–82.

- Fichter, Darlene. 2006. "Web 2.0, Library 2.0 and Radical Trust: A First Take" (April 2, 2006). http://library.usask.ca/~fichter/blog_on_the_side/2006/04/web-2.html.
- Haythornthwaite, Caroline. 2009. "Crowds and Communities: Light and Heavyweight Models of Peer Production." In *Proceedings of the 2009 42nd Hawaii International Conference on System Sciences*, 1–10.
- Liew, C. L. 2014. "Participatory Cultural Heritage: A Tale of Two Institutions' Use of Social Media." *D-Lib Magazine* 20, no. 3/4. <http://dlib.org/dlib/march14/liew/03liew.print.html> (accessed January 7, 2016).
- McKinley, Donelle. 2015. "Design Principles for Crowdsourcing Cultural Heritage." <http://nonprofit-crowd.org/crowdsourcing-heuristics>.
- Mechant, Peter, and Lieven De Marex. 2012. "Studying Web 2.0 Interactivity: A Research Framework and Two Case Studies." *International Journal of Interactive Communication Systems and Technologies* 2, no. 2: 1–18.
- Oomen, Johan, and Lora Aroyo. 2011. "Crowdsourcing in the Cultural Heritage Domain: Opportunities and Challenges." In *Proceedings of the 5th International Conference on Communities and Technologies*, 138–149.
- Owens, Trevor. 2013. "Digital Cultural Heritage and the Crowd." *Curator: The Museum Journal* 56, no. 1: 121–130.
- Preece, J., and B. Shneiderman. 2009. "The Reader-to-Leader Framework: Motivating Technology-Mediated Social Participation." *AIS Transactions on Human-Computer Interaction* 1, no. 1: 13–32.
- Raddick, M. Jordan, Georgia Bracey, Pamela L. Gay, Chris J. Lintott, Carie Cardamone, Phil Murray, Kevin Schawinski, Alexander S. Szalay, and Jan Vandenberg. 2013. "Galaxy Zoo: Motivations of Citizen Scientists." *arXiv.org e-print arXiv:1303.6886*.
- Reed, Jason, M. Jordan Raddick, Andrea Lardner, and Karen Carney. 2013. "An Exploratory Factor Analysis of Motivations for Participating in Zooniverse, a Collection of Virtual Citizen Science Projects." In *Proceedings of the 2013 46th Hawaii International Conference on System Sciences*, 610–619.
- Ridge, M. 2013. "From Tagging to Theorizing: Deepening Engagement with Cultural Heritage through Crowdsourcing." *Curator: The Museum Journal* 56, no. 4: 435–450.
- . ed. 2014. *Crowdsourcing Our Cultural Heritage*. London: Ashgate Publishing.
- Rotman, Dana, Jen Hammock, Jenny Preece, Derek Hansen, Carol Boston, Anne Bowser, and Yurong He. 2014. "Motivations Affecting Initial and Long-Term Participation in Citizen Science Projects in Three Countries." In *iConference 2014 Proceedings*.
- Russo, Angelina, Jerry Watkins, Lynda Kelly, and Sebastian Chan. 2008. "Participatory Communication with Social Media." *Curator: The Museum Journal* 51, no. 1: 21–31.
- Wiggins, Andrea, and Kevin Crowston. 2011. "From Conservation to Crowdsourcing: A Typology of Citizen Science." In *System Sciences (HICSS), 2011 44th Hawaii International Conference*, 1–10. <http://www.computer.org/csdl/proceedings/hicss/2011/4282/00/07-04-02-abs.html>.