Teachers' Domain Pathways Stage II Evaluation: Focus Group Report

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SUBMITTED TO:

WGBH Teachers' Domain

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Executive Summary

This report presents findings from formative research conducted by Education Development Center's Center for Children and Technology (EDC/CCT) on behalf of WGBH Educational Foundation as part of an evaluation of the National Science Foundation-funded project, *Teachers' Domain: Pathways Stages II*.

EDC/CCT reviewed social media tool use on teacher-oriented websites and conducted focus group interviews with PreK-12 teachers, library and media specialists, and professional development staff in order to understand educators' attitudes towards and use of social media tools. More specifically, EDC/CCT asked: (1) How do teachers use social media tools in professional contexts, and for what purposes? (2) How are teachers likely to use social media tools in the near future?

A key finding of the focus group interviews was that teachers we spoke with have a common goal when they go online for professional purposes, which is to find high-quality materials that enhance their students' learning experiences. They welcome the use of social media tools if, and only if, it helps them achieve this goal. They stressed that any social media tool, such as ratings, reviews, or user profiles, needs to be easy to use.

Focus group participants envisioned three main purposes for social media use:

- Finding appropriate rich media resources, activity ideas, and lesson plans more efficiently.
- Learning from and communicating with other educators.
- Storing, organizing, adapting and sharing rich media resources and related materials in one place.

As TD moves forward with its enhancement efforts, it should be careful to retain the features that make it so attractive to its current user base. Teachers appreciated that the site attracts a community of educators and, for this reason, were unenthusiastic about encouraging student access to social media tools on the site. Furthermore, they voiced concerns that new opportunities for teachers to upload content may result in resources of lower quality.

EDC/CCT's next steps include conducting a series of talk-aloud sessions in order to gather feedback from educators using prototypes of the social media tools the TD team decides to develop.

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Introduction

WGBH recently received a grant from the National Science Foundation to enhance the utility and appeal of *Teachers' Domain* (TD) by integrating social media tools; expanding the reach and user base of TD; expanding TD's content offerings; and providing in-person and online workshops to support TD use. The Education Development Center's Center for Children and Technology (EDC/CCT) serves as the external evaluator of the project, focusing on formative research around social media tools. Because these tools are still novel in educational settings, it is not yet clear how they can be designed and organized to support high-quality instruction rather than serve as a distraction for users. EDC/CCT is gathering formative data from educators and reviewing the current media landscape, to provide WGBH with guidance about how to design and integrate social media tools in a productive way.

The overarching research questions that guide this work are:

- How can social media tools be designed so that they provide teachers with meaningful, productive ways to engage with their peers?
- When teachers have access to social media tools to interact with peers and students around rich-media resources, what do they do with them?
- What instructional needs do teachers have when using the *Teachers' Domain* site that social media tools would help address?

Our first task is to help TD staff understand how educators are currently using social media tools for professional purposes and how the TD website can support teachers' professional practices. In order to accomplish this, first we reviewed social media tool use on teacher resource websites, gathered information from prior research at CCT, examined the preliminary wireframes prepared by WGBH, and prepared a memo for WGBH staff (dated January 14, 2009). We then conducted a series of five focus group interviews investigating the questions: (1) How do teachers use social media tools in professional contexts, and for what purposes? (2) How are teachers likely to use social media tools in the near future? Each group focused on a different group of educators: elementary school teachers; middle and high school teachers; a group of middle school teachers from the same school; science professional developers; and library media specialists and technology teachers.

This report presents the focus group findings after a brief explanation of our research methods. At the end, we offer conclusions and ideas for next steps.

Research Methods

Focus groups were an appropriate method because we wanted to understand the professional use of social media tools from the perspective of diverse groups of educators. Each of the five focus groups contained educators who had similar professional roles:

- Elementary school teachers
- Middle school and high school teachers
- Colleagues at a suburban middle school
- Librarian/Media specialists and technology teachers
- Science professional development staff who work at a regional education organization

Focus groups, also known as focus group interviews, are essentially guided group discussions and are used in qualitative research to generate an understanding of participants' experiences. Focus groups provide rich qualitative data, wherein participants facilitate each other's understanding of the issues, are less constrained by their role as the interviewee, and are able to elaborate and defend their views in the company of their peers (Stewart & Shamdasani, 1990; Morgan, 1998). Kreuger (1988) suggests that six to ten participants is the ideal number for focus group interviews, unless participants are known to have a great deal to share or a lot of experience regarding the topic. In that case, smaller groups of four to six are preferable. Our focus groups ranged from six to nine participants, with the exception of the group of science professional development staff, which contained four participants.

Using a variety of recruitment methods – a blast email to registered TD users in the New York area; outreach to participants in WNET/VITAL trainings; and contacting participants of prior TD evaluations – we invited educators to participate in a focus group and offered an honorarium to thank them for their time. We received approximately 200 responses to the blast email and selected participants based on their grade level and professional role, in the order of valid responses we received (i.e., ones that included all the requested information).

We developed a semi-structured interview guide based on the goals of the formative evaluation. It addressed topics such as: how educators spend their time online for professional purposes; how they find and select instructional resources; how they organize and store instructional resources they find online; whether they adapt resources they find; how they connect with other educators online; their use of TD with students; and their reactions to mocked-up *Teachers' Domain* resource and profile pages that incorporate social media tools. Participants also filled out a questionnaire about the frequency of their use of *Teachers' Domain*, their use of social media websites for personal and professional purposes, their familiarity with various social media tools, and whether social media websites were blocked at their schools.

Focus groups lasted between 75 minutes (1 hour 15 minutes) and 105 minutes (1 hour 45 minutes). Each group had a moderator and one or two assistant moderators who took detailed notes. Every session was audiotaped as a back-up. At the beginning of each session, participants received an explanation about the purpose of the evaluation and the focus group. We told them that the focus group conversation would be used to write a report in which their names and any other identifying information would not be used.

The three EDC/CCT researchers who conducted the focus groups worked together to analyze the data for common themes as well as divergent views. They shared emergent themes with colleagues who have also done work in the area of teachers' use of technology – social media tool use in particular – in order to get additional perspectives on the data.

Participants

Participants came from schools in all five boroughs of New York City; two New York area suburbs; and a regional education agency in the Midwest. Teachers taught at a range of schools, including private and parochial schools as well as public schools. Five participants worked at a district office, providing technical assistance and professional development in instructional technology use to a group of schools, and four of the participants served as science consultants, providing technical assistance and professional development for groups of districts. Focus groups included new teachers and veteran teachers; they ranged from one year to over 30 years of teaching experience. Several participants were career-changers. In total, 33 educators participated in the focus groups. For more details about participants, see Table 1 below.

Their familiarity with and use of social media for professional purposes, and their use of rich media in the classroom, were diverse. The technology teachers and library professionals used a variety of social media (social networking; viewing and uploading videos; reading blogs; writing or commenting on blog entries; and using wikis). Teacher use of these tools was more mixed; very few used social networking sites or read blogs for professional purposes. More than half of the teachers view videos and use wikis for professional reasons, but less than half upload videos or write or comment on blog entries.

All teachers reported that they searched for resources online. Many used computer-based resources in their classrooms, generally as part of whole-group instruction, projecting video clips, interactives, or images onto a screen using an interactive white board or projector, or having students gather around one computer.

About half the educators were medium to high users of *Teachers' Domain* and half were low users or had never used *Teachers' Domain,* as measured by their responses on the questionnaire they filled out as part of the focus group.

Limitations

The focus group interview approach was appropriate for this study but, as with any research method, it has its limitations. Focus groups offer insight into participants' experiences and opinions, but do not predict future behavior. Moreover, we cannot generalize the results because participants may not be representative of all educators. We made every effort to recruit a diverse group of participants, but because we conducted the majority of focus groups at our office in New York, recruitment occurred mainly in the New York area. More than half of the participants work in New York City public schools. In addition, valid responses to the blast recruitment email came overwhelmingly from women; consequently, our focus groups mirror that response, with six men and 27 women in total.

Table 1: Focus Group Participants

FOCUS GROUP	COMPOSITION
1 Elementary school teachers	Participant 1: Science teacher (public school) Participant 2: Pre-K teacher (public school) Participant 3: 1st grade teacher of ELLs (public school) Participant 4: 2nd grade teacher (public school) Participant 5: K-2 science teacher (public school) Participant 6: Pre-K/1st grade teacher (public school) Participant 7: Elementary school teacher (public school) Participant 8: High school science teacher* (public school)
2 Middle school/ high school teachers	Participant 1: Math teacher, grade 6 (private school) Participant 2: Science teacher, grades 9-10 (public high school) Participant 4: English and special education teacher (public high school) Participant 5: English and history teacher (selective public middle school) Participant 6: Science teacher, grade 8 (public middle school) Participant 7: Math teacher, grades 9-10 (parochial school)
3 Teachers in suburban middle school that participated in VITAL training	Participant 1: Science teacher, grade 6 Participant 2: Math teacher, grade 6-7 for students requiring additional support Participant 3: Science teacher, grade 6 Participant 4: Math teacher, grade 6 Participant 5: English Language Arts teacher, grade 6 Participant 6: Bilingual math teacher, grades 6-8 Participant 7: Science teacher, grade 8 Participant 8: English Language Arts teacher, grade 6 Participant 9: "More able learners" enrichment teacher, all subjects, grades 6-8
4 Science consultants	Participant 1: Science consultant to elementary schools in rural area Participant 2: Science consultant to smaller K-12 districts Participant 3: Science consultant to larger K-12 districts in metropolitan area Participant 4: Science consultant and PI on math-science partnership grant
5 Librarian/Media specialists; technology teachers	Participant 1: Computer teacher & staff developer, K-8 school Participant 2: MS/HS Library Media Specialist Participant 3: Technology teacher, Middle School Participant 4: Technology Consultant, NYC Department of Education Participant 5: Technology teacher & staff developer, Elementary School Participant 6: Technology teacher & staff developer, Elementary School

* *Note: This high school teacher participated in the elementary group due to a scheduling error.*

Note: because of the short turnaround time between the focus group interviews and the report, we did not transcribe the audio recordings. Quotes come from the detailed notes taken by the researchers during the focus group sessions.

Results

Educators said that, at this point in time, they envision three main purposes for social media use:

- Finding appropriate rich media resources, activity ideas, and lesson plans more efficiently;

- Learning from and communicating with other educators; and
- Storing, organizing, adapting and sharing rich media resources and related materials such as Powerpoint presentations or instructions to students, in one place.

Finding appropriate rich media resources, activity ideas, and lesson plans more efficiently

Teachers, and those who support them, were focused on how to find high-quality rich media resources, activity ideas, and lesson plans that were appropriate to the grade level and ability of their students, their subject area and their teaching context. They wanted materials that would enhance the learning experience for students. If social media tools can support these goals, educators welcome their use. Social media tool use that educators discussed as being helpful for these goals included:

- Reading reviews and ratings, and using passive ratings tools such as browsing resources that other teachers have viewed or downloaded.
- Looking at profiles of teachers whose comments or uploaded work are appealing – and looking at other things they've posted, such as reviews and materials.
- Using enhanced methods of finding resources.

RATING AND REVIEWING. Educators were enthusiastic about the idea of being able to see ratings and read reviews of resources. They noted that, while ratings and reviews feature prominently in their personal web behavior, few sites offered opportunities to rate and review educational resources. Several participants said they would be likely to peruse the ratings and reviews of resources but unlikely to contribute them, while others said they would likely rate and review resources that they really loved or really hated.

Generally, educators also liked the idea of getting resource recommendations in a variety of ways (e.g., "teachers who viewed this also viewed"). Some, but not all, said they would appreciate recommendations based on popularity, such as number of downloads or number of views, with the attitude that the more data they had available, the more efficiently they would be able to browse and select resources. Others were critical of these approaches, saying things like, "maybe I viewed it but didn't think it was appropriate" or "something rated favorably by a bunch of math teachers may be useless to me as a science teacher."

Everyone stressed that the process of viewing and contributing ratings and reviews needed to be easy and fast. They frequently mentioned the ease of rating DVDs on Netflix (e.g., "you recently downloaded this resource. Take a moment to rate it!") and the passive rating features commonly found on shopping websites. Educators also said that information about the raters would be useful because it would allow them to judge whether their ratings are meaningful to them.

> *Time is a key factor. I don't want to waste my time looking at something that teachers say stinks.* (Technology teacher)

It's important that the rating system is not overly complicated, because teachers just don't have the time. (Elementary teacher)

Classroom teachers are so bogged down. They won't rate a resource if the process is too cumbersome. (Technology teacher)

I will read a review as long as it's short. I'm not going to read three paragraphs of someone's opinion. (Technology staff developer)

It would be useful if ratings included a link to the raters profile. I want to know where the rater is from, what subject they teach, what grade they teach, etc. (HS science teacher)

One group seized upon the popular restaurant review brand, Zagat, as a model and recommended that TD include three to five optional rating categories in addition to an overall rating. These educators suggested categories such as quality of video, student reaction, and ease of curriculum integration.

Use a system like Zagats, where they have set categories like price, ambience, etc. People will become used to these categories and come to expect them. (MS/HS librarian)

Less is more. Just have a few [rating] categories. (Technology teacher and staff developer)

In sum, the following attributes of a ratings and review feature are important to the educators we spoke with:

- Ability to see a summary of ratings.
- Ability to sort ratings and reviews (e.g., by geographic location, grade level of students, date, number of stars, etc.)
- Seeing just a few lines of text on the screen for each review, and providing the opportunity to read more details for those who are interested.
- Allowing reviewers to insert links to related resources in their reviews.
- Ability to have or access threaded discussions about a resource's content, application, or classroom use.

USER PROFILES. Educators said they would most likely look at the profiles of teachers whose ratings, reviews or uploaded materials they found helpful. They expect that visiting these profiles would lead them to additional quality resources. Despite the perceived benefit of accessing other user profiles, most educators we spoke with said they would be unlikely to create their own. Teachers cited concerns relating to privacy, school district administrators' resistance to publicizing information about their school, and concerns that parents would take advantage of the new communication opportunity.

I wouldn't want parents to figure out a new way to contact me. (1st grade teacher)

Educators who said they would create a user profile said they would not include a photo or links to their personal social networking sites. Moreover, participants said they would like control over how much information they reveal on their profile pages, including their names and school names.

> *I wouldn't put my picture out there…I would purely be interested in finding other Pre-K teachers.* (PreK teacher)

> *This is New York City and there are other people out there who are looking to get your information to advertise to you…you might get all these people trying to contact you.* (Elementary school teacher)

> *I don't think for the purposes of this website you need a photo. Who cares if I have brown hair? If I have a good resource, that's what's important.* (Elementary school teacher)

ENHANCED WAYS OF FINDING RESOURCES. Participants raised a host of practical issues regarding user-generated content. Some teachers said they seek out teacher-created materials, and would want ways of doing that on TD. Others said they would prefer to focus on TD-created materials. All wondered how the user-generated materials would be categorized, or "tagged," and whether user-generated and TD-created resources would be clearly differentiated in the search function.

Participants in our focus groups wanted more options than TD currently has for searching and sorting materials. Several educators said they would be apt to tag items if it were easy, though questions remain about how they would find relevant teacher-created resources: will there be opportunities to tag items using pre-determined or user-generated tags? Educators also said they wanted an expanded list of key words and categories that they could use to generate tags and search for resources. Similar to how they would like to interact with ratings and reviews, they would like to be able to sort search results by various criteria, including media type, grade level, and rating. They suggested additional categories TD might consider:

- Resource creator (to distinguish between TD-created and user-generated resources): educators stressed that this will be very important when users begin uploading their own materials.
- Level of interactivity (e.g., appropriate for interactive white board? This was a particular concern of New York City teachers)
- Video content type (e.g., animation, interviews/talking heads, interactive, documentary, etc.)

The following comments from teachers highlight their priorities and suggestions when it comes to finding high-quality resources.

> *I look for resources that are teacher-created. I think it's more appropriate to what we're teaching if another teacher created it and used it. Maybe there's feedback on how they used it, what worked, what didn't work. I think that's very helpful.* (MS math teacher)

[It's] important to make it really clear what is a TD resource, and what is a user-customized resource. (Science professional development staffer)

If I started getting used to tagging, I would do it. It's like you're giving something back. It would be cool if the keyword you searched for automatically went into the database. (Elementary science teacher)

It would be great if it said, "Teachers of your subject tagged this video." (MS math teacher)

Maybe Teachers' Domain could have a list of tags and the person who uploads a resource could tag it using one of these tags. (MS/HS librarian)

In addition, participants suggested that users be able to set up automated notifications, so they could be alerted when new resources in a particular topic area are added.

I would like to get an email when something new is uploaded—that would be interesting to me. (MS math teacher)

On Facebook, when a friend leaves a comment I get notified. It would be great if I got an alert when a teacher like me uploads something. (Technology teacher)

Learning from and communicating with other educators

Educators said that they frequently got recommendations and ideas about online resources and activities from colleagues as well as professional listservs and discussion boards. They were excited about the potential of expanding the universe of trusted advisors and colleagues; finding educators who teach the same subject and similar students as well as those who are like-minded in terms of pedagogical orientation; and getting advice from more experienced educators who might serve as informal mentors.

There should be more opportunities for teachers with a lot of experience to share with newer teachers . . . The best resource for me is other teachers. I want access to other teachers. The content is on TD and if I'm planning a lesson, I like the fact that I can send a teacher a message and get feedback on the lesson I'm developing. (MS Technology Teacher)

Our best resource for finding resources is talking with other teachers. Regardless of the setting, there are common experiences. (MS English and history teacher)

The ways teachers could imagine going about this included watching videos of classroom lessons for professional development purposes and also to show to students. Several teachers mentioned searching for videos of teachers teaching that they could use in the classroom, noting that students often pay more attention when video is involved, perhaps

because of the novelty or change. One technology-using middle school social studies teacher told us he has started to videotape himself lecturing, because students pay more attention to it. "There's something about being trained to absorb something on a screen that makes them more attentive," he said. Participants could also envision checking out the user profile of someone whose user-adapted version of a TD resource, user-uploaded materials, or comments are appealing, with the possibility of contacting the user or browsing through his or her other materials.

Educators told us that if they were to contact users directly, they would expect a double-blind email system[1] to be in place to protect their privacy. According to several teachers, using an email system like this would be preferable to posting comments or questions to the user's profile page. A feature like this could also provide a way for users to communicate with site developers. One participant suggested that TD offer a virtual "suggestion box."

Participants did not show any particular enthusiasm about connecting with educators they already knew. It seems that most feel they can already connect with their colleagues, coaches, and others in their networks through other electronic means.

> *[User profile] information would help you find your teaching twin, which would be really helpful.* (HS science teacher)

> *[Opportunities to connect electronically] help teachers who are geographically stretched out. It gives professional development to teachers without forcing them to travel.* (Science professional development staffer)

Storing, organizing, adapting and sharing rich media resources and related materials such as powerpoint presentations or instructions to students, in one place

STORING AND ORGANIZING RESOURCES. Having a place to store and organize resources, and share them with others, was attractive to our participants – as long as it's easy, free, dependable and reliable, and 'worth it' in terms of having high-quality and quantity of resources available.

> *Having a place to store [and share] resources is very appealing. I'm thinking specifically of a group of six elementary teachers that I work with. It would be wonderful to share [resources] with the larger faculty on a site like Teachers' Domain.* (Science professional development staffer)

[1] As examples, participants cited such models as Craigslist, match.com, and FaceBook's "inbox" (versus writing on someone's "wall").

Educators report storing bookmarks and resources in a wide variety of ways. They save resources and URLs on flash drives (i.e., in a word processing document with links or the downloaded or adapted resources); bookmark them on their browser at home and work; or bookmark or save them on district-provided web server or school or district website. With the exception of the technology teachers, few participants use social bookmarking tools such as deli.cio.us or Portaportal on a regular basis, although several participants are aware of these tools through professional development experiences; they choose not to use them because they seemed too complicated to set up and maintain.

> *I download resources from TD, but I also save them in my TD folder. It's good because I have it from year to year.* (Elementary science teacher)

> *I took a course that taught how to use the internet in classrooms. I learned about del.icio.us, an online portal to store all your bookmarks. . . I enjoyed the tagging aspect of it because I forget which websites have different features. The problem is that it's so much work upfront. . . I was into it for a while, but during the school year I don't have the time to really organize it all. It's a summer project.* (Elementary teacher)

> *I have a Word document and I copy and paste web links with a short description. It's on my thumb drive, or I email it back and forth.* (HS science teacher)

> *We have a wiki space, where all digital resources go. Anything that's relevant goes there. It's a wiki for everyone – the technology staff; the teachers. It's open.* (Technology coordinator)

Educators were enthusiastic about the prospect of storing and organizing their resources on TD if personal folders were easy to maintain. Before investing much effort, though, they would want assurance that access to their folders would be free for the foreseeable future. Several teachers told us that they had lost access to their resources when sites began charging for membership or grant monies ran out.

USER-UPLOADED AND USER-ADAPTED RESOURCES. Participants expressed a definite interest in *using* teacher-generated resources, but they were less than unanimous about adapting and uploading resources. Almost all teachers said that they adapt text-based resources they find online for their own classroom use. However, few participants, apart from the technology teachers and a couple of technology enthusiasts, said would remix the video. They told us they would be more apt to upload presentations, visuals, and other support materials relating to rich media on the TD site. The key to adapting and uploading their own content, participants said, is ease of use. In all groups, participants noted that user-generated or user-adapted materials should be clearly differentiated, both in terms of how they appear on the webpage and how they show up in search results, to distinguish them from TD-created materials.

> *I like the idea of user-customized versions because of the creative element. We are at our peak when we are creators. To see how teachers customize these video clips to meet the*

needs of their learners is intriguing and revealing, and could lead to a lot of interesting reflection and dialogue. (Science professional development staffer)

I don't know how interested regular teachers would be in editing resources like videos. They just don't have the time. (Technology staff developer)

Note: the teacher-created video of a class activity featured in one of the mock-ups set teachers' antennae off; they could think of a host of reasons why sharing this sort of video would not work due to student privacy concerns, and school and district regulations. In the two conversations with groups that contained staff developers, participants suggested having a sort of checklist for users who upload materials related to copyright issues, privacy issues, etc. that could serve as a step in the vetting process.

SHARING RESOURCES WITH STUDENTS. Teachers were enthusiastic about enhanced capabilities for managing student and class registration, although currently most educators in our groups use resources like TD with the whole class,[2] through use of a projector or interactive whiteboard, or gathering students around a computer screen. They expressed interest in being able to easily direct groups of students to certain resources, or let them roam free; this varied mainly by grade level.

Kids are so digitized that if I want to connect with them, I have to use technology. A YouTube video of me explaining the same thing I would explain in class gets their attention a lot more. (MS English and history teacher)

Teachers disagreed about the amount of information they would like to see on their students' use of TD.

What I'd love to be able to do is have modules where I take the videos with my questions and give the kids an opportunity to blog about it, like a multimedia homework assignment. (Technology teacher)

I'm so tired of assessments. Teachers shouldn't have to spend time evaluating online assessment reports. It's gotten to the point where if teachers have to enter in a student roster, I know they won't use it. (Technology staff developer)

Conclusion & Next Steps

– *It's* **Teachers'** Domain*, not* **Students'** Domain.

– *Content is key; the features are useless if the content isn't good.*

– *[Although] we peak when we are creators, don't dilute quality with quantity.*

[2] For this reason among others, teachers want access to high resolution video clips so they can use the full screen view for videos.

Its current website model has served *Teachers' Domain* well. Educators value the quality of the resources along with the fact that the videos, lessons plans, and background information have the imprimatur of the public television station that has produced shows such as *Nova.* Furthermore, educators appreciate the length of the clips along with the other rich media and background materials. Finally, the price is right; some educators pay for low-cost website memberships and their schools or districts sometimes pay for subscriptions to services such as Discovery Streaming, but participants find they cannot rely on these services from year to year.

As TD transitions to a website model where users have more opportunities for interaction with each other, the ability to generate their own content, and the option to browse user-generated content, it should be careful to retain the features that make it so attractive to its current user base. Three major concerns educators voiced during our focus groups are encapsulated by the quotes at the beginning of this section. First, participants expressed a strong desire for *Teachers' Domain* to remain a site that privileges educators; while teachers use the rich media resources with students, the majority want only educators – not students or their parents – to have access to the social media tools. Second, while social media tools might enhance the TD user experience, the educators value the high-quality resources on the site. They indicated that they will value the new features only to the extent that they help them find more high-quality resources. Third, some – particularly participants who are involved in professional development activities – did not want the quality of materials available on *Teachers' Domain* to be eroded by the introduction of user-generated content.

All the educators we spoke with want resources to further their teaching and learning goals, and are interested in the tools and features that will help them find high quality rich media materials. Many are engaged in social networking and use social media tools for both personal and professional purposes; they expect options that will allow them to customize and personalize their experiences with the media. In addition, participants are familiar with ratings and reviews but do not typically encounter them on educational resource sites, and approve of efforts to incorporate them into TD.

It is important to note that our focus groups represent a snapshot of social media use by educators – a particular moment in a rapidly evolving field. This work is exploratory, as users' understanding of their needs for this information and these tools is not yet well developed. There is not an established set of beliefs or practices in the culture of education professionals around the purposes and uses of social media tools. The educators we spoke with sometimes had a hard time imagining how they might use the social media tools to network with other teachers. We see a parallel with FaceBook; we have heard people say that they didn't know what they would do on FaceBook until they actually started using it.

Similarly, we don't yet know what elements of professional identity will be served by social media tools. Tellingly, only three educators shared stories about how they used FaceBook professionally. One created two profiles, one presenting her professional self and the other for personal purposes. Another, stating that she was among the first cohort of college users of FaceBook and cannot imagine life without it, described how she set up a group for her

school colleagues, and limits the elements of her profile that they can see. A third participant recounted her recent foray onto FaceBook, where she joined a group of alumni from the teacher education program where she completed her degree; they recently had an interesting discussion about legislative efforts to legalize the discussion of "intelligent design" in schools, she told us.

Overall, the educators we spoke with were receptive to using social media tools such as ratings, reviews, comments, tagging, etc., on *Teachers' Domain*, provided it was easy to do. One teacher suggested having available a brief 'tour' that explained how, and why, to use the tools.

As the TD development team moves forward with this project, we suggest they keep in mind the teacher types, or personas, we wrote about in our memo dated January 16, 2009:

- *Teacher Islands:* teachers who work alone to get their job done.
- *Silent Consumers*: those who may integrate the resources and ideas of others into their classrooms, but are unlikely to play an active role in sharing, networking, and communicating.
- *Community Connectors*: educators whose professional identity is rooted in networks at their school, district, discipline, or region.
- *Teaching and Curriculum Leaders:* leaders in terms of curriculum development and resource sharing.

We do not yet know much about the different teacher types' use of social media tools, but we can speculate that community connectors may use the tools more actively than silent consumers, and that leaders will likely have a disproportionate amount of influence on their colleagues, relative to their small number. It may be worthwhile for TD to consider hiring teaching and curriculum leaders to 'seed' the site with user-generated content.

Other dimensions that may influence the ways educators use social media tools and their purposes for using them, include grade level (elementary vs. middle school vs. high school); the amount of teaching experience; professional role; and type of TD user (active, intermediate, infrequent, or rare, as described in ISKME, n.d.). In addition, age may be a factor; younger people might be more comfortable with these tools. However, prior research on teachers and technology shows that more experienced teachers often feel more confident in adopting new innovations, including instructional technology tools and techniques.

Next steps

For this project, we had proposed to take an iterative approach to formative research around the integration of social media tools into the *Teachers' Domain* site, providing the WGBH team with regular feedback on findings, which would inform the development of prototype tools. These prototype tools would then be used in turn in further formative research.

The next evaluation task is to conduct a series of talk-aloud sessions using prototypes of the social media tools the TD team decides to develop, in order to gather feedback from teachers. During these talk-aloud sessions, we will be mindful of the personas and the different dimensions described above that might influence teacher use of social media tools.

The EDC/CCT research team will continue to communicate periodically with the TD development team to review progress, share preliminary findings, raise questions, and discuss concerns.

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