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PROJECT PLANNING

PROJECT SCHEDULING THREE WAYS | SCOPING PROJECTS: TEN TIPS FREELANCERS NEED TO KNOW
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A Note from the Editor

Our November/December 2023 issue focuses on Project Planning, which is a key core competency of the technical communication profession. This issue features articles on best practices and techniques of project scheduling, scoping freelance consulting projects, and planning and developing content using ChatGPT in technical communication work and in the practice of legal writing. Columns in this issue feature an interview with content strategist Megan Gilhooly and a discussion of budget cuts in higher education, with important implications for technical communication academic programs. Our other features include an overview of STC's Instructional Design and Learning Special Interest Group (IDL-SIG) from SIG Manager Maralee Sautter. And finally, our spotlight section features a memorial on the life and contributions of STC Fellow Lola Fredrickson.

This issue also includes the second of a two-part feature on STC's 70-year history, focusing on the future of the profession and the Society. STC Fellows Saul Carliner, Janice (Ginny) Redish, and Karen Schriver share their concerns, hopes, and predictions for the future of technical communication. Some of these issues include how our profession will address generative AI, content creation, ethics and social justice perspectives, as well as remote work. A special thanks goes out to the STC 70th Anniversary Task Force Chair, Nicky Bleiel for her work in coordinating the many events, features, and webinars throughout 2024, which have provided us a way to celebrate and reflect upon STC's history.

As we close out another year, we look forward to the next and look forward to hearing from you, our readers. If you're interested in contributing to *Intercom*, email your topic idea or mansucript to us at intercom-editor@stc.org for review. Upcoming issues in 2024 include special issues on Training and Development and Content Sustainability, as well as featured issues on Strategic Branding, Structured Authoring, and more. Be sure to check out our updated 2024 Editorial Calendar at https://www.stc.org/intercom/editorial-calendar/ for a preview of these forthcoming issues and topics. ■

Dr. Craig Baehr
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Project Scheduling Three Ways

Technical communicators have many choices when it comes to project management tools—this case study examines three useful ones to consider.

By Dr. Liz Herman | Fellow, Celeste Graeff, and Kelly Kaiser

A comprehensive project plan includes creation and maintenance of a project schedule. Technical communicators should, at a minimum, be included in the project schedule and should understand how to schedule their work within a larger project schedule. In some organizations, the technical communicator may be responsible for managing the project schedule in total with input from the project manager and the project team. Management of the schedule entails ensuring all discrete tasks are included, owners are assigned, dependencies are charted, and task statuses are kept current.

There are numerous software tools to use for project scheduling, from the simple to the complex. The selection of a project schedule tool is directed by the complexity of the project, the availability of the tool, and even user preference. While a table created in Microsoft® Excel® might work for a simple, small project with two or three team members, a complex project, such as revising an entire training curriculum with multiple tasks, milestones, and designers, requires something more robust. Regarding project management tools, your organization may dictate what project teams use to track. You may have a personal preference when it comes to selecting a project management tool—something you are already familiar and comfortable with.

Project scheduling tools can vary during a project. For example, on a recent project, the team's project schedule migrated from Jira software to Microsoft® Project. In addition, Smartsheet was the scheduling tool of choice for a subset of content management tasks. This article introduces each of these project scheduling tools and how each tool benefitted the project at specific times during its lifecycle. Pros and cons of each will be shared to give technical communicators a solid understanding of these tools, should they wish to use them on future projects.

Software Development Project Management

At the beginning of the project, when the overall customer service product was being developed, the team used Atlassian Jira Issue and Project Tracking software. Jira, an agile project management tool, was chosen by the software development team. Because the content and training team was developing content and training materials for how to use the software being developed, it made sense for them to use the same project management tool. Moreover, at that time, the entire project was following an agile approach to project management. The Project Management Institute defines agile as "an iterative approach to work that helps teams deliver value faster and with fewer headaches. Instead of betting everything on a big launch, agile teams deliver work in small, consumable increments." With the software development team and several other project teams, the content and training team was on the Agile Release Train (ART), which the Scaled Agile Framework® (SAFe) defines as a "long-lived team of Agile teams that incrementally develops, delivers, and often operates one or more solutions in a value stream."

Jira, an agile project management tool, was chosen by the software development team. Because the content and training team was developing content and training materials for how to use the software being developed, it made sense for them to use the same project management tool.

The content and training team's agile charter outlined team responsibilities, work item types, working agreements, success measures, acceptance criteria that tasks were complete (the definition of "done"), key interaction points with other teams on the ART, and key stakeholders. While on the ART, the content and training team developed content during two-week sprints within a 12-week program increment. This cadence naturally provided start and stop dates during which team members worked tasks, which the product owner and scrum master had prioritized. Because the charter specified team interdependencies and acceptance criteria (as two examples), those tasks did not necessarily need to show up explicitly in Jira as tasks were created and moved through to completion.

The team was part of the ART and used SAFe for 18 months. Like any project management tool, one hurdle was training new team members on its use. Technical communicators are in a terrific position to develop training materials and job aids to help new team members learn how to use the project management software. In this situation, team members who were not familiar with agile project management also needed to be educated on that methodology, plus learn how to use Jira. This added a layer of complexity to the use of the Jira tool. Time for education must be factored in when the tool is used with agile project management. Less experienced project managers could inadvertently omit time to create instructional materials and onboarding new team members from the overall project plan.

Complex Project Management

When the project was in steady-state mode, the team chose to leave the ART. While the Agile methodology worked tremendously well for the team when the entire project was aligned to a product release, that cadence was no longer necessary after the product was in production. However, leaving the train created a gap. Without the team tied to sprints and without the selection of a project scheduling tool, tasks generally took longer to complete given the lack of assigned deadlines or project milestones. Going into a new team-specific project to update all of the customer service training materials, it was apparent that a scheduling tool was needed.

Given the scope and complexity of uplifting the existing User Training for the product curriculum and the abbreviated timeline for completion, Microsoft (MS) Project was the project management software selected to support the successful delivery of the project. MS Project has a variety of capabilities to track tasks, sub-tasks, start and end dates, and resources, as well as many other data points, in a very clear and organized fashion. Also, one does not need to be an expert with using the software to successfully leverage many of its core capabilities.

Because this was a new team project and a new Project Manager (PM) was selected to manage this training project, a clear approach to designing the project plan was needed to achieve the goals for the effort. Discussions concerning tasks and sub-tasks, resourcing, and project delivery timing were critical. The PM and the lead Instructional Designer collaborated to identify the main tasks and subtasks to enhance the existing content of approximately 60 training lessons. The decided approach was to carefully identify these tasks before drafting the plan to ensure that a replicable, task-based approach could be consistently used for the enhancement of each learning module's content with as little plan rework as possible.

MS Project has a variety of capabilities to track tasks, sub-tasks, start and end dates, and resources, as well as many other data points, in a very clear and organized fashion.

After the full training uplift tasks, subtasks, and resources were determined, they were added to the tool. For each lesson, there were 16 replicable subtasks that defined the team's training uplift cycle. These included analysis, design, quality assurance testing, SME feedback, training pilots, exam updates, and learning management system hosting verification. The resulting plan, which took approximately 20 hours to create, update, and proof, exceeded one-thousand lines.

Adjusting the Project Management Plan

To easily navigate the tasks, subtasks and other information, the original plan was separated into four smaller plans based on lesson skill-level groupings. The content uplift tasks and subtasks noted above remained consistent for each lesson in each plan. The Start Dates and Target Completion Dates were forecast within each plan but were regularly adjusted due to factors such as Subject-Matter-Expert (SME) availability, and other competing, business-related priorities that affected resourcing. Each team member was initially tasked to make updates to the plans for their respective project assignments; however, this approach became

cumbersome as co-authoring capabilities were not available. Ultimately, the PM assumed the responsibility of updating all task start dates, completion dates, and resourcing, gathering the information during brief, Agile-inspired daily project meetings, to ensure that the project plans were always current.

After the task update approach was refined, the Gantt Chart view in MS Project enabled everyone on the project team to know the status of their task assignments as well as the overall project. The data captured in the plan's Duration field will help the team improve forecasting the time necessary for future training content uplift efforts. This benchmark of the team's current capabilities will be a helpful measure as they work toward becoming more efficient with training content development.

Task and Milestone Project Management

While the training team tackled their project using MS Project for task and project management, the content team chose a different project management tool called Smartsheet to help them deliver customer service scripts, job aids, and informational alerts.

The team members who handle content creation of items such as job aids, SOPs, and knowledgebase articles identified another gap after no longer relying on Jira for project management. Requests for new content or updates to current content were coming in from multiple sources and landing in the Inboxes of several members of the team. It became clear that there was no process for the intake and management of these various requests, so the team decided to use Smartsheet.

Smartsheet is a robust, cloud-based solution that offers various features to help with the management of project logistics, details, and communication. It helps users easily create, manage, and report on tasks to make a process more streamlined and automatic. It combines features available in several other tools into one simple platform. Smartsheet has scalable, dynamic features with automatic, live updates that can rapidly respond to changes.

The team likes that Smartsheet has similar features to Excel® and PowerPoint®, because the learning curve for new users is small. Since no coding skills are necessary, Smartsheet is very user-friendly and intuitive to learn. The built-in automation features make Smartsheet so much more robust than a simple spreadsheet program. It also integrates and works easily with the team's existing tools including Microsoft Office and Teams, and others like Salesforce, Jira, Adobe Creative Cloud, DocuSign, ServiceNow, Okta, and Slack.

Smartsheet is a robust, cloud-based solution that offers various features to help with the management of project logistics, details, and communication.

The intake process for data/tasks can be done by entering them into a spreadsheet, or using one of the customizable, robust, branching forms that enables the user to add attachments. Our team uses the form for the intake of requests, so that other teams can complete and submit the form, and it automatically populates a sheet with a list of all the requests.

The sheets can be viewed as a spreadsheet, Gantt Chart, calendar, or task cards like Jira, so it was an easy transition for the team. Comments can be created and tied to a whole sheet, task card, or row. This makes communicating about each request easier and more streamlined for the team members—no more searching through email threads to see the progress of a task! The team likes the ability to assign tasks and have Smartsheet automatically send notifications and reminders. We also set up alerts to let us know when the assignees made updates to their tasks. The review/approval process in Smartsheet allows our team to either proofread and approve content and images from within the sheet, or use documents attached to each row/request in the sheet.

Reporting to colleagues and leaders on the various requests and tasks is easy with the auto-populated reports that are always accurate with the most current information. The reports automatically feed the chosen

data into fully customizable dashboards that house the various metrics and graphs. The metrics are automatically gathered and populated into dashboards from the reports with dynamic, automatic, live updates as users made edits in the sheets. The tool provides unique URLs for sheets, reports, and dashboards to easily share with those who don't have a subscription.

There are also different levels of permissions/access, so we can control who is able to only view and who we want to be able to edit the sheets as well as the reports and dashboards. We also set up others as administrators to help manage the access to certain data.

The drawbacks to using Smartsheet include the requirement of a subscription service (either individual or enterprise) and the need to make separate purchases for premium features. Otherwise, it is a wonderful tool that provides an easy, robust experience for our team to make work intake and managing projects and tasks more efficient and automatic.

Technical communicators have many choices when it comes to project management tools. The tools above—Jira, MS Project, and Smartsheet—offer three options to ensure the overall success of your project plan.

- Are you creating a project schedule tied to software development (planning, tracking, and product release)? Jira may be the natural choice.
- Creating a project schedule to track a complex effort with variable tasks and an abbreviated timeline (task and resource management)? MS Project enables you to organize and track easily.
- Creating a project schedule where automation is built in, and no coding is necessary (collaboration and workflow management)? Smartsheet could be a viable option.

Choose one or accept the risk that failure to include a schedule as a necessary part of a project plan can lead to cost and scope issues. Ultimately, without a schedule and without good governance around the maintenance of said schedule, the project could fail in total. Technical communicators can prevent this through advocating for and managing the project management tool for their projects. ■

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As a former teacher, **CELESTE GRAEFF** uses her extensive instructional experience to help end users more easily understand complicated issues through documentation. Her teaching past has aided her in being patient, flexible, and an apt problem solver. She is analytical, logical, and as a lifelong learner, loves to use new tools to create documentation. She travels the US with her husband and son in their huge RV full-time and loves working remotely so she can pursue her personal and professional dreams simultaneously.

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Scoping Projects: Ten Tips Freelancers Need to Know

Advance planning tips that can help you better meet your client's expectations and preserve your sanity.

By Alisa Bonsignore | Associate Fellow

"So… I'm thinking about going freelance."

The conversation always starts the same way: job dissatisfaction or a layoff pointing towards the presumably verdant pastures of freelance life. My 15 years of experience make me a prime candidate for these kinds of discussions. And then, as we talk a little more about my experiences, a wave of terror passes over the soon-to-be freelancer's face.

"I don't know how to scope projects."

Guess what? Most people don't. It's not a skill that most people have had to learn in-house. Here are 10 tips for where to begin.

1. **Do the pre-work.** In a moment of relative calm—without the client's needs staring you in the face—figure out how long it takes you to do a variety of common projects. If you're still in-house and can refer to past projects for examples, this is easier. Look back at your files, your emails, or anything that can help you track the number of hours that things take. Document this, and then add 50% to it because you'll now be doing this all by yourself. Solo work takes time.

   This is not a one-time process. At the end of every project, audit your hours. Does one phase consistently take longer than expected? Does one client always slow the process? Keep track of this so you can more accurately estimate the project the next time.

2. **Estimate project phases separately.** This includes discovery, creation, editing, etc. Make them separate line items so both you and your client know what's needed, how much time it takes, and what it costs. This also allows you to establish milestone billing, rather than trying to negotiate invoicing at some arbitrary midpoint of the project.

3. **Every project requires a discovery phase.** Employees are onboarded into companies and teams. Contractors are not. Every project requires time to familiarize yourself with the product, the competition, the customer, and the challenges—even one with a familiar company. Do not shortchange yourself on this phase of the project. The more you can learn upfront, the more valuable your contributions will be.

4. **Establish project phase timelines.** Once you know your project phases, start building out timelines. I always overestimate the timelines based on how well I know my client contact or organization. The less familiar I am with them, the less likely I am to have everything I need upfront. Therefore, I need to add extra padding for meetings, administrative work, or other challenges that stand between me and the work itself.

   Example: The project is due to start on the first of the month. By that date, the client is supposed to have sent you all relevant background information, plus the names and contact information for four subject matter experts (SMEs). The first of the month arrives, and you'll discover that you actually have one-third of the necessary background material and an email for only one of the four SMEs. A padded timeline prevents deadline slippage when you're chasing the information for the other three SMEs, and trying to get a response from the other one who wasn't told that they would be contacted by an outsider.

   And remember, as an outsider, you don't know what you don't know. Don't be afraid to ask questions, or to follow up with a request for additional information after the SME interview reveals something that hadn't been mentioned before.

5. **Show clients a real-time timeline.** Let's say that Project Phase One has you submitting your work to the client by the 15th of the month, with client responses due by the 30th. They will say that this is reasonable, even generous. And then they will promptly miss that deadline, often by weeks. Modify the client-facing timeline accordingly, showing where the breakdowns occurred and how it affects the overall project.

   Most of my clients have their own project management tools that are used internally; this is where I post updates for their benefit. For my personal timelines, I haven't found anything that works better than a plain old year-at-a-glance calendar with color-coded sticky notes that I can move around as the deadlines shift. This helps me to easily visualize where things

stand, what weeks are open, and how the projects are about to converge.

6. **Protect against rush projects and scope creep.** For every project, establish minimum turnaround times to give you the breathing room that you need. Sure, those updates may only take you one day, but they're not your only client. You have other things going on. Make sure that you have breathing room so you can fully focus on their project without distractions from other projects. If they want it faster, make it clear that they can pay extra for a prioritized spot in your queue. If the discovery phase uncovers something unexpected, make it clear that they can pay to add that in.

7. **No project occurs in isolation.** Keep in mind that none of your projects occur in a vacuum. It is entirely possible (and surprisingly likely) that three different clients with staggered deadlines can converge into one absolute hell week. Make notes in your proposal that any delays on their end can affect the speed of turnaround on your end. If you reserved the third week of the month to make the updates, that doesn't mean that you're free and flexible in the fourth week of the month.

   Sometimes you are the bottleneck to the schedule. Delays on other projects, federal holidays, planned vacations, unplanned illnesses, and other life events can affect turnaround times. Note as many of these as possible in your project estimate. My proposals have a section that says, "[Contractor] will return edited work within [X] business days unless otherwise noted in Section [ABC]." Section [ABC] lists holidays, vacations, conferences, and other known schedule bottlenecks.

8. **Make your office hours clear.** I'm guessing that you aren't planning to go freelance because you want to be online and accessible 22 hours a day. (Admittedly, I am online all the time, but clients don't need to know that.) Establish your working hours and time zone upfront, whether it's 9:00–5:00 or something that works better for you. This is especially important if you work with other time zones. I can't tell you how many times I've received an 11:00 PM email with an invite for a 4:00 AM meeting. Establishing office hours makes it clear that you shouldn't be expected to see the email, let alone attend that meeting.

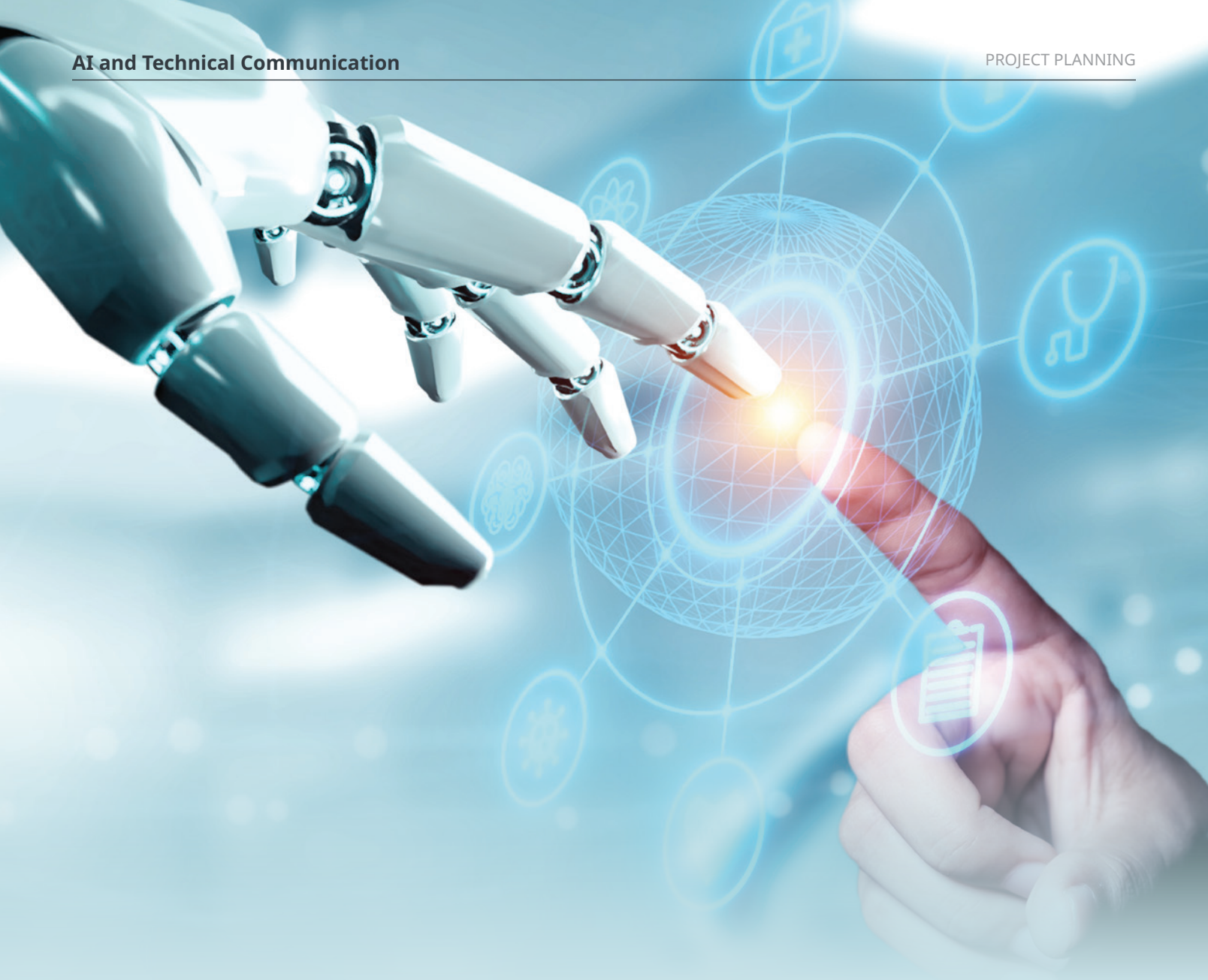
9. **Establish billing parameters.** I touched on this above, but this is an important one: make payment terms and timelines clear. Does this mean that clients will always pay promptly? No, it does not. But having this documented upfront makes the process go faster.

Establish your working hours and time zone upfront, whether it's 9:00–5:00 or something that works better for you. This is especially important if you work with other time zones.

10. **Never, ever begin work without a written and signed agreement in place.** Do you expect to be paid? Then never, ever, EVER leave things to chance. Your client contact is not the same as Accounts Payable. If you don't make it clear what you're doing in exchange for the money that they're paying, don't expect to see the money.

With a little bit of planning and preparation, you can effectively scope projects in a way that keeps clients happy while minimizing your stress levels. ■

ALISA BONSIGNORE clarifies complex ideas, developing sustainable content strategies for a global clientele. Her experience spans several industries over more than two decades, with particular focus on measuring and mitigating the carbon emissions of digital content. She is an Associate Fellow of the Society for Technical Communication, a Certified Master Gardener, and frequently speaks at conferences and workshops. She's taller than she looks on Zoom, and likely to be spotted with a crochet project in hand.



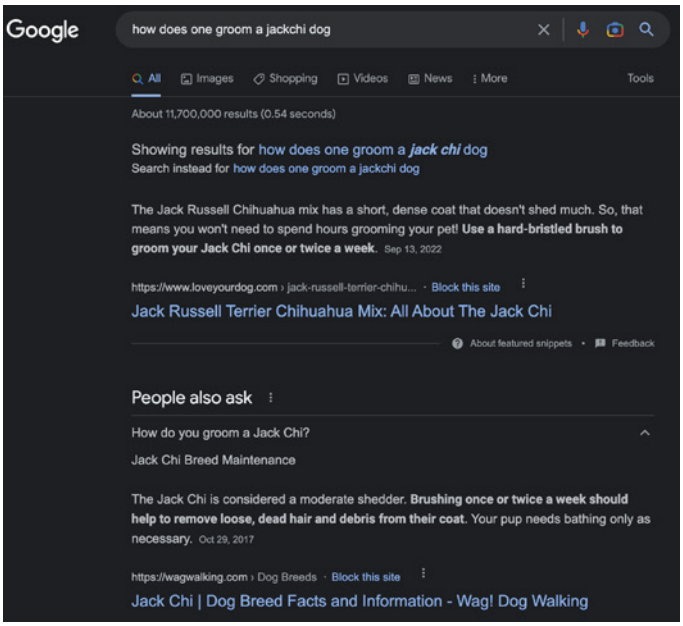
AI and Technical Communication

Understanding how AI can facilitate collaboration in a technical communication context, which can be important when using tools such as ChatGPT to plan and generate content.

By Filipp Sapienza | Member

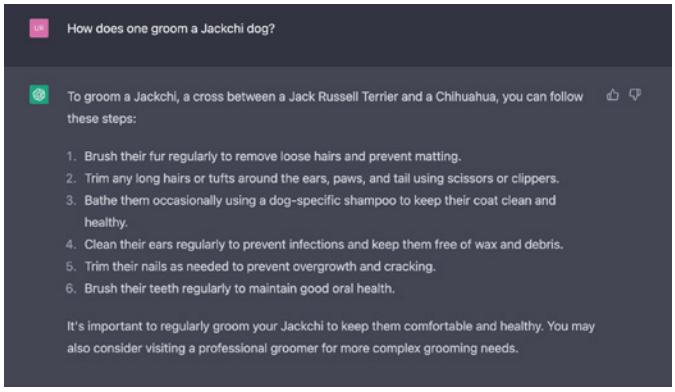
Artificial intelligence or "AI" is expected to have a significant impact on the field of technical communication by automating many tasks, such as writing and editing technical documents, creating instructional videos, and providing customer service. Additionally, AI-powered tools will be able to analyze large amounts of data and identify patterns, which can be used to improve the effectiveness of technical communication by tailoring it to the specific needs of the audience. AI will also enable the creation of more interactive and personalized technical communication experiences, such as virtual assistants that can provide real-time support. Overall, AI is likely to significantly improve the efficiency and effectiveness of technical communication, making it more accessible and user friendly for both technical and non-technical audiences.

This response was produced by ChatGPT (Chat Generative Pre-trained Transformer), an artificial intelligence chatbot launched by the firm OpenAI in November 2022. ChatGPT responds to natural language queries submitted in a web form. ChatGPT differs from a search engine in that, while the search engine retrieves existing content, ChatGPT both retrieves and produces content as natural speech.



For example, when I asked Google, "How does one groom a Jackchi dog?", it displayed a set of links to information about JackChi dogs and a couple of how-to sentences.

When the same question is posed to the ChatGPT interface, the results were more elaborate.



Core Competencies of Technical Communication

According to Rainey, Turner, and Dayton (2005), the core competencies of technical communication encompass the following:

- Skills in collaborating with both subject matter experts (SMEs) and coworkers
- Ability to write clearly for specific audiences directed by clearly defined purposes
- Ability to assess and analyze user needs
- Ability to learn to use technologies
- Ability to take the initiative (be a self-starter) and to evaluate one's own work and the work of others.

What do AI applications like ChatGPT portend for the future of technical communication? Let's start by focusing on each of these core competencies.

ChatGPT differs from a search engine in that, while the search engine retrieves existing content, ChatGPT both retrieves and produces content as natural speech.

Collaboration with SMEs and Coworkers

The ChatGPT interface can facilitate collaboration by connecting coworkers and SMEs with common knowledge repositories, from which to discuss, debate, and reach consensus on the content generated by the chatbot. This feature is necessary because the chatbot generates a lot of verbiage. In fact, OpenAI acknowledges that ChatGPT "sometimes writes plausible-sounding but incorrect or nonsensical answers." This behavior is common to large language models and is called *hallucination*.

Generating extra textual content brings up questions of information integrity. When asked to comment on the accuracy of ChatGPT's response, "JackChi person" Cory Sapienza told me, "Brushing a JackChi weekly is not an incredibly realistic goal, because their fur will shed at incredibly different rates throughout the year. Besides, it's more important to take care of their nails and ears."

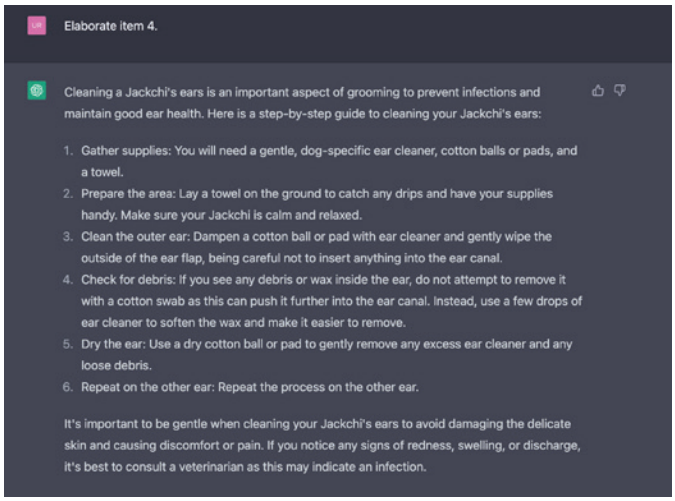
Another potential drawback is that AI may prevent collaboration if technical communicators rely on it alone rather than consult with live SMEs.

AI models require "training" from real human users. Some questions about training might include:

- What kind of SMEs will train the chatbot?
- How "expert" will the SMEs be?
- What technical skills are necessary to train a chatbot?
- How do we account for sociocultural biases that human SMEs might embed in the AI?

Clear Writing for Diverse Audiences and Specific Purposes

Unlike static documents, AI-generated content allows users to ask for clarification of a particular step. Upon confusion about cleaning a Jackchi's ears, I prompted ChatGPT to elaborate on that subject.



Elaborate item 4.

Cleaning a Jackchi's ears is an important aspect of grooming to prevent infections and maintain good ear health. Here is a step-by-step guide to cleaning your Jackchi's ears:

1. Gather supplies: You will need a gentle, dog-specific ear cleaner, cotton balls or pads, and a towel.
2. Prepare the area: Lay a towel on the ground to catch any drips and have your supplies handy. Make sure your Jackchi is calm and relaxed.
3. Clean the outer ear: Dampen a cotton ball or pad with ear cleaner and gently wipe the outside of the ear flap, being careful not to insert anything into the ear canal.
4. Check for debris: If you see any debris or wax inside the ear, do not attempt to remove it with a cotton swab as this can push it further into the ear canal. Instead, use a few drops of ear cleaner to soften the wax and make it easier to remove.
5. Dry the ear: Use a dry cotton ball or pad to gently remove any excess ear cleaner and any loose debris.
6. Repeat on the other ear: Repeat the process on the other ear.

It's important to be gentle when cleaning your Jackchi's ears to avoid damaging the delicate skin and causing discomfort or pain. If you notice any signs of redness, swelling, or discharge, it's best to consult a veterinarian as this may indicate an infection.

A user can also input casual language, and ChatGPT will reply in a friendly voice. When I wrote, "Oops! I forgot step 4," ChatGPT replied, "No worries! Here is the updated step-by-step guide to cleaning your Jackchi's ears, including step 4..."

Sometimes a follow-up request, if re-requested, will generate slightly different content from the original; other times the AI will repeat the content from the initial prompt, thus sidestepping the request for clarification. There can also be a lack of specificity in the provided content. For example, ChatGPT doesn't really distinguish between dog breeds. When I substituted "JackChi" with "Labrador Retriever," I received almost the exact same content.

Sometimes a follow-up request, if re-requested, will generate slightly different content from the original; other times the AI will repeat the content from the initial prompt, thus sidestepping the request for clarification.

Provision of tailored content is not fully consistent in the ChatGPT system. While it sometimes provides nearly identical advice for different dog breeds , in other ways, it does customize the format of the advice for different groups. Consider the following:

- AI can adapt text for different audiences. When asked to rewrite the instructions for a child, ChatGPT produced the following:

Hey there! Here's how you can take care of your Jackchi dog to make sure they look and feel great:

1. Brush their fur every day to get rid of any loose hairs and keep their fur smooth.
2. Cut any long hairs around their ears, paws, and tail with scissors or clippers.
3. Give them a bath every once in a while with a special dog shampoo to keep them clean and healthy.
4. Clean their ears once a week to prevent any ear problems. Use a special cleaner and cotton balls.
5. Trim their nails if they are getting too long to make sure they don't hurt themselves.
6. Brush their teeth every day to keep their smile healthy.

Taking care of your Jackchi is important to keep them happy and healthy. If you need help with something more complicated, you can ask a grown-up for help or take them to a professional groomer.

- ChatGPT can also employ different voices. When asked to reproduce the instructions in the voice of Geoffrey Chaucer, it rendered the following:

Good sir or madam, let me impart unto thee some wisdom regarding the grooming of thy faithful Jackchi hound. Follow these steps, and thy pup shall be kept well-groomed and hale:

1. Take thy brush, and giveth thy dog's fur a good brushing, removing any hairs that may be loose and preventing any matting.
2. Trim any long hairs around the ears, paws, and tail with scissors or clippers.
3. Bathe thy Jackchi from time to time, using a soap specifically made for canines, to keep their coat clean and bright.
4. Clean their ears with care, so as to prevent any infections and keep them free from wax and debris.
5. Trim their nails as needed, so they don't grow too long and crack.
6. Brush their teeth daily, so their oral health shall remain good.

'Tis important to keep thy Jackchi well-groomed, for both comfort and health. Thou mayhap visit a professional groomer for more complicated grooming needs.

- ChatGPT can produce translated content on demand. When asked to write the instructions in Spanish, it gave the following response:

Aquí hay cómo cuidar a tu perro Jackchi para que se vea y se sienta genial:

1. Cepilla su pelo todos los días para quitar cualquier cabello suelto y mantener su pelo suave.
2. Corta cualquier cabello largo alrededor de sus orejas, patas y cola con tijeras o cortaúñas.
3. Dale un baño de vez en cuando con un champú especial para perros para mantenerlos limpios y saludables.
4. Limpie sus orejas una vez por semana para prevenir cualquier problema de oído. Usa un limpiador especial y algodones.
5. Corta sus uñas si están creciendo demasiado para asegurarte de que no se lastimen.
6. Cepilla sus dientes todos los días para mantener su sonrisa saludable.

Cuidar a tu Jackchi es importante para mantenerlos felices y saludables. Si necesitas ayuda con algo más complicado, puedes pedir ayuda a un adulto o llevarlos a un estilista profesional.

You might notice that it produced the children's (and not original adult) Spanish version of the instructions.

ChatGPT remembers only the immediate context of the discussion. In this respect, ChatGPT is capable of producing not only an interactive form of technical documentation but also one that is a product of producer-user collaboration.

Ability to Assess and Analyze User Needs

Usability is a core task of the technical communication field. Being a text-generator, ChatGPT's capabilities in usability are somewhat limited. Other products on the market, such as *odaptos*, perform many user research functions, including reading emotional responses of users, System Usability Scale (SUS) scoring, heatmaps, automatic transcription of audio interviews, and expedited analysis of user metrics. Future releases of ChatGPT are planned to include more robust graphical components and UI analysis.

ChatGPT can provide How-To's and answers to some user research tasks. ChatGPT was prompted to explain the SUS lostness score and produced the following:

UR How does one calculate the lostness variable in usability testing?

The lostness variable in usability testing measures the extent to which a user is disoriented or confused while using a product, such as a website. The lostness variable is often used as a measure of the usability of the product.

Here's how to calculate the lostness variable in a usability test:

1. Start by recording the total number of clicks the participant made while completing a task on the product. This can be done through screen recording software or by manually counting the number of clicks.
2. Next, identify the number of clicks made by the participant that do not contribute to the completion of the task, such as clicks on the wrong menu item or misclicks.
3. Divide the number of non-contributing clicks by the total number of clicks to calculate the lostness variable. The result will be a decimal between 0 and 1, with a lower number indicating a lower level of lostness or confusion.
4. Repeat this process for each task and participant, and then average the results to get a overall lostness score for the product.
5. The lower the lostness score, the better the usability of the product, as it indicates that users are less likely to become confused or disoriented while using it.

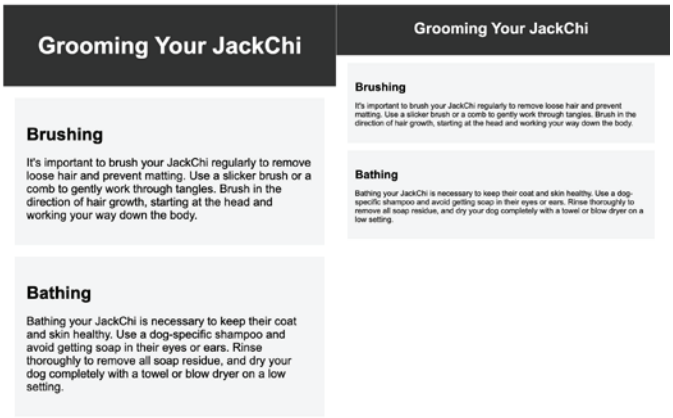
By using the lostness variable, you can gain valuable insights into the usability of your product and identify areas for improvement.

When asked to design a usability test, ChatGPT produced a more general response.

In its current manifestation, I do not have the impression that the AI interface is capable of designing an adequate research design. Intermediate steps in the response (such as number of users to test) require increasingly specific follow-up questions (asking it to specify how many for a particular type of test). Even then, I found some of the responses not completely accurate (for example, the frequent response to "number of users" to

test was 16–20, when according to Nielsen and Norman, 5–8 users is acceptable for most user tests).

ChatGPT will produce working HTML and CSS code for a basic responsive website that conforms to user interface standards. ChatGPT produces the computer code for you to copy to your clipboard and paste into an HTML editor, save as an HTML file, and load into a browser. As pictured in Figure 9, the results work well.

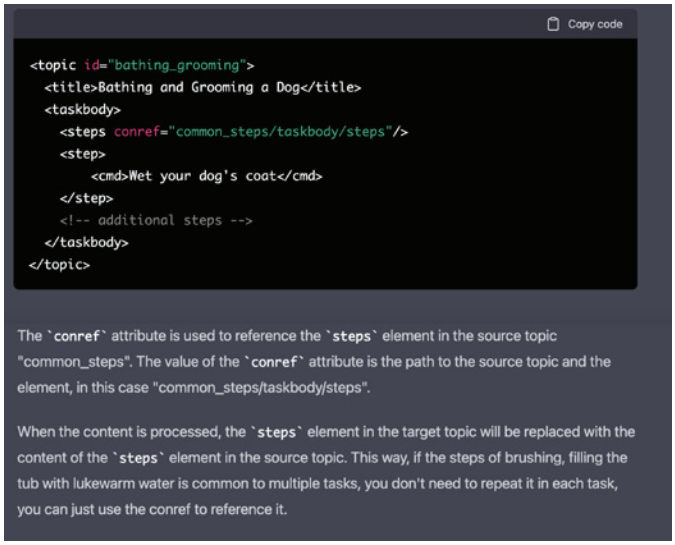


The left part shows the website squeezed to below 600 pixels wide, while the right shows the website when expanded beyond 600 pixels.

ChatGPT also produces errors when writing JavaScript and Python code. I asked ChatGPT to write JavaScript code that would track where a user clicks on a web page. It produced code that adds an eventListener() to the web page and saves where users click to a JSON file, but when I pasted this code into my editor and loaded it in the browser, it didn't work. I told ChatGPT, "It doesn't work. Please help." The answers from ChatGPT were very general and not particularly useful.

On the positive side, ChatGPT does produce well-commented code. Future iterations of AI-assisted coding should be more firmly embedded in the programmer's system ecology, where it would be able to debug code with knowledge of the system(s) on which the code will run.

ChatGPT will also produce DITA, but success depends on how the question is asked. When I asked, "Structure the above JackChi grooming process in DITA," it said, "I apologize, but as a text-based AI model, I am not able to structure the instructions in DITA format." When I reworded the question to, "provide a CONREF example from the JackChi instructions," it gave a robust and



helpful response that includes not just code but additional explanatory text about the feature.

Future AI models are expected to be multimodal, meaning having the capacity to accept and produce images and sounds that may assist user interface designers. We may be in for an AI that converts big data inputs into near real-time user interfaces.

Ability to Learn Technologies

The current ChatGPT AI is "trained" by real people using a variety of learning methods. The model also solicits user feedback to correct erroneous information. When I searched for references written about a specific aspect of the Russian theorist Mikhail Bakhtin (a philosopher often mentioned in technical writing education), the answer was not only erroneous, but included references that didn't exist.

I posed the issue of learning technologies to ChatGPT, and it gave the following response:

> As an AI language model, ChatGPT does not "learn" new technologies in the traditional sense. Instead, its capabilities are based on the data it was trained on and the algorithms used to process that data. However, updates and improvements to the algorithms and training data can be used to enhance ChatGPT's abilities and keep it up to date with new technologies. Additionally, human experts can provide feedback and input to help refine and improve the model.

Ability to Take Initiative and Evaluate Work

Of all the core competencies, the ability and willingness to take initiative may be the most important skill a technical communicator needs to work with AI. For example, practitioners will likely need to learn some data science if they are going to work with multimodal AI that can produce near real-time interfaces using big data. Coding skills may become more important to configure systems.

It's unclear what AI will look like in the distant future, but in the near term, there will be a need for technical communicators to evaluate what it produces, and to assess the accuracy, wording, and graphics used to train the systems. Since taking initiative is already built in for technical communicators, the profession is well suited to adapting to an AI future.

Future AI models are expected to be multimodal, meaning having the capacity to accept and produce images and sounds that may assist user interface designers.

Will AI Take Jobs in Technical Communication?

I posed this question to ChatGPT, and this is the answer.

> AI has the potential to automate many tasks in technical communication, such as writing and editing technical documents, creating instructional videos, and providing customer service. This could lead to some job loss in the field, as some tasks may no longer be performed by humans. However, it's important to note that AI is not likely to replace all jobs in technical communication, but rather it will change the nature of these jobs and create new opportunities.
>
> AI can assist and augment the work of technical communicator, by taking over repetitive, low-value tasks that are time-consuming and allowing technical communicator to focus on more complex, high-value tasks such as strategy, research, and engagement. AI can also help to improve the efficiency and effectiveness of technical communication, by providing insights and enabling the creation of more personalized and interactive content.
>
> In addition, AI-powered tools and technologies will also create new job opportunities for technical communicator. For example, the development and maintenance of AI-powered tools will require people with specialized skills and knowledge, such as data scientists, machine learning engineers, and AI-powered content developers, who will work closely with technical communicator.
>
> Overall, it's likely that AI will have a significant impact on the field of technical communication, but it's not likely to replace all jobs in the field. Instead, AI will change the nature of these jobs and create new opportunities. Technical communicator will need to adapt to this new environment and develop new skills to stay relevant in the field.

In a nutshell, the answer is yes and no, and the outcome is likely going to be determined by how well technical communication practitioners are willing to take initiative and adapt to a changing profession. At present, ChatGPT is akin to a "stochastic parrot," and I am not aware of parrots who also work as technical communicators, but stranger things have happened (Bender, et. al., 2021). ■

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Improving Legal Writing Skills with Help from AI

Our skills in AI use will need to be learned and developed when planning to stay ahead in increasingly competitive industries, including the practice of legal writing.

By Joseph Wilson, Co-founder — Studicata

Artificial intelligence (AI) has made headlines in recent years due to what it can bring to various industries in terms of assistance, creativity, and time savings. The field of law has long been rooted in traditional approaches to information gathering, communication, and writing. However, technology advancements had seeped their way into the way lawyers do their jobs and handle cases. Lawyers are no strangers to the benefits of tech innovation, but now, AI is poised to radically transform the law field as it grows in adoption and capability.

AI is not novel, having been around since the 1950s. Yet, the capabilities of programs like ChatGPT have ushered in an entirely new age of AI — one that has many people gobsmacked over what it can do and where we can take the technology as a society.

AI is not novel, having been around since the 1950s. Yet, the capabilities of programs like ChatGPT have ushered in an entirely new age of AI — one that has many people gobsmacked

According to a recent *Brookings* article, some adoption of AI may be integral to the survival of law firms. "Law firms that effectively leverage emerging AI technologies will be able to offer services at lower cost, higher efficiency, and with higher odds of favorable outcomes in litigation. Law firms that fail to capitalize on the power of AI will be unable to remain cost-competitive, losing clients and undermining their ability to attract and retain talent" (Villasenor, 2023).

Firms may be overwhelmed by the wide-reaching opportunities that AI presents. By starting with AI for assistance with writing, law firms and lawyers can dip their toes in the AI waters, slowly familiarize themselves with the technology, and see where AI can help them before diving in completely.

Efficiency

One of the hallmarks of AI and generative AI programs — ChatGPT in particular — is their efficiency. What may have taken hours of research and note-taking can now be compiled in mere seconds by generative AI. How lawyers use this to their advantage is multifaceted.

ChatGPT and its cohorts can help with brainstorming and list-making. If a lawyer is mired in a particularly difficult case or issue, AI can help break through that block and generate ideas, starter sentences for written pieces, outlines, and summaries. This may allow lawyers to save time they would have otherwise spent sitting around a table, tapping their pencils, waiting for ideas to strike. It can also save administrative time spent summarizing ideas or writing out pages of notes on an idea or case.

The law can often be pegged as being maddeningly slow. Lawyers understand why, but it can be frustrating for clients when months are spent on a case. With AI, efficiency is expanded. AI can be used to produce drafts and initial brainstorming lists, research related law cases and cite directly from those cases, and even help develop arguments.

Generative AI is especially adept at drafting correspondence, whether to clients or opposing parties. Although lawyers will still need to put their personal stamp on whatever they write, AI can help them generate documents efficiently — giving them the ability to dedicate time to pressing forward with cases.

The process of initiating cases can also be quickened with AI writing programs. In the past, drafting a case against someone or an entity could take some time. Today, there are innovators already working to give lawyers and citizens the ability to file "one-click lawsuits," targeting robocallers with AI writing.

Drafting Legal Briefs

One commonality with lawyers is the legal brief — the court-presented document lawyers have to draft and present on a regular basis. There likely is not a lawyer alive who hasn't come up against some level of writer's block while writing a brief. AI can help lawyers draft and complete their legal briefs quickly.

Lawyers can approach using AI to draft legal briefs in a number of ways. For one, they can give the AI prompts and request an outline, or even draft their own outlines and ask AI to fill in the gaps, fleshing out the ideas with additional context. With AI doing the majority of the heavy lifting required in writing the legal brief, the lawyer is now free to edit, add to, and complete the brief far more quickly and efficiently.

Another Eye

Lawyers can often get buried in their work. They can also get close to their cases, so much so that it can be difficult to suss out problems, missteps, or mistakes. These situations are where AI can act as another set of eyeballs on a paper, a decision, evidence, or briefs. Lawyers are often adept wordsmiths, but can benefit from having AI programs point out a different way of wording something, or even with grammatical errors that could be embarrassing if they landed in the wrong hands.

Summarizing

Legal narratives, decisions, and case documents can sometimes be frightfully lengthy and detailed. AI can analyze and summarize these documents faster than it would take most people to open the manila envelope they are contained in. If a lawyer wants to discuss a case or decision with a client or their colleagues, a summary of the full document can be helpful.

LegalMind AI Summarizer is one such program that targets the lawyer's need for quick, efficient, and easy-to-understand summaries. With programs like these, the burden of stacks of papers, rows of text, and late nights highlighting important information is lifted.

Plain Language for Clients

Although lawyers are, quite literally, experts in reading through legalese and deciphering what everything means, documents written in legal language can often be frustrating for their clients. AI can be used to turn a legal document written in legal jargon into something a client can digest and understand. This will require a lawyer's eye to make sure the AI didn't tell the client something incorrect, as generative AI is not completely foolproof. Nevertheless, it can save a lawyer the time that would have otherwise been spent translating a document laden with legalese for clients.

This ability for AI to put things into easy-to-understand, plain-language terms can also be useful for planning for addressing a group — for example, in a courtroom situation. Lawyers often have to plan their line of questioning, or opening and closing statements far ahead of time. It is important that questions are succinct and get to the heart of the matter at hand, drawing out the answers most beneficial to the lawyer's case. In addition, opening and closing statements need to be compelling and convince those in attendance that your side is right.

This ability for AI to put things into easy-to-understand, plain-language terms can also be useful for planning for addressing a group

Learning New AI Skills

A recent *New York Times* article hinted that AI is "coming for lawyers" — insinuating that their jobs may be in jeopardy due to the power of AI technology to replace much of what lawyers do. However, from all accounts, lawyers needn't fear for their jobs just yet (Lohr, 2023). Although large swathes of the administrative and written work lawyers do can be aided by AI, the human element is still required in the legal profession. While AI can be made out as a "one-button" solution to writing, drafting, and creating issues, this is far from the current reality of AI's capabilities. Lawyers must be especially aware of the new skills they will need to develop to work best with AI technology.

First, AI and generative chat programs are not perfect by any means. Indeed, their output can include mistakes, plagiarism, bad grammar and syntax, and outdated references. Often, if the output is long enough, the AI will begin to repeat itself. Although some have extolled the perfection of AI and how it will replace humans in some respects, it isn't there yet.

There is still a good amount of human intervention required to make AI as effective as possible.

Another facet to remember with regard to using AI in a legal sense, is that one must be careful with what information is fed to the program. Programs such as ChatGPT are so new that we still do not have a good understanding of the security of such programs. Much of the information that passes between client and attorney, within court cases, or between attorneys within one firm is confidential. Confidential information should not be fed into AI programs, as it could be more easily compromised, which could potentially spell a PR nightmare for a law firm.

Lawyers will need to familiarize themselves with all of the different AI tools and learn which ones will be most beneficial to them and their needs. Skills in AI use will need to be learned and developed to stay ahead in an increasingly competitive industry. Partners should consider instituting training on AI use for legal writing within their firms, so all of their lawyers know what tools are at their disposal and how to use them for the most benefit.

No one can be certain how far AI can take the legal profession, or how advanced it will eventually become. Lawyers, as well as other communication professionals, need to keep themselves abreast of changes in this technology and integrate the advancements into their work as much as possible, or run the risk of being left in the dust by more tech-savvy firms. ■

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Good Omens

BY TIMOTHY ESPOSITO | *STC President*

In books and films, the depiction of the afterlife tends to fall into certain stereotypes. If you end up in a good place, it is light and airy and open. If you're in a bad place, it is dark, crowded, and filled with smoke. But what do the denizens of each location actually do with their infinite time? A recurring theme for good/bad/neutral places seems to be … paperwork? Processing all those souls in our entertainment afterlives requires a sophisticated level of bureaucracy and record-keeping. In the bad place, it is often shown as a nightmare bureaucracy in a horrible office space, worse than the DMV. In the good place, everything works easily and paperlessly (and they probably have Macs). No doubt things go more smoothly in the good place because the forms are all well-designed, the CMS is well structured, and most importantly, the good place has all the technical communicators to help them out.

This month, *Intercom* focuses on project planning, a project that was planned well in advance. Likewise, the Board of Directors is in the midst of several long-term projects, many bureaucratic in nature, designed to help improve STC and its membership experience. We've been:

- Reviewing and revising policies and procedures for good governance throughout the organization.
- Improving STC membership and member value, including new membership models and dues structures.
- Reviewing our accounting system, as it is in new hands and being carefully revised to better suit our organization.
- Acquiring and rolling out new and vastly improved Member Database. To shift to a new system that offers what STC would best benefit its members takes some time, however, and the plans to roll out a new membership database system are at least a year out at this point.
- The STC Summit process has already started with a new team and we're aiming to bring you the stellar event you expect once again next year.
- Updating the STC websites for an improved user experience. This is one project I've personally been working on for years, and we're really starting to get some traction with it!

While all that work may sound like a bureaucratic nightmare from the bad place, it is all good news for you! The membership renewal and maintenance process will improve. Registering for events will improve. Certification tracking will improve. Community management and oversight will be easier for volunteers. Our website can be updated to more cleanly integrate with the membership management aspect. It all takes time, project planning, hard work, dedicated staff and member volunteers, and an alignment of the stars. If you can assist either personally or by helping to fulfill a heavenly prophecy, or if you have any questions or feedback, let us know by sending a choir of angels to board@stc.org. ■

TIMOTHY ESPOSITO (tmesposit.stc@gmail.com) is the 2023-24 president of STC. His ongoing column will keep you updated on STC's direction, and be filled with fun cultural references such as Good Omens and The Good Place.

STC@70 Part 2. Thinking Forward

Three long-time STC members answer four questions about the future of technical communication

BY SAUL CARLINER, JANICE (GINNY) REDISH, and **KAREN SCHRIVER |** *STC Fellows*

Editor's Note: *What has propelled technical communication to its current point and what's on the horizon for the field?*

On March 15, 2023, the three authors (all STC Fellows who have been active in research, practice, and teaching for decades) shared their thoughts In a webinar, Reflecting Backward, Thinking Forward: A Conversation About 70 Past and 70 Future Years of Technical Communication, in honor of the 70th anniversary of STC.

This is the second of two parts, transcribed from the webinar. In the previous part, the three looked backward, exploring the most important and overrated developments in the field over the past 70 years. This part looks forward, exploring concerns about and hopes for the future.

The authors have edited the transcript for length and clarity.

What is your greatest concern about the field moving forward?

Ginny: I noticed that, in response to one of the earlier questions, a webinar attendee answered "ChatGPT"; and someone just put in "AI replacing humans." I think we have to talk about that.

ChatGPT is my answer to this question, but I could also use it as my answer to our final question about greatest hope for the future. ChatGPT and its cousins are not going to replace us, and they're not going to do away with English. But we have to face them because they are part of the current and future reality.

AI has been around for decades. You might remember ELIZA, the old AI psychiatrist, and laugh at it. In the past, AI failed to live up to the promise of its original premise. But now ChatGPT and similar AI programs are rather amazing.

We are going to have clients and colleagues who ask, "Why can't we just have AI write for us?" So, we have to think about—and do research on—how we can best use these AI programs. What role could or should AI have in what we do?

For example, I would be interested in asking ChatGPT to write something and then see if that gives me ideas for simplifying what I would write.

Saul: I had AI on my list because some tasks will be automated. For example, writing up reports of city council meetings could be done automatically. Everybody hates taking minutes and I expect that minutes will be generated automatically, too. But one of the problems is that AI tends to make things up when it doesn't have the knowledge. That's a scary part of all this.

But, rather than AI, my number one concern is this: Within the community of technical communicators, there's fragmentation. Among people who do the kind of work that we do, not everybody identifies as a technical communicator.

That has a number of implications:

- It's hard to get any kind of critical mass to promote the field.
- We have a lot of parallel conversations because each community comes up with their own terminology and the terminology doesn't match. More significantly, the duplicate work slows progress rather than enhances it.

You think you're creating something new; but guess what, it's not new. And in fact, I would advise everyone out there: If anyone tells you that they've invented something new in this field, they probably just did a weak literature review!

> **ChatGPT and its cousins are not going to replace us, and they're not going to do away with English. But we have to face them because they are part of the current and future reality.**

My second major concern is the increasing disconnect between the world of practice and the world of research. The world of researchers is getting increasingly out of touch with what technical communicators do every day.

Some of the communication situations that researchers look at are not typical of work that technical communicators are likely to be doing. Researchers don't understand the everyday work environment that practicing professionals have—the pressures, the choices available, and the trade-offs practicing professionals must make. I've tried to focus most of my research on what practicing professionals are really doing in their real jobs.

Academics are concerned that their research goes unvalued. But that happens for good reason: Because practitioners can't use it. It doesn't speak to them. It doesn't even acknowledge them.

Karen: I'm worried about the field fragmenting into specialist camps that have little core identity. I'm sure you've noticed the splintering of the field around technical domains and subject matter areas, such as writing for chatbots or designing for the aerospace industry.

The specialization of the field has been both a strength and a weakness.

- On the one hand, I think specialization has encouraged technical communicators to acquire sophisticated knowledge about the fields they want to work in. And that's given us more leverage to show our value by knowing the field like an insider.

  If we're working with chemists, we know how to evaluate the writing and design about the science of chemistry. Experts needn't talk down to us because we're familiar with the field's problems and issues. We may not be an expert ourselves, but we can easily talk with them, share knowledge, and author their documents. So, in this case, specialization is a strength.

- But on the other hand, specialization can be a weakness because it can narrow our focus, make us more myopic, and limit our flexibility to pivot from one job to another. It may mean that when we jump industries, we can only edit the content rather than develop it from scratch. Employers may see us as kind of old-style translators and documenters, rather than, for example, as information designers, content managers, or UX writers.

Employers may prefer programmers who write over people trained as technical communicators. This tension makes me wonder if specialists such as programmers actually write better documents that create a better customer experience. While we might say "No," and I think we would, many companies still privilege engineering and computer-science knowledge over customer-experience and rhetorical knowledge.

So, my concern with the field going forward is this tension between being a specialist and a generalist. How can we position ourselves in ways that we're not just chasing trends that employers put out in their job ads? Can we be both a technical specialist and a language generalist at the same time? Put differently, can we still be an

effective rhetorical generalist in a sea of technical specialists?

What is your greatest hope moving forward?

Ginny: The field has changed radically over the last 70 years.

- Think how much has changed even from the early 1980s that Karen talked about in Part 1, Looking Backward: STC members then were mostly men writing military documents. Now, we are a much more diverse community writing much more diverse types of documents, topics, and media.
- And another change over the last 70 years is that the primary medium today is digital rather than print.

In the digital world, we have moved from user experience to customer experience to service design and to the new term "design thinking," which privileges design in a way that can leave us out.

My hope is that we will make sure that we are there and that we are there throughout the process. And I hope we will work more on a strategic level.

Content strategy has become a new thing in the last decade. Technical communicators are the right people to be content strategists because the questions at that level are "What content?" "What content system?" "What style guide?" "What voice and tone guide?" Those are our questions.

STC has, for a long time, been a wonderful umbrella, including people in all the specialties with the commonality that it's our job to help people communicate. It's my hope that we embrace all the specialties, the document types, the topics, and the media, and do it in a user-centered, customer-centered way.

Karen: My biggest hope is that we continue to support professional development and research. STC has done a great deal over the years to support and disseminate research. We've all benefited across industries and even across the world.

> **Technical communicators are the right people to be content strategists**

Research is going to be very important as we face the challenges ahead. Let me mention three challenges: generative AI, which we've already mentioned; the carbon footprint of digital products; and ethics and social justice in technical communication products.

- First, the role of generative AI in tech comm. Some people worry that language models such as ChatGPT are coming for our jobs. They see whole sectors of the field being wiped out.

  Procedural instructions may, in fact, be the lowest hanging fruit. But there'll be many opportunities to leverage language generation technology. That may change our identity a little bit or maybe even a lot. But it will also free us up for more creative and strategic analysis. Research can play a big role there.

- A second challenge is to create content in ways that will result in a smaller carbon footprint. Did you know that different ways of expressing the same digital content use different amounts of electricity?

  A *Technical Communication* article by Alisa Bonsignore offers a tutorial on how to calculate how much energy you're using. She argues that when we become experts in the sustainability of our content, we will both help the planet and position ourselves as valuable business assets. Again, here's an opportunity for research.

- A third big challenge is the crucial role of ethics and social justice in the products we create. Whether we're designing to influence people's understanding of climate change or designing health information for older immigrants, we will need to think harder about how to make language plain and accessible to more people. And that will press us to develop better and more inclusive models of audience.

I predict that these research issues and others will help sustain our field and show our value. Academic institutions and professional organizations like STC will play a vital role in helping us imagine and

reimagine the possibilities for the next 70 years.

Saul: One of the big challenges that we've had—not just in the pandemic, but over the last 20 years—is the internet and people moving online.

It's reduced interest in local professional activities. For example, many of our STC chapters have not been able to meet as often as they did in the past, a phenomenon that predates the pandemic. This phenomenon is not unique to STC. It's one I see in most professional organizations and not just in the US. I see it in Canada, Europe, and Asia. People turn to the internet for a lot of the information and discussions that they used to go to meetings for. That's been a problem.

> **Research is going to be very important as we face the challenges ahead.**

One of the fundamental questions we used to ask before the pandemic was, "Are virtual experiences as good as face-to-face ones?" In the world of education where I do much of my research, the conclusions are that the two are the same: A weak course in the classroom will be equally weak online, and a strong class in the classroom will be equally strong online. And personally, I love the live virtual experience. I've been teaching this way since 1998 and it's actually my favorite way to teach.

But little to no energy was expended studying the value of the in-person experience. Through the pandemic, educators realized it's really important for creating relationships. More than anything, professional organizations are about relationships. It's through those relationships and informal conversations that people have with each other that we learn a lot of incredibly valuable things.

I remember conversations I had with Ginny almost 40 years ago. I carry those lessons to this day. I remember sitting with Karen at one of her first dinners at the STC banquet, back in, let's just say the 1980s. I remember that was what got her really started on her 1989 article, which became a landmark and that, in turn, led to her 1997 book, as I understand it.

What's been really heartening over the past six months as the pandemic controls have been lightened, in-person experiences are back in vogue in a way they haven't been in years. For example, almost every in-person event that I've had the privilege of attending has either sold out or broken its previous record.

Getting back to being in-person is really important because that will lead to a renaissance of our professional communities. ■

For a list of relevant references and resources on technical communication, see the bibliography compiled by Karen Schriver at Ginny Redish's website: https://redish.net/wp-content/uploads/2023_Resources_about_technical_communication.pdf

Acknowledgments

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The Instructional Design & Learning Special Interest Group (IDL-SIG)

Learn all about the IDL-SIG and its offerings, which include webinars, workshops, student outreach, and more.

BY MARALEE SAUTTER | *Associate Fellow*

The Instructional Design and Learning Special Interest Group (IDL-SIG) has a widely varied membership. Our business professionals include instructional designers, trainers, technical writers, technical editors, graphics designers, while our academic members range from instructors to full professors preparing the next generation of technical communicators. The SIG philosophy is that the core attributes of a technical writer overlap with those in instructional design so we offer a broad range of activities to our members.

The IDL-SIG's mission is to help all STC members identify and develop knowledge and practical skills for designing, developing, and implementing technical instruction in electronic and traditional classroom settings. The SIG strives to promote sound design practices and provide information and education about instructional theory and research. Our goals are to build instructional design skills by extending educational opportunities to the three major groups of members by:

- Leveraging practitioner knowledge through mentoring and training less experienced members.
- Providing technical writers with ways to transition into instructional design.
- Mentoring students with an interest in instructional design as a career.

Webinars & Workshops

The IDL-SIG hosts webinars and workshops in many areas of technical communication, including instructional design, training and teaching, usability, web design, management, accessibility, and more.

IDL-SIG workshops range from performance methods to practical knowledge of what it takes to become an instructional designer. These workshops are lengthier and take a deeper dive into a topic, some taking place over several months.

- To learn about past and upcoming webinars, workshops, and mini-conference, visit the IDL-SIG Eventbrite link https://www.eventbrite.com/o/instructional-design-amp-learning-sigcop-7687636379/.
- To gain access to past recordings, contact the SIG Program Manager, Viqui Dill, at programs@stcidlsig.org

Webinars: IDL-SIG members and students enjoy free webinars with a nominal charge for non-members.

Workshops: IDL-SIG members and students enjoy reduced rates for workshops with a slightly higher rate for STC members.

Mini-Conference: On 21 October 2023, the IDL-SIG held a mini-conference for technical communicators with an underlying theme of instructional design. The event was a first for the IDL-SIG and we hope to repeat the conference in 2024.

Student Outreach

The IDL-SIG believes in encouraging students who pursue formal training in instructional design or technical writing. The SIG provides training and mentoring opportunities for

students that want hands-on experience. Many student volunteers advance to positions on the leadership team where they polish their management, organizational, and tools skills. We provide opportunities for students to expand their experience by participating in our monthly First Fridays at 5 (FF@5) and Student Article Writing Competition.

First Fridays at 5

FF@5 is regularly held on the first Friday of the month at 5 p.m. ET. This virtual networking event is run by student volunteers under the mentorship of professional technical communicators. Both students and professionals enjoy networking in this relaxed virtual environment. The formats vary. Some events include a short presentation on a specific topic followed by conversation and questions from the audience, while others are entirely networking. The student volunteers also gain experience while creating and presenting PowerPoint presentations, writing and editing articles regarding the events, and using project management techniques to bring their presentation to completion. For more information and student liaison contacts, visit our Student Member News page at, https://www.stcidlsig.org/students/student-member-news-center/.

Student Article Writing Competition

The IDL-SIG invites undergraduate- and graduate-level students at various universities to submit an article related to instructional design for the Student Article Writing Competition. The best entries are published in the *IDeaL* newsletter. Students can link articles in their portfolio. Winners enjoy a free one-year STC membership, and the ability to network with other ID practitioners and experts. The applicants retain copyright to their work and may cite their published articles in their resumes.

To learn about competition details, go to https://www.stcidlsig.org/students/student-competition/

IDL-SIG Benefits

Industry-recognized training through educational webinars is one of the membership benefits, and a list of additional benefits follow:

- **Newsletter**: *IDeaL: Design for Learning.* Find quarterly newsletter editions at, https://www.stcidlsig.org/newsletter/.
- **Website**: Visit our website at, http://www.stcidlsig.org/.
- **Social Media**: Connect through Twitter, Facebook, LinkedIn, Slack, and more. The social media links are on the IDL-SIG homepage, http://www.stcidlsig.org/, right sidebar, as shown in the graphic.

- **Discussions**: Post questions and share IDL information and experiences using STC's Slack workspace. Instructions on joining Slack are at, https://www.stcidlsig.org/how-to-join-slack/. Be sure to add the #sig-instructional-design channel.
- **Announcements**: SIG leadership announces upcoming SIG conference activities, webinars and events, and other important items that require a quick, one-way message. Members are automatically added to the announcement list (Mailchimp) when they join or renew SIG membership.

Volunteer Opportunities

The SIG depends on members to the Instructional Design & Learning SIG. Leadership experience looks great on your resume. Here are a few reasons why volunteering is good for you:

- On-the-job, management training
- Opportunities to meet like-minded folks
- Opportunities to network and learn from professionals
- Increased desirability as a job candidate
- Promotes personal growth and a sense of giving back.

Interested in volunteering? To learn more about SIG volunteer positions, go to https://www.stcidlsig.org/about-idl-sig/idl-leaders-committees/.

Not ready for a long-term commitment? Then, volunteer for a short-term opportunity (toe-dip). To learn more, go to https://www.stcidlsig.org/about-idl-sig/classifieds/.

We encourage student volunteers present or host *First Fridays at 5* (FF@5) sessions and to maintain the

Use STC's Salary Database

STC's *Salary Database* is the premier source of data for technical communication jobs nationwide.

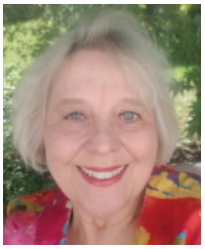
Members, download your FREE copy at *https://www.stc.org/publications/salary-database/*.

student section of the IDL-SIG website https://www.stcidlsig.org/students/.

How to Join the IDL-SIG

The IDL-SIG is a community of practice and depends on membership for funding. If you are an STC member, but not yet an IDL-SIG member, contact STC membership at +1 (703) 522-4114 with payment information and your community selection to update your membership. Gold membership includes access to all SIGs, but you have to select the SIGs you want to join.

You can add the IDL-SIG to your STC membership at any time during the year; you do not need to wait for the renewal period. For more information about the IDL-SIG, go to our website, https://stcidlsig.org or contact SIG Manager, Maralee Sautter manager@stcidlsig.org or managersidlsig@gmail.com. ■



MARALEE SAUTTER is a technical writer, instructional designer, and educator. She is an Associate Fellow and long-time volunteer for STC, serving in many chapter and SIG leadership roles. She is currently serving as IDL-SIG Manager and is a member of the Community Affairs Committee (CAC).

Building a Unified Self-Help Portal at Reltio

An interview with Megan Gilhooly, Senior Director of Self-Help and Content Strategy.

BY SCOTT ABEL | *Fellow*

In this installment of "Meet the Change Agents," I chat with Megan Gilhooly, Senior Director of Self-Help and Content Strategy at Reltio, a cloud-native data management platform. We delve into her vision for an integrated self-help portal and explore the insights she's gained in creating an outstanding (and award-worthy) technical product information experience.

A seasoned content expert and polymath, Gilhooly's expertise spans the complexities of generating, managing, and delivering technical documentation at scale. Her background includes working with software vendors that develop tools for content teams and leading strategies for innovative content creation groups that produce complex technical product information. Recently, Gilhooly's team was a finalist in the Software and Information Industry Association's 38th annual 2023 CODiE Awards in the Best Knowledge Center/Help Site category.

Scott: Before diving into the details surrounding the unified self-help portal you've built at Reltio, tell our audience about yourself and the experiences that have shaped how you think about content.

Megan: Hey, Scott! So lovely to have a new label - "Content Polymath." Love it!

I've been in content my entire career, starting as a print journalist before websites were a thing. I happened into technical writing and grew my career from an individual contributor upwards, and I've worked in all sizes of companies, from 12-person start-ups to Amazon. Every one of those roles inspired how I think about content delivery and content consumption.

Amazon influenced me as a leader, although our content delivery mechanisms were surprisingly archaic on my teams. There was a big appetite for innovation, so being there helped me think about what we could do for customers.

Scott: The name of this column is "Meet The Change Agents." You've been an advocate for — and a practitioner of — evidence-informed change. What evidence did you collect to help inform your change-related decisions at Reltio? Provide an example.

Megan: I love the idea of evidence-informed change — keeping history visible in the rearview mirror to guide you while not allowing it to hold you back. I'm also a big believer in solving the problems that matter and prioritizing problems over promises. What I mean by this is find the 1–3 issues that are critical to your team's (or company's) success, and then focus on solving those rather than thinking about your favorite software tool and advocating for it using a laundry list of promises you believe the tool could help you keep.

Here's an example from my time at Reltio, where I prioritized issues. We had a home-grown documentation portal and no taxonomy. We stored content in a software code repository. Our India team worked through the night every Wednesday to publish content. Not to create and review content but to publish it (something that should have taken minutes, not overnight).

Our process efficiency relied on humans behaving predictably and making no mistakes. We designed

our process around tools, not content. And we were using software tools designed for purposes other than creating and managing technical content.

While those obstacles were challenges, they were also opportunities to create a better content experience. Solving our publishing problem allowed us to select fit-for-purpose software. Investing in the tech stack also provided us with opportunities to overcome additional challenges.

More importantly, when I presented the C-suite with data showing how and why our writers worked overnight, no one questioned whether or not we had a problem worth solving. Reltio cares about its employees, so it was a straightforward decision.

Scott: Describe the workflow used by Reltio to produce docs before making changes in the content production approach. And talk about the challenges those processes introduced.

Megan: The team had an impressive workflow. They had processes documented, and they followed them to the best of their ability. We relied on manual intervention while attempting to navigate a less-than-optimal tech stack. The team got requests via JIRA, wrote in Google Docs, went back and forth between subject-matter experts (SMEs), then transferred the final draft content to XML using Oxygen. We stored our docs in BitBucket, a Git repository for software developers, and then moved them into our home-grown portal.

One of our biggest challenges was updating content. Writers had to navigate a series of time-consuming manual tasks, jumping in and out of multiple software products to create and deliver technical information. Writers and SMEs found the productivity-zapping experience frustrating and error-prone.

Scott: Could you share a story about a challenge worth overcoming and how your new content production capabilities eliminated that obstacle?

Megan: Yes! The publishing pipeline required the team to go through nine steps; after every three, there was a check-in. They had to return to the beginning and start over if there were any conflicts or failures. On a perfect day, we could publish in 2 hours, but needing to move content between Google Docs and Oxygen multiple times ensured conflicts. Every conflict added an hour or more to the publishing process.

Every Wednesday, my team in India had what we not-so-affectionately — but in good humor — dubbed "publishing pajama parties." Our new strategy aimed to eliminate all-nighters. The slide deck I presented to the executives showed people working in their pajamas that said, "No more Publishing Pajama Parties." This visual was an excellent way to start the conversation.

I focused discussions on overcoming the underinvestment in content since the company's inception.

The argument was:

1. Content is mission critical (with evidence to back that statement up).
2. The company spent next to nothing on content (with exact dollar amounts).
3. If we want the content to contribute to case deflection, customer retention, and expansion and positively impact customer experience, we must spend the money necessary to get it right.

I convinced leadership to provide financial support to change the content game completely. The bedrock investment was in the Heretto component content management system (CCMS) and documentation portal.

Heretto enables us to avoid publishing through the night. Now, our US folks prepare content, and our colleagues in India publish it in minutes — during their regular working hours. No one loses sleep while publishing! We use the time we save to create increasingly helpful content.

Scott: How did you determine the vision for your new approach to content at Reltio?

Megan: I collected data about everything. Some of it was worth it. Much of it was not. But you don't know what data is — or isn't — worthwhile until you monitor it for a few months. Without data, you'll find yourself in a position where you're trying to sell promises to your execs and your customers.

Data allows you to pinpoint the crucial issues that need resolving.

Scott: What did you require to produce content at the necessary scale and speed to fulfill customer

demands and achieve business objectives?"

Megan: We needed five things.

1. Automated editing (so our one Managing Editor didn't become a bottleneck)
2. Scale video production (and updating to eliminate the old branding)
3. A content management system designed to manage XML content properly
4. A delivery mechanism (a portal to make content easily discoverable)
5. Federated search that provides results across our digital assets (training, community, documentation portal, developer portal, and ideas portal).

Scott: What are your goals for your new-and-improved self-help support portal, and how will you measure success?

Megan: In the first year, we measured success by decreasing the time to resolve documentation requests. We reduced the backlog of documentation tickets by achieving a specific content quality score and reducing publishing time (to eliminate pajama parties).

This year we're looking to grow and activate the team to optimize this new process. We're working to reduce our time to resolve tickets, refresh a large percentage of our content, and reinvigorate the developer experience by unifying Swagger content from the developer portal with content in the documentation portal. Our documentation and user experience teams will work together to build helpful in-product documentation and guides.

Scott: What factors influenced your decision to power your self-help portal with XML DITA content managed in a component content management system? Were any other approaches considered? If so, why did you settle on XML DITA with a CCMS?

Megan: Honestly, it was the opposite. The team already used DITA XML but needed the right strategy and DITA-savvy leader. I was likely chosen for this job because I knew how to create and drive the strategy for DITA content, not the other way around.

Now that AI is available, having structured content in clean DITA makes everything much more manageable. So, whoever chose DITA before did so correctly. They just needed the strategic muscle to do it well.

Scott: What capabilities does Reltio require of its CCMS?

Megan: We need a CCMS to help us scale our content operations by empowering us to manage single-source content (with relevant links and conflicts shown upfront). We need an intuitive user interface for those involved in creating, reviewing, and publishing content. And we need our authoring environment to support real-time collaboration for subject matter expert (SME) reviews. We need an easy, one-push multi-channel publishing mechanism that will work with localized content in the future. And we need intuitive, simple-to-use process workflows.

Scott: Providing a great authoring experience is critical to gaining acceptance from writers. What authoring tool (or tools) did you select and why?

Megan: In the past, our writers used the Oxygen XML Editor to create DITA content. Although Oxygen performs well for its intended purpose, it doesn't address our specific challenges. We need authoring software to optimize the review process so SMEs can review in a familiar interface (WYSIWYG) without playing electronic hopscotch between disjointed software tools.

We selected Heretto's browser-based collaborative authoring tool because it has everything we need. It looks and feels familiar (think Google Docs) and has an intuitive user interface for everyone involved in content creation and review. Our authoring environment must facilitate real-time collaboration during subject matter expert (SME) reviews.

I'm a big fan of Oxygen and its capabilities. However, to operationalize content production, you need to choose the tools that best fit the task, not just stick with the ones you're familiar with out of habit.

Scott: What evidence do you have that your new unified self-help portal delivers value to your customers and the business?

Megan: The most significant evidence is that when people ask questions about our products in our Slack channel, the answers increasingly include links to topics in our XML DITA-powered documentation portal! Another

indicator is the reduction in requests for content from our support team. When we don't produce the right content, our support team contacts us, which tells me it's valuable to the business because they rely on it.

But building value isn't a one-and-done project. It's a living thing. You don't come in, fix stuff, and then declare success. It's an evolutionary process that involves continuous monitoring, measuring, adapting, and updating.

In Amazon's 20th annual shareholder letter, Jeff Bezos said, "One thing I love about customers is that they are divinely discontent." I agree with Bezos. Customer expectations are consistently rising. That's human nature. As soon as you solve one problem, they want the next one solved — more quickly than the last time and to a higher standard.

So, I use requests/feedback/complaints as a barometer. If people complain that they can't find or understand anything, that's bad. When you fix that, you'll hear people complaining about certain pages. Then you'll hear that people don't like a particular word. When you get to that last complaint, you've won the content game because not only are people accessing your content, they care about it so much that they have an opinion about one word!

Scott: Change is often difficult. What lessons did you learn about introducing change to your staff that you can share with our readers?

Megan: This isn't a lesson learned this time as much as a reminder — people hate change, some more than others. Some people will be right there with you, asking great questions and trying to move forward, while others will dig in their heels and fight against you the whole way. It would be best if you had some of both types of people to make the best decisions, but you also need to provide strategies for the latter to ensure progress. As the team leader, you must balance empathy for the heel diggers while not allowing them to paralyze the team.

Despite the differences, it's essential to stay positive. I don't mean excessive optimism that strays from reality. I mean don't be an opposing force or run around using your ridiculously busy initiative as an excuse to be mean. And don't stand for your team being mean to each other. Embrace the process and find some humor to help everyone overcome the challenge these changes introduce.

Scott: Let's take a look toward the future. What changes to your self-help system capabilities would you like to implement moving forward?

Megan: We're doubling down on in-product guides and investing in exceptional experiences for users of our knowledge center (product information and documentation portal). We're working on adding contextualized help with snippets of microcontent and making complete documentation available inside our product. And we're excited about finding ways to use GPT-like content extraction to help customers find the answer they need.

Scott: Wow! That was a great interview. Thanks for sharing your wisdom and experience with *Intercom* readers, Megan. We appreciate you making time to do so. ■

In the digital age, change happens quickly. This column features interviews with the movers and shakers — the folks behind new ideas, standards, methods, products, and amazing technologies that are changing the way we live and interact in our modern world. Got questions, suggestions, or feedback? Email them to scottabel@mac.com.

Budget Cuts in Higher Education: The Case of WVU and a Look into the Future

Engaging faculty, staff, students, and community partners in working together can help universities look to the future.

BY THOMAS BARKER | *Fellow*

While this article is being composed, a new Fall semester is starting at universities across North America. The breezy blue skies, crisp temperatures, and yellowing leaves bring an air of excitement to the hearts of students and faculty. They do to mine, as I look out over the University of Alberta Campus from my office window in the Humanities Centre. The grassy green lawn with the babbling fishpond is dotted with clusters of students sporting backpacks and sweaters.

This is my 50th year as a university faculty member, so the annual thrill of a new beginning is somewhat diminished when I read about persistent budget cuts in higher education. I can't help but wonder how these cuts will affect students, faculty, programs, and staff in all academic units, and especially in technical communication. These changes encourage me to reflect on the direction that universities are taking and the role they play in our society.

In this article, we look at the academic conversation surrounding the dramatic budget cuts at West Virginia University that have made shock waves in the news. After looking at these cuts against the backdrop of decades-long social trends, we will focus on the effects they have on technical communication programs. Stepping back from this, we ask, How can these changes help us understand the way universities are transforming under our very eyes? We conclude by taking a closer look at "transformation initiatives" in higher education and recent shifts in technical communication toward a cultural approach. I hope this exploration helps us see into the future of universities and the role that faculty, staff, students, and community partners play.

Budget Cuts at WVU

The conversation about cuts at WVU is being carried out in a number of news outlets, including *The Washington Post*, *The New York Times*, *Inside Higher Education*, and National Public Radio. The cuts have been described as "dangerous" in *The Chronicle of Higher Education*, and the Associated Press Service sees them as a "crisis." Paula Krebs, Executive Director of the Modern Language Association, said they would "dramatically narrow educational opportunities" for all students. How big are these cuts and why are they so upsetting?

The Washington Post article by Nick Anderson, reports that the actual deficit, given the funding from the State of West Virginia, is $45 million. Anderson reports that 32 majors

(out of 338 total) would be discontinued and 7% of the faculty would be eliminated. The preliminary recommendations document shows which programs might be discontinued, which continued but advised to change, and which were retained. As of this writing, the Board of Governors has yet to approve the cuts, but it is expected that they will follow the recommendations of the review panel, which has been studying programs at WVU since May 2023. *(Note: At the time this article goes to press the Inside Higher Ed has reported that the WVU Board of Governors voted on Friday, September 15 to cut 143 faculty positions and 28 academic programs.)*

The cuts upset many academics because they target language and humanities areas of the university. These include programs in French, German Studies, Russian Studies, Spanish, and Linguistics. These and many of the programs in the arts and education are seen as central to the core areas of a liberal arts education. That broad-based education, historically, has been the basis of state university curricula because it ensures that students will have a balanced education. Paula Krebs points this out in her letter to President Gordon Gee of WVU: "A full liberal arts education includes providing students with the tools that enable them to interact both with their neighbors in West Virginia and with the rest of the world."

Another window into these cuts at WVU is to look at the criteria used to identify areas to cut. These are spelled out in the Academic Program Portfolio Review on the WVU website. The primary metrics are *enrollment* as of Fall 2022, and *research contributions* in terms of dollars as recorded for each unit. These two criteria, with some exceptions and limitations of scope, were the primary metrics. They identify programs and departments scheduled for: *no action*, *continue with no specific action, continue with specific action* (such as combining with another unit), and (the dreaded) *discontinue.* The list of programs that meet the criteria for *discontinue* ranges across disciplines and takes an objective approach. Empty seats and no big grants means you get cut and that's it.

While the programs being cut seem to fall into the languages and humanities areas, they are, as far as I can see, unbiased and objective on the surface. Assumptions that humanities or languages are being targeted do not show up in the list derived from the application of these two criteria. To understand where bias toward, say, science, technology, and business majors and courses (as specified in the letter by Paula Krebs), we need to look beyond the present controversy over the slimming of WVU to the overall slimming impact of social and political trends over the last few decades.

Budget Cuts: The Big Picture

When you look at the cuts in higher education over the last 20 years, a pattern emerges quickly. According to the Center on Budget and Policy Priorities, only four states have increased budgets from 2008 to 2017. These reporters call it, "A Lost Decade in Higher Education Funding." But this may be the tip of the iceberg. If we look back at social and political trends just since I was born, we can see a number of trends that have resulted in a changing and diminishing role for universities in social and public life. These trends include the following:

- **Access to information**. Information technology, social media, the internet have decentralized information and learning from universities. Universities no longer hold the keys to knowledge.
- **Globalization of markets**. Organizations need to serve customers in other countries, which foregrounds lived experience over university-style book learning as a qualification for employment. Languages are important, but the explosion of language training and translation apps has, at least in the eyes of some, diminished the need for university training in these subjects.
- **Changes in social institutions and healthcare**. Social services and healthcare sectors play a much larger role than they did in previous times, often taking a community-led approach over the theory- or research-based approach that is characteristic of universities.
- **Decentralization of government**. Since the groundbreaking movement toward joined-up, streamlined government—big in the 1980s—governments have increasingly relied on

outsourced services to citizens. In this environment, the priority is on organizational effectiveness based on organizational development models and less on a university, "brain-trust" approach.

- **Changes in organizational management**. The decentralization of management that occurred during the 1990s has continued in today's institutions. Universities have been slow to adjust to this contractual, experience-based model of employment.

Governments and the public sector have responded to these trends by reducing in size and streamlining services, and they have expected the educational sector to do the same. The result has been new government, new healthcare, and new universities. In this era of transformation, what are some of the effects on technical communication programs?

Effects on Technical Communication Programs

The effects of budget and social trends on technical communication (TC) programs can be seen in three areas: staff, faculty, and connections to other programs.

Staff. Staff cuts are the hidden cost to programs. At WVU, for example, around 500 non-academic staff were eliminated: a fact that does not make national news. For program executives, counselors, and other persons associated with TC programs, this means a loss of institutional knowledge about courses, electives, and degree planning that staff members possessed. No more Rolodex of contacts. It cuts connections with community members who hire graduates, interns, and service-learning students. Sure, these connections can be rebuilt, but as we know from the pandemic, you cannot just flip a switch to reactivate personal relationships.

Faculty. Faculty reductions can affect programs because they impede the hiring of new personnel to respond to curriculum changes, and they oversimplify the faculty role. *Faculty* is a complex term that covers teaching and service faculty, faculty ranks, and faculty connections with other departments. For example, in Writing, Editing, and Publishing Faculty, the WVU faculty is closely aligned with other writing units, such as creative writing and linguistics—programs that were cut.

Connections with other programs. Technical communication has always been interdisciplinary due to the nature of communication itself. At WVU the program welcomes pairing with Biology, Chemistry, Geology, History, Political Science, Psychology, and Sociology. These degrees reflect the broad application of technical communication, and cuts in them represent cuts in opportunities for students to double major and expand their writing skills and subject-matter expertise.

Who Is Transforming Whom?

This overview of how budget cuts can impact specific programs highlights the interconnected nature of academic programs. If we pull back now to look again at the big picture of how universities are transforming in the new, interconnected, and community-oriented world we live in, we might ask the question, "Who gets to define the changes in universities?" Looking at the WVU criteria, we see that "one-size-fits-all" criteria were applied: enrollments and research dollars. These are important because universities have to exist in a social and economic context, and these criteria are easy to manage. The problem with them is that they are rolled out as "conversations" when they actually are not. They are mandates and the conversations around them are phony.

Another problem is that they ignore the kind of bottom-up, intellectual and scholarly transformations that represent faculty and research trends. One such trend that I explored recently is the movement toward transformative learning, global learning, and indigenization that has and is gaining momentum in north American universities. In an article for the *Journal of Transformative Learning*, I reported on a study of these trends that was able to conclude that, "Together, these three dominant currents interact at the level of ontology as witnesses to us about how institutions of higher education are, for the most part, charting future core elements of learning."

In technical communication, a related current is the social justice turn in technical and professional communication. An article by Agboka and Dorpenyo looks at 231 tech comm programs and describes the "burgeoning scholarship on social justice" at work. While more needs to be done, this important transformative element is something that can easily be lost in counts of enrollments and research dollars.

Looking to the Future

As I look up from my keyboard, after reflecting on budget cuts, shifts in the social and political landscape, and the impacts on technical communication programs, I am confronted with the pleasant reality of blue skies and fresh ideas. But I am also prompted to ask, "Who is really transforming higher education? The legislators, who want to transform universities by eliminating low-enrollment programs? Or the faculty, who are transforming universities through innovative teaching and research?"

If I had one recommendation to make in this whole interesting process, it would be this: *Let the conversation about transformation be broadened to include all the ways that faculty, staff, students, and community partners work together to look to the future of universities.* ■

FURTHER READING

Agboka, Godwin, and Isidore Dorpenyo. "Curricular efforts in technical communication after the social justice turn." *Journal of Business and Technical Communication* 36, no.1 (2022): 38–70.

Barker, Thomas. "Moving toward the centre: Transformative learning, global learning, and indigenization." *Journal of Transformative Learning* 7, no. 1 (2020): 8-22.

A special thank you to Laura Beard for pointing me to many of the resources I used in the writing of this piece.

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In Memoriam: STC Fellow Lola Fredrickson

BY SAUL CARLINER | *Fellow*

In February 2023, STC Fellow Lola Fredrickson passed away after a brief illness.

About Lola

Lola was a career technical communication manager and executive. After earning a bachelor's degree in arts (specializing in costume design) and a master's degree in horticulture, both from the University of Minnesota, Lola eventually landed in Idaho and eastern Washington State, where she managed documentation control, technical publications, and industrial security for the large defense contractor, EG&G. She then returned to Minnesota, where she met Joyce and Dave Lasecke, with whom she co-founded Fredrickson Communications in 1985 (now Fredrickson Learning), a Twin-Cities based firm that provides technical training and communication services to large companies. Lola retired in 2015.

Throughout her career, Lola played an active role in her community, supporting women entrepreneurs and scientists, promoting awareness of elder abuse and, of course, technical communication. In addition to election to the rank of Fellow, Lola also received an award of Distinguished Technical Communication for her third quarter 1992 article, "Quality in Technical Communication: A Definition for the 1990s" and served on the jury selecting the best articles in the first 50 volumes of *Technical Communication*.

Lessons from Lola

Through all of her life experiences, Lola gained great wisdom and generously shared it with others. And in that spirit, here are some Lessons from Lola.

1. **Customer service is not how you handle the ordinary, but how you handle the problems**. Although technical communicators focus on processes and earn a living from documenting them, even the strongest processes occasionally go off-track. How one handles those situations really cements relationships. Do you acknowledge the situation? Do you apologize for your part in it? Do you provide updates on efforts to resolve the situation? The more one does to inform and reassure the other party during a mess-up, the more trust that usually builds. That openness helps transform the seemingly worst mess-up to a life-long relationship of trust.

2. **A sting now hurts a lot less than an "owie" later.** Managers often avoid providing feedback on important, but smaller, issues in an effort to minimize friction. By contrast, Lola advocated for providing feedback as early as possible. Doing so provides workers with both awareness of the issue and an opportunity to address it before it becomes serious. By contrast, should the issue persist without feedback, when that feedback comes later, delivering and receiving it becomes significantly more challenging as does correcting the issue.

3. **Approach projects in two phases: design and implementation. That leads to much more accurate estimates.** In contrast to the prevailing project management approaches, Lola advocated against estimating entire technical communication and training projects up-front. Rather, she suggested only starting with the needs assessment, an effort that culminated in a complete blueprint for a design (such as training programs or help systems) along with an estimate for developing and producing that content.

   This offers two benefits: (1) If the relationship did not work out, all parties had an easy "out" and the client had a detailed

plan another provider could complete. (2) The estimate for developing and producing the content would be more accurate because it factored in all key details. Up-front estimates could be off by as much as 10 to 20 percent while the two-phase approach led to estimates within 2 to 3% of their actual costs.

4. **Take risks; they might not be as risky as you fear.** When I was working for Fredrickson, I had been invited to give a speech to a business organization. I shared my nervousness about the upcoming presentation with Lola. In reassuring me, she noted something important: even if the presentation goes haywire (noting it was an unlikely outcome), these audience won't know me and probably won't remember me. If that's the worst that can happen why not go for it?

5. **Support the people who matter to you.** More than anything, relationships were Lola's life force. As an employer, she actively supported her staff's professional development and growth, even if it involved their moving on to new employers. As a colleague and friend, Lola always took the initiative to keep in touch.

Fortunately for me, she kept in touch until her very last days. I feel fortunate to have remained in contact with her until the last weekend of her life and to continue to benefit from her wisdom and the memories of our friendship. ■

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Saul Carliner is a Professor and Chair of the Department of Education at Concordia University. He served as an Executive Vice-President of Fredrickson Communications in the 1990s. He is a Fellow and past president of STC.

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