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MAVERICK MESSENGER

Versatility in Communication

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Featured In This Issue

Converting Face-to-Face Training for Virtual Delivery

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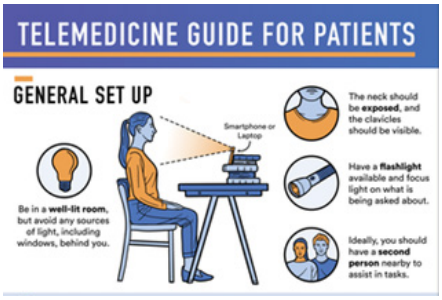

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About This Publication

The Maverick Messenger is a student-run newsletter featuring articles on technology, cross-culture communication, web design, career advancement, and much more. This award-winning newsletter is recognized by the Society of Technical Communication. In these unprecedented times, this edition of the Maverick Messenger focuses on the many ways communication is and must be versatile.

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Converting Face-to-Face Training for Virtual Delivery

Ellen Murphy

Gone are the days of working late to set up the classroom for the next day's training session. No more last-minute trips to the office supply store, no printed materials to set out, no pens or highlighters, and certainly no need for tape flags to mark important references in the material. With the current COVID-19 crisis significantly impacting workplace training and education, we are quickly moving into the era of virtual training. This means late nights reviewing your presentation to make sure it is engaging, checking to see if your webcam is in the correct position, testing internet connection speeds, and finding some quite space to host an uninterrupted session. After all that is said and done, you are still faced with the task of converting your existing face-to-face course to a virtual format.

Figure 1. "Automated schoolmarm" at the 1964-65 New York World's Fair (Source: Novak Archive) Courtesy of Smithsonian Magazine

Where did it begin?

Although COVID may have escalated the need for distance learning options, these ideas were born many years ago. Smithsonian Magazine referenced a 1960 article from the Oakland Tribune predicting "teaching machines" such as computers, will make their way to the classroom. Shortly after that article was released, the New York World's Fair displayed artwork titled "Automated Schoolmarm" (Figure 1) in the Hall of Education (Novac 2013).

What's going on now?

While virtual delivery as a training method isn't a new concept for most industries, July 2019 National Center of Education Statistics (NCES) showed only 15% of large companies favored this method. Many of these same companies have been forced to make the switch to virtual training as COVID-19 infection rates continue to increase. What about K-12 schools? As of November 3, 2020, more than 50% of public-school students nationwide will be either distance-learning, or on a hybrid schedule that includes distance learning and in-person training (NCES 2019).

What to consider?

As the world of work becomes increasingly more digital, it's essential that your content adapts with the times (LinkedIn). The level of detail and structure is critical to revisions. This is called content modeling and forces a determination of what content is really needed and what could be used for something different. (Rockley and Cooper 2012, 135) You don't want to take a 3 day in person seminar and switch it to a 3-day online event – their attention levels would drop too quickly. Consider splitting it up into different modules, or even try a blended approach with some self-paced and some instructor led. Focus on what is most relevant for the live instruction piece and see if there is another area that can be recorded and viewed at a separate occurrence. (Hogle 2017).

What are the delivery options?

The most common platforms are virtual instructor-led training (webinars), online learning modules (traditional, self-paced e-learning), and videos. Independent learning assignments and blended learning are additional approaches. Videos can be standalone or used within another training platform to demonstrate a process or explain a recording related to the training topic.

How to engage the audience?

Interactive whiteboards, online quizzes, poll questions, or electronic user guides or job aids are tools that can reinforce learning and gauge retention. Where can interactive whiteboards, breakout sessions, or poll questions be used? Are there other certain topics that could be converted into a game versus a traditional lecture? Many facilitators use group discussion promote attentiveness. This is a great thought, however without that face-to-face piece, it is much harder to initiate that conversation and to keep it going. Imagine you're an instructor in your classroom. Traditionally, if a teacher asks a question to the group and does not get a response, one could think they don't understand, however in a virtual setting it could be a plethora of other reasons...can they hear your, are you still connected, does their audio work or are they on mute? (Goldberg 2020) Teachers need to find a way to continue making progress in the class and get through these hurdles.

Where to begin?

There are several factors to consider when planning a shift to online delivery. A checklist is a helpful tool to find out what exists and what is needed.

1. Review the content and objectives. What message must they take away and what could be studied independently? Is the current structure realistic?

2. Define your audience. Does the content apply to all levels or will separate modules need to be created?

3. Determine the platform. What will offer a manageable option that still ensures engagement from the participants?

4. Think about engagement. What tools

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will help the audience stay attentive throughout the session?

5. Review adequacy of tools and capacity of supporting staff? Is there an authoring tool available to use? Are there peers available do help execute your plan? Developing training material is not everyone's forte. Some instructors are better at the delivery piece and some are better at the design and development of the curriculum. Others excel at planning and organizing. (Georgina and Keengwa, 2011).

What are the challenges?

One significant issue is that the instructor will have less face-time and ability to interact with students or participants. This is a big piece of gauging knowledge retention and understanding. Another negative is increased prep time. It often takes more time to prepare for virtual training than it does for in-person training. Structure becomes a priority and "winging it" is no longer an option (Hogle 2017.) Often, the number of presentation slides increase and additional activities such as poll questions or other prompts are incorporated into the materials to retain engagement. Many people need extra time to get their creative juices flowing in order to come up with these additional items. There are also many learners with lack of technical ability. They may be able to sit at a desk and stare at a presenter, but many of these same folks may not be digital natives and must learn how to hook up a second monitor, download a manual, or launch a poll question to record attendance. Some even struggle with webcams or sad to say – the mute button. It is a big learning need to be incorporated on how to use the tool to effectively participate in the learning session. Last, and most common is technical issues, which usually are not easy to handle. An in-person training doesn't have bandwidth issues or page not loading, unless of course the instructor forgets to come back after lunch break!

What are the advantages?

With challenges, positive impacts will surface. The online format is a benefit to both the trainer and the attendee. There are no longer travel restrictions or time constraints with virtual learning that might be traditionally associated with face-to-face sessions. Attendees could join a session from their home office, a coffee shop, or from the comfort of their sofa. If the training is asynchronous, they can do this on their own schedule. Self-paced training options allow the user the ability to take part at a time that meets their own scheduling needs. Instructor-led virtual, self-paced options and others that are hosted through a Learning Management System (LMS) have tracking and reporting advantages for a school or a corporation. One additional positive is the cost-savings that result from a virtual session. With everything being online, there will no longer be a need to rent space, print materials or even supply lunch or snacks for the longer sessions.

What does all of this mean for industry and education?

Virtual training is here, just as it was predicted in 1960. Leaders need to embrace the movement and figure out how to deliver an exceptional learning experience. As more people become comfortable with using online resources, we need to continue to build on this foundation. Younger generations are using these tools more often...especially with distance learning mandated in early 2020. It is not just kids. The older generations are learning how to FaceTime and join zoom meetings in order to stay connected with family and friends. According to Harper, 2020 is the yar that learning and developments takes it one step further. Now is the perfect time for a conversion to virtual format.

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Memory-Activating Strategies for Online Company Training

Chris Bechtel

Line items in business training budgets have been shifting since the COVID-19 crisis-from event reservations to salaries for technical communicators in learning development roles. Companies are investing resources to replace single-session or text-heavy offerings with media-rich, virtual trainings. Also, many online learning management systems (LMSs), which host and administer content, are upgrading to modern user interfaces. Amidst this rapid change, Learning and Development (LD) staff must focus on more than popular employee engagement methods. Since employees can't improve performance if they don't remember what they learned, LD staff should incorporate research-backed strategies that enhance memory and retrieval into training development. Complemented by basic features in most LMSs, strategies such as spaced repetition, microlearning, frequent testing, and interpolated testing strengthen employee knowledge recall and skill acquisition.

Workplace training should be designed to offset a phenomenon known as the "forgetting curve." As early as the late 1800s, psychologist Hermann Ebbinghaus documented that people tend to remember only 50% of newly learned information when tested 20 minutes later. This learned percentage falls to 40% in 9 hours, gradually declining to 24% in one month (Ebbinghaus 2013). Immediate, on-the-job reinforcement promotes retention, but in some cases, trainings cannot be followed with physical participation. Properly designed, online refresher courses can meet this need.

Refresher courses solidify information in long-term memory when they are delivered over timed gaps called spaced intervals (Kang 2016). The length of these intervals depends on how soon employees will be expected to retrieve the information. A study by Kim et al. analyzed LMS data from five companies (2019). The study concludes a shorter spacing interval between initial and refresher courses is better if information is retrieved soon after learning (Kim 2019). Examples from the study elucidate this concept. If onboarding new employees, information may need to be retrieved within a week of starting, so the refresher course should occur within days (Kim 2019). However, if the employee is not likely to use the information soon, a longer spacing interval is better for lengthy retention (Kim 2019). An example of this is yearly emergency preparedness training. The intent is longer retention before possible use, so the intervals should be longer (Kim 2019).

Because research is ongoing, industry guidelines for optimizing lengths between spaced repetition are not available. However, a LD team can determine this for their company's specific knowledge and skill competencies. In the LMS, a pre-set interval between initial and subsequent refresher courses could be scheduled and adjustments made based on quiz score reports. For example, provide one leadership skill training and pair it with three refresher courses spaced over these gaps: 1) two days, 2) two weeks, and 3) three months. If quiz scores drop between the latter courses, try shortening the interval from three to two months in the next skills training. The next refresher course could also be amended if a knowledge gap is indicated by an incorrect answer trend in the initial training quiz. Finally, an LMS can be programmed to send notifications when scores are low and to automatically assign additional courses. A LD team should become familiar with these LMS features to allow "content delivery to be personalized to individual employees so that training is focused on content that employees have yet to sufficiently acquire" (Kim 2019).

When refresher courses are digital based, focused on a single objective, and take under 20 minutes to complete, they are called microlearnings. Characterized as mobile-optimized and multi-media-formatted, these lessons offer on-demand learning that appeals to many employees in today's workforce. While cognitive research on this strategy is in early stages, learning efficiency is increased when "microlearning lessons center around a single skill or problem, providing a simple activation of prior knowledge, microcontent for delivering information, and a short assessment providing immediate feedback" (Zhang 2019).

A well-documented aspect of microlearning that boosts memory is implicit in its name. Bite-sized, connected pieces of information united by a single learning outcome are mentally ingested better. According to the American Psychological Association, "the mind divides large pieces of information into smaller units (chunks) that are easier to retain in short-term memory. As a result of this recoding, one item in memory (e.g., a keyword or key idea) can stand for multiple other items (e.g., a short list of associated points)" (APA 2020). Thus, an employee can store more information when it is chunked and displayed in patterns (Doyle and Zakrajsek 2019). Course developers can capitalize on chunking by discovering meaningful patterns in content, then dividing instruction into a series of microlearnings. For example, a new administrative assistant can be pre-assigned three microlearnings on company communication platforms. The microlearnings can be divided and categorized by access type: 1) internet 2) intranet 3) network drives. Regardless of how many communication programs or websites the recent hire must know, the material is chunked and categorized in a memorable way.

Learning does not stop once content is delivered. The quiz at the end continues to teach. Known as the testing effect, answering questions improves subsequent recall. In fact, frequent testing boosts memory more than re-reading or re-studying (McDaniel and Masson 1985) or additional exposure to the information (Roediger and Karpicke 2006). Summarizing studies on this topic, Roediger and

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Karpicke conclude, "In many contexts, conditions that lead to rapid gains in initial learning will produce poor long-term retention, and likewise, conditions that make learning slower or more effortful often enhance long-term retention, with the testing effect being an example..." (2006). Despite evidence that "effortful struggle" is rewarded with long-term retention (Bjork 1994), additional testing is not popular. People tend to select mentally easier, but less effective, learning methods (Bjork 1994). Employees willing to embrace learning can be identified in LMS tracking of course completions and scores. Once competencies are met, these top learning performers can be recognized and granted permission to other courses or pathways, rewarding them and enhancing their company learning.

Another application of effortful struggle's positive effect on memory is interspersed, or interpolated, testing. This learning technique quizzes the employee during content delivery and can be applied in live or recorded instructor-led trainings and video sessions. According to Lavigne and Risco's study on recorded lectures for online learning, memory retention is higher when questions are inserted immediately after the topic is explained rather than waiting until the end (2018). Interpolated testing also reduces mind-wandering and overconfidence (Szpunar and Schacter 2013). In a study comparing the effectiveness of interpolated testing and peer discussion on memory, Okano et al., reports "interpolated testing and structured discussions enhance long-term retention of the content of video training in the workplace," but "spontaneous discussion did not enhance memory for content" (2018). Interestingly, study results reveal LMS-deployed interpolated testing and instructor-led discussion to be equally effective at increasing employee memory retention (Okano et al. 2018).

This does not negate instructor or peer interaction but validates incorporating interpolated testing in LMS courses. A key researcher in worker safety and health training recommends, " to the extent possible, computer-based and distance learning methods should, in some manner, include active participation on the part of learners (e.g., modeling, feedback, and dialogue) to enhance their knowledge acquisition and increase their preparedness" (Burke et al. 2006). In an LMS interface, structured peer discussion posts pair well with live, instructor-led training.

After U.S. companies spent $83 billion in 2019 (Freifeld 2019) on upskilling, onboarding, and compliance, Learning and Development teams should pause to evaluate if knowledge and skill competencies are sticking in employees' minds long enough to improve their work. Two weeks, one month, and two years later, have performance evaluations, production reports, or safety records improved? Some memory-activating strategies incorporate readily into courses and LMSs. By using spaced repetition, microlearning, frequent testing, and interpolated testing, LD teams can empower employees with the tools they need to make their company successful.

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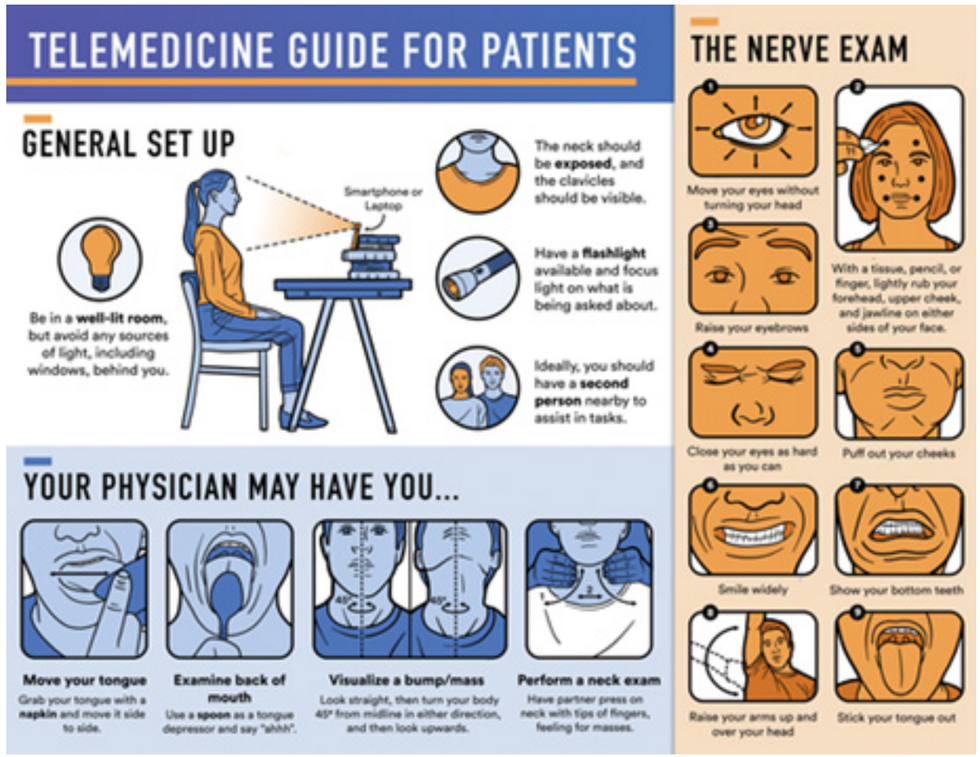
Versatility of Telemedicine Communication Delivery During COVID-19

Rebecca Houston

As the world transitions into the "next normal" of the coronavirus disease (COVID-19) pandemic, the medical field has continuously adapted to meet the new, unanticipated needs of their patients. COVID-19 has accelerated the growth of telemedicine to comply with public health mandates and social distancing protocols (Serper et al. 2020, 725). The term telemedicine is defined as "the remote delivery of health care services and clinical information using telecommunications technology" (Evans 2020, 469). The term of telemedicine is used interchangeably with "virtual healthcare" and "telehealth" (Lawrence et al. 2020, 4). For some perspective, in 2016 only 11.8% of family physicians and pediatricians in the U.S. worked in a practice that utilized telemedicine (North 2020, 145). A few months into the COVID-19 pandemic, only 9% of primary care physicians worked in a practice that did not offer telemedicine (North 2020, 145).



Patient Handout (Prasad et al. 2020, 1320)

Telemedicine has evolved from primarily conversations on the phone to the use of video calls and other telecommunication applications which have improved medical services (Hau et al. 2020, 1). Video conferencing and similar television systems are also used for people who are hospitalized or in quarantine to reduce the risk of exposure to others (Monaghesh, Hajizadeh 2020, 1193). Physicians in quarantine can also utilize these telecommunication services to care for their patients remotely (Monaghesh, Hajizadeh 2020, 1193). Telemedicine has been shown to improve the mental and physical health of the geriatric population who are at greater risk of contracting COVID-19 (Hau et al. 2020, 1).

Technology

With the rapid evolution and downsizing of portable electronics, most families have at least one device, such as a smartphone or computer with a webcam, which can provide communication between the patient and healthcare provider (Monaghesh, Hajizadeh 2020, 1193). The World Health Organization has standing recommendations on "the use

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of information and communication technologies (ICT) for health," to improve care globally (Evans 2020, 470). Within telehealth using ICT for the exchange of valid and correct information is essential (Monaghesh, Hajizadeh 2020, 1193).

One of the cons to telemedicine is that confidentiality can potentially be compromised with the presence of parents or others during the virtual encounter since the technology itself offers inadequate security (North 2020, 145). To combat this concern, many teams have moved to a multidisciplinary visit model to better highlight each team member's abilities in a more controlled, shorter appointment space (North 2020, 145). Although this may lead to more frequent visits it gives the patient the advantage of more security (North 2020, 145). Many healthcare systems also have begun to utilize messaging software or "patient portals" to communicate with their patients nonverbally (North 2020, 145). There are still many potential avenues of virtual care currently being developed that include "digital therapeutics and remote monitoring technology" (North 2020, 145).

Communication

From a provider perspective, the three areas of telemedicine competency include: technical proficiency; virtual information gathering, which includes patient history, information collection, and the physical examination; and finally, interpersonal communication skills (Lawrence et al. 2020, 3).

Two commonly overlooked aspects of information gathering in the initial portion of an appointment is rapport building and patient education which can be more challenging virtually (Lawrence et al. 2020, 3). Providers have continually made adaptations in their approach in order to improve patient satisfaction and patient activation during appointments, including the use of surveys and follow-ups (Lawrence et al. 2020, 3). Telemedicine has also been used internally through institution as a means of health education, physician training, and communication during administrative meetings (Jnr 2020, 3).

Key issues in telemedicine care include an individual's technical proficiency, gathering extensive information virtually, and interpersonal communication challenges (Lawrence et al. 2020, 4). Technical challenges with devices, software, or internet connection can result in significant barriers to communication (Lawrence et al. 2020, 4). Additionally, many traditionally employed nonverbal cues (such as allowing for silence, open posturing, and empathetic touch) may not be as easily interpreted (Lawrence et al. 2020, 4). Patient education handouts as shown in Figure 1 have been disseminated as part of many medical institutions' practices to better assist patients with technology set up, examination descriptions and accompanying visuals.

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Communicating COVID: How Technical Communication strategies can alleviate rising tensions between teachers, students, and parents

Chidelia Edochie

The onset of the COVID-19 pandemic has led to an unprecedented change in the structure and habits of society, both in the United States and beyond. These changes have been felt economically, socially, and perhaps above all, educationally. The educational system depends on a supportive and trusting relationship between teachers, students, and parents. However, in an era of uncertainty, stress, and frailty due to the global pandemic, the bonds between these groups have become frayed, resulting in less support and increased mistrust. Tensions between the distance of teachers, the needs of students, and the limits of parents continue to rise. Could technical communication strategies be the solution?

On January 23, 2020, the People's Republic of China imposed a complete lockdown of Wuhan, the largest city and capital of the country's Hubei Province (Reuters, 2020). The world was shocked by the draconian measures, but not entirely alarmed at learning that a viral outbreak was occurring in what many still see as a second-world nation. SARS, MERS, swine flu, Zika, Ebola and other infectious diseases had made similar ripples in the global health community over the past few decades. The American consciousness responded to the news as it often had before: concerned, sympathetic, happy that it wasn't happening to us.

But then quickly, quietly, it was happening to us. On February 27, the first school closure on American soil was announced: an employee at a high school in the Northshore district of Bothell, Washington had been exposed to the virus. In an abundance of caution, the campus closed for two days. But the spread continued, and on March 5 the entire school district closed all school campuses. By March 11, more than a million students across America experience school closures (Education Week, 2020). The shift to remote, online learning had officially begun.

While schools were closing, businesses were also shutting down. With many parents either out of work or working from home, it was assumed that parents could easily take on the daily responsibility of student learning, in partnership with teachers working remotely. However, that soon proved untrue. Parents who had lost their jobs were searching for new ones, trying to navigate complex unemployment claim systems, or struggling directly with the effects of Covid-19 as caregivers or as sick patients themselves. Parents who were working from home were trying to navigate new labor technologies, meet their regular deadlines, and provide meals for their children that had previously been provided by schools. Parents who remained employed outside of the home were struggling with how to avoid catching the virus and giving it to their children, with many such parents making the hard choice to live separately from their families in order to avoid unintentional transmission.

Yet, these same parents were simultaneously expected to act as "co-teachers" in a system that was built for professionally trained, full-time, face-to-face educators in a classroom setting, not for untrained parents juggling multiple responsibilities from the corner of their kitchen. While parents have always had some responsibility for the education of their children, that responsibility typically centered on homework completion, building at-home study habits, and behavioral correction. Now, those responsibilities have expanded to include confirmation of in-class participation, technology set-up, materials provision, minute-by-minute behavioral monitoring, and more, all while managing the daily responsibilities of work, health, and unemployment concerns.

What are the consequences for parents who are unable to meet these new expectations that have been suddenly foisted upon them? Parents are reporting that school districts have called law enforcement on parents whose children are not participating in online classes at the rate at which teachers expect. School districts view absence or lack of participation in online classes as truancy, and truancy as a possible symptom of abuse in the home. Families affected by this policy are disproportionately minority, low-income, and recent immigrants (Toness, 2020). While it is understandable, even honorable, that teachers are concerned about online attendance, involving Child Protective Services (CPS) and law enforcement leads to potentially dangerous interactions in the home. CPS and law enforcement traditionally act with more aggression and force with black, brown, and poor families, leading to a greater likelihood of negative consequence such as police violence and family separation (Cross, 2005). Once parents realize that school districts are resorting to involving these authorities in educational disputes, parents may then resort to harsher punishments when their children experience educational difficulties, which can include corporal punishment. Thus, real abuse has the potential to arise as an unintended consequence of truancy prevention.

Parents have reported a lack of clear communication from schools about the expectations of students—and by extension, parents—when engaging with online education. Even more importantly, schools are not clearly, consistently communicating the reasons for and circumstances under which they

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may be involving CPS and law enforcement for educational issues. In fact, some schools have been intentionally vague when parents have questioned why CPS was called to their home, and often refuse to even confirm their involvement in CPS cases when questioned by the family under investigation (Toness, 2020). This lack of clear communication contributes to rising tensions and mistrust between educators and families.

So, how can these rising tensions be resolved? Technical communication strategies utilized for (1) documentation and (2) risk communication may hold the answer.

Student-centered Documentation

At the onset of the pandemic and the start of online learning, many school districts and educators sent families manuals for setting up, navigating, and engaging with new technologies meant to deliver and track online learning modules. However, these manuals were written with the parent as the presumed audience, not the student. Manuals that are geared toward parents as the audience necessitates a level of parental involvement that is infeasible during the ongoing pandemic. Manuals are a common technical communications endeavor—known as documentation—and should thus follow rule number 1 in the field of technical communication: write for the right audience (Schimel 2021, 21). Documentation for online learning success should be written with the student as the prime reader, not the parent. This approach would necessitate the usage of age-appropriate vocabulary, simple action items, and colorful visuals mapping out the necessary steps for students to demonstrate active engagement in online classes.

Parent-centered Risk Communication

Teachers and school districts are extrapolating a student's risk of abuse based on engagement in online classes, or lack thereof. Currently, this process includes observing student behavior and then reporting said behavior to the authorities, largely circumventing parental contact in the process (Toness, 2020). Instead, schools should incorporate risk communication strategies directly with parents. Risk communication is a subset of technical communication, and refers to "the exchange of real-time information, advice and opinions between experts and people facing threats to their health, economic or social well-being. The ultimate purpose of risk communication is to enable people at risk to take informed decisions to protect themselves and their loved ones" (World Health Organization). Schools should send parents direct, clear communication about the risks of student nonattendance in real-time, with a standardized set of consequences (i.e. 3 unexplained absences in a row will lead to social services involvement), prior to contacting the authorities. Such communiqués should be parent-centered rather than student-centered, because children and young adults may not fully grasp the seriousness of the consequences of their absenteeism.

It is impossible to know how much longer our social, economic, and educational systems will be grappling with the effects of Covid-19. However, the current problems being faced by teachers, students, and parents when transitioning to online learning must be confronted, analyzed, and rectified to avoid further fraying of the communal bonds between educators and families. Technical communication strategies may very well be the solution.

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Technical Communication in Government COVID-19 Regulations

Madeline Poole

Due to the many unknowns of the coronavirus disease (COVID-19), it has been imperative for the United States government to effectively communicate various health guidelines to the public. Especially, information provided by the government must be accurate and prompt. The government must rely on media outlets such as websites, ads and the news to reach vast numbers of people in a short timeline. It is evident technical communication has played a vital role in the United States government's communication to the general public in regard to COVID 19. Without it, the government could fail to relay pertinent COVID-19 information that could risk their own health and safety.

Technical communicators advocate for the use of plain language, especially in information the government communicates to the general public. Word choice, organization, and visual design are key principles in plain language practices (Willerton 2015, 1). In addition, these plain language principles are used in various government COVID-19 regulations in order to effectively communicate to the public. Ineffective communication by the government can lead to a great deal of public uncertainty and misunderstanding, as well as serious errors in reacting to this emerging health crisis leading to catastrophic public health and social consequences and prolonging the pandemic (Kim & Kreps, 2020).

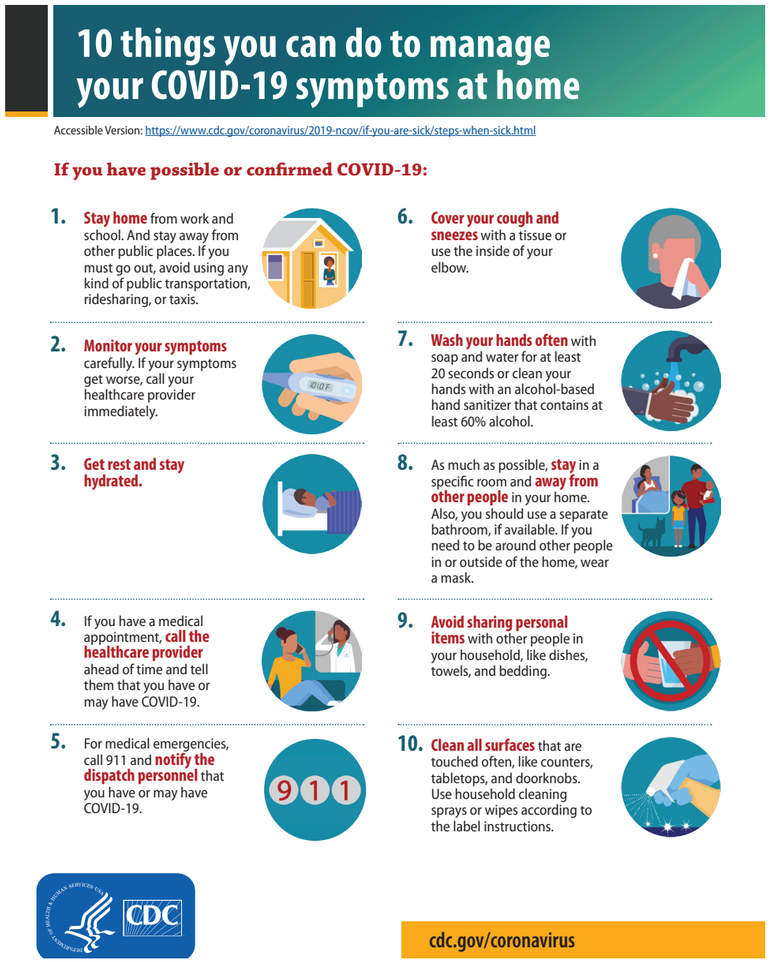

Figure 1. 10 things you can do to manage your COVID-19 symptoms at home (CDC)

Guidance Documents

The Center for Disease Control and Prevention (CDC) continues to be a fundamental resource for informing the public on COVID-19. In addition, their website has made it easy for the public to access COVID-19 related information. An aspect of technical communication the CDC uses is referred to as consumer literature. Consumer literature consists of information for the public about regulations and safety issues (Last et al. 2019, 2). Through text and visuals, the CDC provides multiple guidance documents for the public's use and education. In Figures 1 and 2, it is important to acknowledge the word choice, organization, and visual design of these documents. In Figure 1, the

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document is organized in a list of 10 instructions and uses imperatives. By bolding the imperatives in each instruction, for example, "stay home, call the healthcare provider, and monitor your symptoms," it urges importance to the reader. Thus, the word choices used in this document are important to acknowledge because it is emphasized through The National Park Service (NPS) is another federal agency closely monitoring COVID-19. The COVID-19 page on their website is regularly updated to ensure public health and safety at all parks. In addition, there are graphics related to NPS COVID-19 response and social distancing to be used on websites, social media and physical locations to promote COVID-19 related best practices for health and safety. Figure 3 emphasizes the NPS's principle to recreate responsibly during COVID-19. The three plain-language practices are used in this graphic, but specifically visual design. The audience for this graphic is the general public and NPS visitors.

Figure 2. How to choose the right mask (CDC)

Figure 3. Recreate Responsibly

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Global Communication: The Development of Technology

Alex Bowerbank

The development of technology has changed the way we communicate in many different areas of our lives. According to extensive research, business and education are among the two categories affected the most by technology. Even though the United States has been a global leader in many areas of interest, other countries have developed many new defining technological resources. Over the past several decades, technology has slowly and effectively changed how we communicate in our daily lives; indeed, we may all communicate in different ways, but we all do it for two primary purposes: needs and desires.

Education

What technological resources have affected education the most? David Martin and Nancy Knowlton invented the SMARTboard in 1991; it was once just a new invention, but it is now used in classrooms worldwide. Many public and private institutions consider the SMARTboard as the most significant technological resource within the academic system. This versatile/accommodating display has continuously been updated and designed for any subject matter and is commonly used for ESL (English as a Second Language) learning. The SMARTboard is also known as an interactive whiteboard (IWB) because of its ability to communicate with students directly. Preparation is needed before each class, as teachers are required to adjust the settings and choose the intended program; then, students can interact with this device—independently. The smart board can give instructions, highlight words and phrases, and guide each class session—all on its own!

Now, let's hear some opinions from educators who have used this amzazing invention. Beauchamp and Parkinson state, "The real advantages of the SMARTboard are being seen as teachers explore ways to use this new technology… resuting in changes in pedagogy" (2005). Davidovich and Yavic say, "the greatest improvement since the introducation of smart boards is in the variable of clarity" (2016, 63). I agree with both of these opinions, as I have used smart boards myself in both the United States and abroad.

What is the connection between international communication and smart boards? When I lived in China, I taught ages 3-18, and I can effectively say that smart boards can be extremely useful in the classroom. Because I don't speak Mandarin Chinese, and when I first arrived in China, I wondered how I would teach students of a different language. I began learning how to operate an IWB, including how it could translate any language into a designated lesson plan; I could play, teach, and communicate with my students on an efficient level. In answering my question, smart boards break the language barrier and allow teachers to successfully communicate with their students—regardless of location, academic content, or language.

Business

"Perhaps the largest innovation made to date is the way we communicate, especially in business," says Axxys Technologies.

According to research, the 1990s were a pivotal and vital era for technology; I can attest to this, as I grew up during this period. I watched as cell phones, computing devices, and the internet all developed over the years and affected the world of business. Khan Academy explains, "The creation of a global market and the outcome of major institutional and technological changes, introduced during the 1990s, have contributed to the globalization of western and, more specifically, American programming around the world." (2019). On a global scale, how has technology influenced the way businesses communicate? You may immediately think that Skype and Zoom win the argument—mainly because of popularity; if you assumed this, then you were right! It isn't just because of popularity, though; both platforms boast several different innovative features, such as virtual rooms and workspaces, video webinars, the App Marketplace, and advanced messaging.

Furthermore, they allow us to communicate from different computing devices—such as a laptop, computer, cell phone, or tablet. "Industry analysts say that business users have been drawn to the app because of its easy-to-use interface and user experience, as well as the ability to support up to 100 participants at a time. The app has also blown up among educators for use in online learning." (Ghosh 2020). Before the inventions of Skype and Zoom, many international businesses would communicate by phone, and if they wanted to have a face-to-face meeting, an airline ticket would be purchased; in fact—brace yourself—Zoom is now worth more than the seven largest airline compa-

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nies combined! It is now relatively easy to see how technology has affected the way we communicate—on both a national and international level.

Social media is another mode for communicating internationally, and it is not just for personal use. The invention of Six Degrees in 1997 was the world's first recognizable social media site. Since then, social media began to build its popularity; the public could now communicate with friends and manage their reputation online—but that has all changed! Even though social media is still used for those basic purposes, it is now implemented on a global platform to deliver better customer service, brand building, communication between employees, and researching market trends.

"By using social technologies, companies can raise the productivity of knowledge workers by 20 to 25 percent," says Michael Chui.

According to reports from various companies, social media can also promote more effective communication within the workplace. SimilarWeb performed an astounding study of 187 countries and discovered that WhatsApp leads the entire social media platform; more than 109 different countries use this app. Facebook Messenger comes in second place and is followed by WeChat, Viber, Telegram, and Snapchat. "WeChat is the all-in-one app. Previously it was only used for sending instant messages, but now it forms the basis of your daily digital life." (Lee 2018). When I was applying for jobs in China, companies would prompt me to download WeChat. I had never heard of this application until then, and my interviews were actually conducted via WeChat on my phone; I could not believe it! Once I arrived in China, I was using Wechat for taxi rides, purchases, communicating with other employees, and other academic purposes. What is the one feature that all these different apps have in common?—they all have the capability of communicating internationally!

Conclusion

It is quite interesting how technology has enabled our world to communicate on a level only dreamed about. Technology has and continues to affect the way we learn in the classroom, communicate with friends, conduct day-to-day activities, and grow and maintain a business. As noted above, I have had the opportunity of experiencing, first-hand, the benefits of technology in both my academic studies and the workplace. Overall, I believe that technology is complimentary and can be useful in any avenue of interest; indeed, it has also provided a more significant opportunity for us in business and education. In one decade from now, what exciting and new resources will technology provide?

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Creative Composition Practices in Technical Writing

Lauren Brandmeier

Creative Composition Practices in Technical Writing

Technical writing is among the densest and most complex forms of writing. Technical communicators use their writing to share important information with colleagues and customers alike. Technical writing can take on a variety of different styles and is most commonly used for documentation, instructions, and guides for consumers. However, instruction guides and user's manuals can result in a relatively bland and dull experience for readers. How, then, can technical writers make their writing not only informative, but also engaging for readers? One way to accomplish this goal of creating equally informative and appealing content is by incorporating basic practices of creative composition into technical writing, which includes traditional aspects of storytelling and narrative writing.

What Scholars Are Saying

In his book Writing Science, Joshua Schimel argued that successful writing must be effective writing (2012). This means that while technical writers focus on creating their documentation, they should also incorporate compelling language into their work. Schimel coined the term "science writing as storytelling" and defined this as the process by which science writers can use characteristics of storytelling to enrich their work (2012, p.8-15). Schimel wrote that there are three key facets to using storytelling in scientific writing: engaging content, effective structure, and compelling language (2012, p.8-15). And, throughout his book, Schimel consistently showed readers how science writers can use these principles of storytelling to make their writing as meaningful and influential as possible.

When we recognize that writing a paper is writing a story, it raises the obvious point that we can become better storytellers, better writers, and better scientists by studying what makes a good story, how other writers do it, and how to apply those ideas to science. We can communicate more effectively while remaining rigorously professional. (Schimel, 2012, p.13)

While Schimel applied his storytelling theories specifically to scientific writing, his ideas can certainly carry into the field of technical communication. By using Schimel's three fundamental characteristics of storytelling, technical writers have the potential to add a new layer of influence and appeal to their work.

Adding the element of storytelling into technical writing offers more benefits than just improving the work's overall style. When authors use storytelling as a way to communicate their ideas, they essentially portray themselves as personable to their readers. Tracy Bridgeford pointed out in "Story Time: Teaching Technical Communication as a Narrative Way of Knowing" that stories have the ability to connect people to each other (2004). Bridgeford also argued that we "process and categorize knowledge in narrative form" (2004, p. 112). With this fact understood, it would make sense that technical writers consider the use of storytelling structure and other narrative characteristics in their work.

Technical documents appear to be neutral, decontextualized texts that should require no interpretative activity…. Many textbooks focus on this aspect of technical communication, which I think doesn't address the content (how writers understand what they are saying) at a level in which students fell connected with the text. Stories, I think, do just that—connect with students at a level that all humans share. (Bridgeford, 2004, p. 115-116)

Incorporating Creative Composition Practices into Technical Writing

I've now talked a bit about how storytelling and narrative writing practices can carry over well into the technical communication field. But how, exactly, can these principles be applied successfully? I now want to emphasize Schimel's key characteristics of storytelling, or narrative, writing and briefly explain how each aspect can improve technical writing.

1. Engaging Content

Engaging content, when done successfully, draws readers in and keeps them absorbed throughout the piece, whether this be some sort of user guide or more elaborate documentation. One way to attract appropriate and/or targeted readership is to

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know the audience. Ask yourself: For whom am I writing? Does my topic require a more casual or more professional tone of voice? What writing style will resonate best with my readers? Asking yourself these questions will help to ensure that your content keeps readers interested and engaged.

2. Effective Structure

Good writing should always follow a streamlined order of events. Staying consistent with a clear structure throughout the duration of a piece is vital to understanding. A loose, ill-thought structure can easily create confusion for readers, who will surely find it difficult to follow along, and will subsequently find the writing to be unpleasant to read. To combat this, create a physical outline before beginning the rest of the writing process. Spending time on developing a solid outline will not only make the writing process much smoother for authors, but will also play a key role in ensuring that the writing stays clear, consistent, and concise.

3. Compelling Language

Arguably, using compelling, or captivating, language is paramount in writing effective content. Using compelling language means that writers should use language which is sure to appeal to their readers. Oftentimes, when this is successful, readers will find it hard to stop reading. You may have felt this yourself if you've ever read a book that was so enjoyable you didn't want to put it down. To ensure the presence of this language throughout a piece, simply befriend the thesaurus tool on your computer. The thesaurus is a great tool in helping writers turn generic, overused words into new, unique, and memorable phrases that readers are sure to find attractive. Compelling language should be used as much as possible in order to continuously captivate readers.

Key Takeaways

In order to ensure that your work as a technical writer or communicator is effective for your readers, consider incorporating elements of creative composition into your technical writing. This way, not only will your writing be informative for readers, but it will also be engaging, effective, and compelling. This, then, makes your writing successful and appealing to readers.

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Making Connections: Platforms for Reaching Students and At-Risk Students During COVID-19

Rebecca Hiatt

When the novel Coronavirus emerged as a threat to public health in the United States in March, 2020, those in the education field were confronted with a complex task: Continue rigorous learning and engagement for each student in an online environment. For many of the 3.7 million teachers in the U.S. (Nces, 2020), the landscape of virtual learning was largely unexplored. Veteran teachers, though highly-effective in a classroom setting, often found themselves on the bottom of the learning curve for online tools, many of which lacked instructional models for how to best utilize the platform. Teachers were directed to quickly master several foundational platforms for family and student communication within a five-day transition period, as well as sift through a variety of instructional applications to ensure student learning and engagement. Since "Distanced Learning" began, several foundational platforms--also called Learning Management Systems, or LMS--have been at the center of student learning, as well as supplementary tools that enhance student engagement. Utilizing both types of programs has enabled continuous, online learning, and aided teachers in the new mode of instruction.

Foundational (LMS) Platforms

At the secondary level, several platforms have emerged as foundational to student interaction. In many ways, programs like Schoology, Google Classroom, and Seesaw act as a "home base" for information and learning. An online platform, at its most basic level, is defined as "a digital service that facilitates interactions between two or more distinct but interdependent sets of users" (OECD, 2019). In this case, educational platforms/LMS enable students, teachers, and parents or guardians to converge on a shared online space to interact, communicate, and collaborate.

The selection of which platform to use varies by grade level. At the elementary (K-6) level, Seesaw is the most popular platform, with 1 out of 2 classrooms in the United States using the program (Smith, 2020). This interactive platform allows teachers to post videos, links, worksheets, and other tools in a highly-interactive format. Students can write directly on worksheets, increasing engagement and learning by minimizing an abundance of materials to deliver instruction (no paper or other materials are required), thereby creating a fair and equitable learning environment for students at every socio-economic level. Parents have access to Seesaw and can easily view entries and assignments completed by students, as well as communicate with the teacher.

At the secondary level (8-12th grades), Google Classroom and Schoology are most widely used. Schoology enables students to view grades, communicate with teachers and peers, and organize all classes within a common format, easily viewable and accessible on one screen. Teachers can post assignments, create discussion forums, hold live group discussions, link to material, embed media, and communicate with students and parents in one LMS application, streamlining the workload of online communication to promote increased time for student learning and feedback. Google Classroom, although not considered a true LMS because it does not offer a fully interactive program, also creates a stream of assignments which students can access to complete classwork. Although Google Classroom is free, which benefits districts who serve a large body of low-income students, it provides a solid basis for engagement and learning. In many cases, Google Classroom is used with supplementary platforms for 8-12th graders.

Supplemental Platforms

In order to increase interest and engagement at all grade levels, teachers have explored and utilized supplemental platforms that seek to bolster collaborative learning and creativity. Many of these platforms also tap into the technological know-how of students and their need for social interaction through various media. These platforms range from highly interactive to mainly creative, with the option to share projects and other work.

One example of a highly-interactive platform is Kahoot!. This program allows students to compete in virtual, online quizzes against their peers. Teachers input questions, students sign into the Kahoot! and answer timed questions controlled by the teacher. Students are assigned points based on correct answers and the speed at which they answered correctly, ensuring a truly engaging activity for those involved. The Kahoot! remains accessible after the competition ends, enabling students to review the answers and study, furthering their learning.

Another application, Nearpod, is a more instruction-led experience. Nearpod allows teachers to create slideshows with links to media, interactive slides for student collaboration in real-time, and embedded checks for understanding. This application creates high levels of engagement, as teachers methodically lead students through the steps of live learning, simulating a classroom experience. Students can access Nearpod on any digital device.

Another Google application, Jamboard, enables students to view a common "board" and post responses in real-time. This format allows for student collaboration on larger projects, discussions, and ideas. Students can anony-

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mously place short "post-its" on a virtual space with their ideas, engaging reluctant learners by scaffolding their knowledge of topics for future discussion or assessment. Jamboard also allows teachers to retain the input they gather from students and make sessions viewable to students to review.

At-Risk Students and Distance Learning Engagement

According to the U.S. Census, about 46% of students have one or more "at-risk factors" that may affect both their schooling and their learning achievement (Us Census Bureau,2001). During the course of a normal school year, prior to 2020, these risk factors necessitated targeted methods of instruction and accommodation for students to meet learning outcomes and build their skills, facilitating growth. In the midst of Distance Learning, these concerns are still very present: How will students who lack engagement when at school connect and have meaningful learning experiences while away from the classroom? Through using a combination of both LMS platforms and supplemental, teachers have begun to create systems of online learning that provide instruction while also fostering growth and facilitating social interaction. Students who have home environments less conducive to learning--younger siblings needing care, loud and busy households, parents who must work and leave children unsupervised, lack of food or means for cleanliness--continue to have needs that educators must meet in order to actualize student learning. Multiple formats of online learning--both LMS and supplemental-- are the basis of ensuring equitable access to education for all students within a state of pandemic. Despite the fact that distance is mandated, quality interaction and learning can still take place, and teachers continue to explore the resources available to provide that all-valuable result: knowledge.

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Platforms for Project Management During COVID

Megan Clasby

As our world adjusts to the "new normal" of the COVID pandemic, many employees are adapting to the challenges by working at home. In large part, this is created by the need for greater social distancing. Additionally, the pandemic has pressured many businesses and organizations into finding ways to cut costs. For some industries, allowing employees to work from home reduces overhead. These changes are increasing reliance on technology, applications, and platforms. In nearly all fields, collaboration and communication between peers is paramount, and finding technology that aids in identifying, tracking, and streamlining group projects is imperative to maintaining productivity while at home.

At-Home Employees

Prior to the pandemic, there were approximately 4.7 million people working from home, which equates to about 3.4% of the U.S. workforce. Today, that percentage is approximately 18%. That doesn't include people who have hybrid schedules, where they work part time at home, and part time in the office (Marinova, 2020). Many companies are recognizing that productivity rates are staying the same, if not increasing. Birkinshaw et, al. found that for most, there are fewer large meetings and coworker distractions, and this has allowed for workers to prioritize tasks more effectively and spend more time on required tasks (2020)

Productivity

This shift in working environments has increased the need for companies to find ways for coworkers to manage tasks, projects, and timelines. Many different apps have aided employees in tracking the flow of work to allow for productivity while working from home. Below is a list of several high rated platforms that can aid businesses in the transition to working from home.

1. Trello

This app allows for people to develop visual and artistic boards to help with project management. It is a free option that allows users to track due dates, develop boards, log activities, and attach photos, drawings, sketches and mockups. This particular app is a great option for companies or individuals who are looking for a zero-cost way to communicate required tasks, completed actions, and next steps in the project (Trello, 2020).

2. Wrike

This platform allows businesses to plan, prioritize, and present projects with clear and outlined expectations. Users can create and assign tasks, share files, and communicate in real time. It allows for prioritizing items and assigning due dates. It provides Gantt charts which help with visual reference and identifying delays. It also allows managers to view workloads to balance tasks. This platform is free for the first 5 users in an organization. If a larger business chooses to use it, the pricing is dependent on the number of users. The Professional Plan is $9.80 per month for 15 users. The Business Plan is $24.80 for up to 200 users. The Enterprise Plan is unlimited, but the business must contact the company for a quote (Wrike, 2006)

3. TrackVia

This platform allows companies to build applications for their specific workflow and industry. It allows users to develop their own project tracking app depending on their needs and abilities. It offers a "no coding" option but allows it to be added on at any time. TrackVia provides a solution consultant to help build, troubleshoot, and test the app to get it up and running quickly. However, this option is much pricier, and would be for a user that has a very specific need or design. The base cost for the application builder is $2,500 per month (Trackvia.com)

4. Monday.com

This operating system allows users to develop workflows and manage productivity without need for coding. It provides alerts, automatic status updates, and project workflows to keep teams on track. It is an intuitive platform that doesn't require training, and it allows new users to get up to speed quickly. There are more than 200 templates to get started with, and users can add files, link boards, and check the status of projects. It provides a free trial, but pricing is dependent on the features and services. The Basic Plan is $8 each month per user, or $24 per month for several users. The Standard Plan is $10 each month per user, or $20 per month for several users. The Pro Plan is $16 each month per user, or $48 per month for several users (Monday.com).

5. InMotionNow

This application is geared for marketing and creative teams who are looking for a workflow option that provides proofing and feedback to reduce the time it takes to get content ready to publish. It allows users to delineate responsibility by routing tasks to specific users and provides role-based user access to control confidentiality. It also includes Gantt charts and Kanban boards, and integrates seamlessly with Adobe products. Pricing for the product is unavailable on the website. Interested users must request a demo in order to get pricing options (InMotionNow, 2020).

Benefits of Project Planners

With many more people working from

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home, the ability to check in with a coworker is no longer just a short walk down the hall. People need to be able to track processes online, and these applications help streamline that process. The first benefit to these planners is the visual progress monitoring. Whether it is a Gantt chart, Kanban board, or to-do list, these applications all allow for users to visualize the overall project, status, and tasks. This increases productivity as team members can act quickly and independently. Secondly, these apps allow for "single-source" communication. Rather than checking emails, opening files, and looking for updates on a calendar, users can access all their project communication in one spot. This allows the team to focus on tasks rather than searching their computers. Additionally, these apps are highly customizable, allowing every business or organization to find a platform that best suits their needs. And if one hasn't been designed yet, they can design their own. Finally, online workflows allow for in-time communication. People can develop, edit, revise, and provide feedback in real time which decreases wait time.

Technology during COVID

The pandemic has shifted many elements of how we interact with each other and how we conduct business. Many of these changes have been swift, but many of them will have a lasting impact. Many employees are using technology to complete work from home; consumers are looking for online options to purchase goods; and schools are finding ways to teach virtually. All of these transitions will have permanent changes in how we operate in our daily lives. We need to look for resources and tools that can aid us in this pandemic.

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Meet the Contributors

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