



E-MENTORING

SUPPLEMENT TO THE

***ELEMENTS OF EFFECTIVE
PRACTICE FOR MENTORING***

December 2019



MENTOR

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INTRODUCTION

E-mentoring (sometimes referred to as electronic mentoring, digital mentoring, online mentoring, virtual mentoring, or computer-assisted mentoring) includes any type of mentoring that incorporates a digital technology.

This type of mentoring has grown in popularity over the past couple of decades with the now ubiquitous use of the internet, cell phones, and social media, especially among young people. E-mentoring requires the use of some form of information and communication technology (ICT) and can include sending emails between a mentor and mentee, texting using cell phones, chatting using a messenger program or social media, video conferencing (such as through Skype, FaceTime, or another video call platform), and posting messages to digital bulletin boards or forums. Some programs utilize their own proprietary platforms, often combining many of the features mentioned above, so that mentors and mentees can communicate in a space completely dedicated to their mentoring interaction, while other programs may use readily available technology, or a combination of proprietary and publicly available software platforms.

Programs in which mentors and youth might never have in-person meetings, or even get to know program staff, will likely face some challenges designing and implementing their services that other programs do not experience. But we have also found, through both an examination of the research literature and in the rich conversations with our practice partners on this project, that e-mentoring programs offer some clear advantages over in-person models and may, in theory, be

better positioned to meet the needs of youth with specific challenges or in fostering different types of meaningful adult-youth interactions. These diverse e-mentoring models can connect individuals literally a world apart and offer potentially greater and more frequent access to a variety of different types of mentors. They can also offer some youth safety and participant monitoring capabilities that go beyond what many in-person programs can offer. With technology playing an increasingly important role in everyone's lives, these relationships and e-mentoring models will continue to grow in importance and relevance in the mentoring field.

This supplement is dedicated to recommending additional and enhanced practices beyond those offered in the *Elements of Effective Practice for Mentoring* that we believe will help e-mentoring programs design and implement their programs more effectively. We hope that service providers, funders, and other stakeholders find it a valuable resource in their work.

THE MANY FACETS OF E-MENTORING IN ACTION

One of the most important things to recognize about the e-mentoring field is that it is incredibly diverse. These types of programs, while all fitting under that broad e-mentoring label, are defined by many factors that govern how they operate and how and when mentors, staff, and youth interact.

Technology Used

E-mentoring programs often use email, bulletin boards or forums, chat features, or other text-based communication methods. Some use video conferencing platforms (e.g., FaceTime or Google Hangouts), while others offer proprietary software systems that combine many of these features, along with providing customized content such as

suggestions for match activities that are integrated into a single-user platform. Some allow users to select a variety of ways to communicate with one another, while others insist on a single tool or platform. The selection of appropriate digital technology is a major consideration for these programs and is discussed in greater detail later in this resource.

Interaction between Participants

E-mentoring is unique in that the interaction between mentors and mentees can be synchronous, such as when interacting via a video call or chat program, or the communication can be asynchronous, such as through the use of emails or forums where there may be a significant time lag between sending and receiving messages. In fact, some programs do not even have scheduled meeting times, allowing mentors and youth to communicate any time they wish. Others, however, have interactions take place at regularly scheduled times, especially when the program is tied to a classroom setting or time-based project.



E-mentoring programs are also unique in that they provide the flexibility of match meetings occurring entirely through the technology or including some in-person contacts between the mentor and mentee along with technology-assisted interactions. For a great example of a blended program, see the case study of the iMentor program below. Similar to in-person mentoring programs, e-mentoring can utilize a one-to-one mentor/mentee setup, small group format, or even a group of mentors matched to one mentee.

For the purposes of this resource, we are defining e-mentoring programs as those where mentor-mentee interactions primarily (or exclusively) take place using technology. This supplement excludes programs that offer primarily in-person mentoring interactions, but also allow match members to communicate with one another using technology. Our intention here is to offer research-informed recommendations to mentoring programs to support matches where mentors and mentees rarely, if ever, meet in person, which — as one can imagine — greatly changes how the program is designed and implemented.

E-MENTORING IN ACTION:

BLENDING ONLINE AND IN-PERSON MENTORING AT IMENTOR

Mentoring pairs in the iMentor program experience a combination of online and in-person interactions. This approach gives each pair the opportunity to focus both on the goals embedded within the curriculum related to postsecondary success and dynamic, interpersonal relationship development. By utilizing dual communication avenues, iMentor provides mentoring pairs with multiple opportunities to engage in consistent and frequent communication, a central tenet of mentoring best practices.

The online platform affords matches with a space to discuss and reflect, encouraging the development of a more personal relationship. In the beginning of the relationship, pairs are encouraged to share aspects of their lives that provide the opportunity for their mentoring counterpart to learn about their lives more deeply. For example, mentees and mentors write “I am from . . .” poems, where they describe their backgrounds and the elements of their lives that have contributed to the people they are becoming. Through this exercise, mentors have the opportunity to learn more about their mentee’s life and gain insight into the context of the mentoring relationship they are in the process of developing. Mentors then share their own poems, providing their mentees with a new perspective they may not have previously had about their mentor’s life based upon their initial introduction.

The initial online-facilitated sharing of more personal elements of their lives allows mentoring pairs to create a foundation upon which to discuss resonating reflection questions they had when reading their partner’s online content. The in-person connection gives pairs a face-to-face opportunity to reflect on the main learning objectives and to further develop the quality of their relationship. When pairs begin working on the mentee’s socioemotional skill development and/or progress toward completing all the required steps necessary for their postsecondary plans, they will typically communicate online each week at a monthly discussion event. The complementary nature of online and in-person curriculum experiences allow for different learning, communication, and relationship styles to flourish toward achieving targeted outcomes.

Goals of E-Mentoring Programs

E-mentoring programs often have similar program goals to that of traditional in-person mentoring (e.g., to improve academic outcomes). More commonly, e-mentoring programs often target specific circumstances and outcomes that are not easily addressed through traditional in-person mentoring formats. For instance, youth with physical disabilities may not be able to easily meet with a mentor in person; e-mentoring provides an opportunity for

regular meetings without physical barriers,^{1,2,3} and these programs allow them an opportunity to connect with mentors and pursue goals that might have otherwise been unattainable.

E-mentoring also creates the opportunity for the availability and accessibility of mentors who fill certain characteristics, such as sharing a similar skill, interest, or characteristic with a mentee. When certain characteristics are not common in the general population, e-mentoring can help to



connect mentees with similar mentors even if they live far away. An example of this is connecting young people experiencing eating disorders to mentors who have experienced similar challenges through an online forum⁴ or the iPeer2Peer program, which pairs young people living with juvenile idiopathic arthritis with a slightly older youth who is successfully managing the same illness.⁵

Some e-mentoring programs also focus on providing specific academic support or career exploration experiences. For example, the Cybermentor program pairs girls (ages 11–18) with female professionals in STEM (science, technology, engineering, and mathematics) careers.^{6,7} Such mentors may be rare and hence, harder to locate and recruit for participation in mentoring programs employing an in-person mentoring design. E-mentoring can also assist with the transition of mentees into higher education, especially for youth who do not have familiarity or easy access to university campuses. For instance, CAMP Osprey⁸ provides college-aged mentors to youth who live far away from university campuses and/or have little exposure to the college experience. In this program, students are even provided with opportunities for virtual college campus tours.

E-mentoring can also offer access to mentors who bring specific academic subject-matter expertise. For example, many of the projects developed by

Dr. Kevin O’Neill and colleagues pair scholars and academics in fields such as history with classrooms of students working on projects related to the mentors’ areas of expertise.⁹ This program model allows young learners to access experts with knowledge and understanding that would have been unthinkable using in-person methods.

We also found examples in the literature of programs focused on improving social and communication skills. Using an electronic relationship to help youth build their online communication abilities — critical in today’s world — these programs teach youth how to engage new people and build relationships with diverse individuals. Two such programs were part of this project’s Working Group, the CricketTogether and TryEngineering Together programs, which provide mentors to children in third through fifth grades so that the mentees can build literacy and STEM skills, respectively, while being exposed to adult role models and learning about others who are different from themselves. Other programs emphasized exposure to a variety of diverse people, both in general¹⁰ and in specific career fields.¹¹ (You can read about a great example of mentoring for specific career fields in the case study of the Cybermentor program below.)



E-MENTORING IN ACTION:

CYBERMENTOR AND THE GROUP EFFORT TO KEEP YOUNG WOMEN ON STEM PATHWAYS

Cybermentor is a nationwide German e-mentoring program that encourages girls to pursue their interests in STEM through academic coursework and career opportunities. In operation since 2005, the program matches up to 800 mentees per cycle with female mentors via an algorithmic matching process. Mentees are girls from 11 to 18 years of age from high-achiever academic tracks. Their mentors are university-educated women working in various STEM domains in the public and private sectors or pursuing advanced degrees in STEM. In addition to their mentoring dyads, the mentees are also assigned to small mentoring groups — consisting of two dyad pairs — that share similar STEM interests. Each mentoring cycle lasts one year and is divided into four consecutive phases. Each phase has a different focus and facilitates collaborative work on exciting STEM projects, including interdisciplinary activities. Mentees can participate in several consecutive mentoring cycles. Cybermentor is being thoroughly evaluated and is the subject of numerous research studies. In 2017, the program was included in the Gender Action Portal of the Harvard Kennedy School.

The combination of one-to-one mentoring dyads with small mentoring groups has increased program engagement. When compared to other mentoring settings, participants in Cybermentor achieve and maintain higher levels of engagement (i.e., the number and frequency of interactions on the platform). The small-group mentoring approach is especially effective in that it encourages a reciprocal exchange of STEM ideas and experiences among participants, mentees and mentors alike. This exchange drives home the crucial realization that the girls are “not alone” in their STEM interests, while simultaneously affording mentors the opportunity to impart their diverse knowledge of experiences related to identifying as a female professional in a STEM field.

To further enhance the participants’ shared learning environment, Cybermentor offers them a bulletin board feature. The bulletin boards offer mentors and mentees opportunities to discuss topics that range from detailed domain-specific questions to general STEM-related discussions. Participants discuss STEM-related topics such as subjects of study, research inquiries, everyday STEM phenomena, experiments, and career enhancement opportunities. While the boards are designed to facilitate STEM-intensive discussions, they are nevertheless kept open enough (i.e., with fewer predetermined topics) to allow relevant themes to emerge organically from participants’ discussions. The boards serve as networking opportunities for mentees and mentors alike and thereby, significantly increase members’ interactions. This resource broadens the reach of the overall community and boosts the positive impact that encouragement and behavior modeling have on the participants’ self-confidence.

These essential touchpoints — small group mentoring and the bulletin board feature — facilitate a STEM-friendly learning environment where ongoing dialogue centered on girls and women in STEM is highly valued and appreciated by all participants.



Finally, e-mentoring may provide mentors to those youth who are simply more geographically or socially isolated and may not have access to a large number of adults who can fill this role in their lives, such as rural youth.^{12,13} Some have speculated that e-mentoring can be a tremendous equity tool in bringing increased and specific forms of social

capital to otherwise isolated populations of youth, such as those in rural communities or communities lacking in sufficient adult role models.¹⁴ You can see how one MENTOR Affiliate is using e-mentoring to increase access to mentors in smaller communities across the state in the following case study.

E-MENTORING IN ACTION:

MAXIMIZING MENTORING IN SMALLER COMMUNITIES AND RURAL AREAS WITH THE IOWA MENTORING PARTNERSHIP AND THE LINKS TO LNX PROGRAM

The Iowa Mentoring Partnership (IMP) has long worked to bring the power of mentoring to rural communities across the state. While the larger metropolitan areas, such as Des Moines and Cedar Rapids, feature large pools of potential mentors and easy access to mentoring activities and locations, the more rural parts of the state can struggle to find sufficient mentors and face challenges for getting matches together and finding fun, relevant activities. These challenges apply to rural communities across America, often leaving rural youth underserved and lacking connection to caring adults and critical social capital.

In response to this challenge, IMP developed an e-mentoring platform that allows mentors and youth to communicate via a closed messaging system. This platform is made available at no cost to IMP partner programs. This keeps rural programs from having to invest in developing an expensive e-mentoring platform from scratch, offers security features that make it a good fit for a variety of programs and settings (particularly schools), and connects rural youth to mentors who might not otherwise volunteer because of the challenges caused by geographic distance.

In one example of how this platform is utilized in the field, the Links to LNX mentoring program based in Shenandoah, Iowa, partners with IMP to utilize the online messaging platform as a core e-mentoring tool. The Links program guides first-year students at Shenandoah High School in building relationships with adults to encourage personal, academic, and career accomplishments.

Shenandoah Schools had an established traditional one-to-one mentoring program when they took over an e-mentoring program component previously led by a county-wide organization. Shenandoah staff reached out to the IMP for technical assistance in developing an e-mentoring opportunity and to learn about how the online platform might increase youths' access to additional mentors from the surrounding areas. The ability to monitor matches in a closed system, as well as the simplicity of the system, were a good fit for both the needs of the schools and the students themselves.

The Links program includes: 1) regular electronic messaging between mentees and mentors, prompted weekly as a part of the school's required Language Arts 9 curriculum; 2) in-person match meetings



three or four times a year during a group activity with a career or job skills presentation; and 3) business tours of local community businesses four or five times a year. By offering ongoing encouragement from e-mentors with hands-on opportunities to explore career options, Shenandoah youth have access to much needed support and exposure to mentors who might have otherwise never been a part of their lives. And as an early adopter and robust user of the platform, the Links program director has been instrumental in advising improvements to the platform to better serve other Iowa programs.

Additionally, the number of programs using this platform is set to increase dramatically in the years to come as IMP is preparing for a major expansion as part of a governor’s initiative on college access and persistence, specifically using the e-mentoring platform to support community college students as they matriculate and better connect them to industry and potential jobs around the state. This will not only offer critical support to the students, but hopefully also strengthen the school-to-career pipeline and keep more graduates in-state as they pursue their careers. Thus, what started as a tool to address the needs of isolated rural youth is now expanding to be part of a major effort to retain Iowa’s best and brightest to help the state thrive in the future.

Settings of E-Mentoring Programs

E-mentoring programs are frequently offered in schools, either as part of a project-based lesson in a specific classroom (e.g., biology students at a high school being mentored by biology majors at a local university on how to conduct an experiment) or as a service offered to some subset of students through the school (e.g., offering e-mentoring on the college application process to all high school juniors and seniors). In these school-based settings, it is common for teachers and other school personnel to lead the implementation of the program at the site, with limited help from actual mentoring program staff who may be far away geographically.

In other instances, e-mentoring is accessed outside of a school or other fixed program location. In these types of programs, participants are free to connect with each other when and how they choose. This can include from personal mobile devices or, in some cases, a shared computer at home or in some other environment (e.g., a public library). While these types of programs offer more flexibility in

how matches communicate with one another, they also present more technology challenges, as well as potentially more security and safety challenges, as it can be harder to keep user information private when the mentoring platform is accessed on shared devices outside of the control of the program or on social media.

Throughout the remainder of this supplement, you will read about e-mentoring programs that fit the descriptions of many of the technologies, interaction styles, settings, and goals noted above. The simple “typology” table that follows illustrates this diversity in the field and the many considerations that go into developing programs like these. We encountered a very rich diversity of programs in the research literature reviewed for this project, as well as in the members of the Working Group that contributed their experiences and expertise to the recommendations offered here. You can learn more about that Working Group starting on page XX and in the “E-Mentoring in Action” snapshots scattered throughout the publication.

SIMPLE TYPOLOGY OF E-MENTORING PROGRAMS BY TECHNOLOGY USED

| Technology Used | E-mail | Forum/Bulletin Board | Video Conference | Live Chat/Text App/ Direct Messaging | Proprietary Multifeature Platform |
|---|--|---|--|---|--|
| Common match structures | One-to-one | One-to-one, blended, or layered group matching, totally unmatched | One-to-one | One-to-one, small group | One-to-one |
| Interaction mode | Asynchronous | Asynchronous | Synchronous | Could be either (based on app) | Usually a combination, depending on features |
| Interaction schedule and frequency | Unscheduled, frequency up to participants unless directed by program | Unscheduled, frequency up to participants unless directed by program | Often scheduled, frequency determined by participants unless directed by program | Unscheduled, frequency up to participants unless directed by program | Often scheduled, frequency often determined by program and use of curriculum |
| Program observation of interactions | Minimal (if participants use their own accounts) | High | Minimal (if not through proprietary platform) | Minimal (unless program offers app, then high) | High |
| Common ages served | MS, HS, YA | MS, HS, YA | HS, YA | MS, HS, YA | K-5, MS, HS |
| Common settings for engaging with the technology | Community, youth homes, workplaces (for mentors), schools (program controlled) | Community, youth homes, workplaces (for mentors), schools (program controlled) | Youth and mentor residences, workplaces (for mentors), schools (program controlled) | Community, youth homes, workplaces (for mentors), schools (program controlled) | School classrooms, workplaces (for mentors), youth and mentor residences |
| Strengths of model | Easy-to-use and familiar technology, allows for longer messages and file attachments, little tech maintenance by program | Thematic sorting of messages, ability to create subgroups, simple to use, potential access to many mentors, easy tracking of participation | Real-time interactions and synchronous conversation, putting a “face” on the match | Immediate, potentially 24/7 contact, mobile-friendly and easy-to-use for youth, free (unless program develops app) | All features (e.g., ideas for match activities and program rules/guidance) integrated into user experience, flexible modes of communication, tremendous potential for match monitoring and support |
| Challenges of model | Participants may wait for messages to be read or responded to, not ideal for quick conversations, “outdated” technology to youth, requires constant staff nudging of participation | Access to many mentors may overwhelm individualized support, participants may need reminders to log in and participate, moderation by staff is needed | Limited activity integration, video can exacerbate feelings of distance | Limited message length in some apps, not ideal for in-depth sharing of complex feelings or thoughts; limited ability to share files/resources; data plans can incur monetary costs; messages may not be encrypted | Expensive to develop and maintain, lots of staff oversight and platform management, need to train participants, daunting for new adopters |
| Common program examples | Program pairing youth with health challenges with adult mentors who have experience with similar challenges to exchange messages of support and perseverance | Program for youth of color exploring STEM careers where they can interact with many STEM professionals from a wide variety of backgrounds and ethnicities | Program providing personalized support to isolated youth who are experiencing mental health challenges and suicidal ideation | Program to support youth during the college application process using frequent check-ins and reminders to take care of specific steps | Classroom-based program for youth engaged in skill-building and project-based learning paired with subject matter experts from local companies |



THE NEED FOR A SUPPLEMENT ON E-MENTORING

Mentoring is inherently a “people-centered” activity, with the core adult-youth relationship supported by myriad other interpersonal relationships and engagements that impact everything from initial volunteer recruitment, to the training of mentors and youth, to the supervision and eventual closure of the match. Even a cursory reading of the *Elements of Effective Practice for Mentoring* (EPPM) shows that all of these interactions are considered to be in-person as a default. That makes sense since so much of running a mentoring program is about engaging participants and creating meaningful relationships that are often filling a tangible gap in the life of a young person.

But in e-mentoring programs, all of those interactions are complicated, even compromised, by the remote nature of the services that are offered. Program staff might never lay eyes on a prospective mentor or meet a young person’s parents to better learn about their needs and understand the strengths the youth brings to the table. This program structure can have profound implications on everything from screening mentors for safety considerations to how to handle the sudden closure of a match. The often virtual nature of e-mentoring changes how a program structures their practices and staffs their services, as well as how they then promote the development of close, responsive, and meaningful relationships to program participants.

It is worth noting, however, that there is tremendous potential with e-mentoring that can also be brought out with strong program practices. These programs can offer both a volume of mentors and the delivery of “just-in-time” mentoring interactions that are frankly impossible to provide using in-person models. These programs can connect those

who are isolated to a world of support and allow youth to get expert advice in ways that only digital communication allows.

As with the other Supplements in this series, MENTOR believes e-mentoring represents a type of program where the traditional Elements of Effective Practice may not be a perfect fit and where more (and different) information is needed to establish what “effective” practices look like. The EPPM was primarily written with in-person mentoring programs in mind, drawing from research about primarily in-person models, and the result is that it is not entirely applicable to the nuances of e-mentoring models. We recognize that there are many additional or separate practices that may apply when the mentoring is through digital technology.

The recommendations provided here are intended to offer additional guidance, nuance, and detail on how e-mentoring programs can meet the Benchmarks and Enhancements of the EPPM. In some cases, we have created brand new Benchmarks related to practices unique to e-mentoring. In other cases, we have suggested that e-mentoring programs can rightly ignore some of the in-person-reliant practices suggested in the EPPM. E-mentoring programs should focus on the recommendations within each section that speak to their programmatic design and staffing, while also striving to meet the remaining practices in the EPPM, where appropriate. We hope that the additional, e-mentoring-specific practices included here will help programs design services that maximize their impact on youth and help close the mentoring gap with meaningful digital relationships.

Developing This Supplement

There are several steps MENTOR took in collaboration with our partners in developing this resource. In general, this process mirrored those taken in the development of the original EEPM, which builds on the strategies for developing clinical practice guidelines in other fields.¹⁵ This process ultimately results in a blend of research-informed practices and practitioner advice based on real-world application and experience.

1. THOROUGH SEARCH AND REVIEW OF E-MENTORING LITERATURE

We used a recent literature search conducted by one of the authors of this Supplement as the starting point for this resource.¹⁶ The authors then conducted a fresh search for additional relevant articles using several full-text article databases, including PubMed and PsychInfo, with some further searching based upon citations in the articles included in the previous search. The search emphasized several key criteria, such as prioritizing research studies employing an experimental design, limiting results to programs serving youth from elementary school through young adulthood (services targeting adults only were excluded), and emphasizing programs that exclusively or primarily communicated using technology. While we did include some book chapters, reports, and other documents that fell outside of these criteria, we tried as much as possible to prioritize citing peer-reviewed scientific literature in our review.

The result of this search was a collection of 72 resources we relied on as our core source material. The files include:

- **Type of document:**
 - 21 non-empirical papers (e.g., general articles, literature reviews, overviews)
 - 12 program descriptions or case studies
 - 6 dissertations or master's theses
 - 3 background research on related fields
- **Study design employed in empirical papers:**
 - 6 experimental research design
 - 11 nonexperimental research design (e.g., correlational, qualitative, single-subject)
- **Mentee population age group in e-mentoring papers or reports:**
 - 12 young adults
 - 25 middle or high school
 - 5 elementary school
- **Number of articles about programs serving specific populations of mentees:**
 - 12 about mentees with one or more disabilities
 - 2 about mentees applying to college
 - 3 about mentees with specific career interests

MAJOR TRENDS

In addition to this simple breakdown, the team of authors also read and coded each article with relevant keywords, allowing us to start to identify patterns and trends in the disparate articles we were reading. A few of those trends are worth noting up front here, as they shaped the conclusions and recommendations found in the remainder of this resource:

- **A lack of rigorous outcome evaluation or implementation studies makes it hard to identify clear “best” practices** – While the literature on e-mentoring is growing rapidly, there is an insufficient number of well-designed experimental studies evaluating the effectiveness of technology-driven mentoring on youth outcomes. While not every e-mentoring program should be expected to conduct a randomized controlled trial, it is difficult to pinpoint which elements of e-mentoring or which program practices are the most effective (or ineffective) without a decent number of studies that at least provide pre- and post-program data, as compared to a comparison or control group. The other challenge here is that with technology changing so rapidly, it is often hard for the peer-reviewed literature to keep up with timely reporting of evaluation studies for e-mentoring platforms that are cutting edge and innovative. In fact, it is possible that by the time a program is established, reviewed, and thoroughly described and evaluated in peer-reviewed publications, the technology that was used may have become obsolete or surpassed by newer models or iterations.
- **Modern technology has rendered some of these software platform distinctions moot** – Again, with the rapid pace of technology development, the platforms used in e-mentoring can quickly become

outdated. For instance, listservs, while still used by some professionals, have been largely replaced by platforms such as Slack, Google groups, WhatsApp group chats, or Facebook groups, especially among youth. Or programs developed prior to the introduction of smartphones, apps, and direct messaging programs are likely now obsolete in many of their features. Some of the literature we reviewed recommended taking into serious consideration whether mentors and mentees should communicate via email, video calls, or group bulletin boards, as examples. With smartphones, all of those communication modes (and more) can be used on a single device, sometimes even within a single app! While technology platform selection may have been a sticking point for some programs a decade or two ago, mobile technology makes it possible to use a variety of communication tools rather easily.

- **There are many processes through which e-mentoring can facilitate positive gains or personal growth for youth** – One of the most impressive aspects of our literature review was the tremendous diversity of programs working in the e-mentoring space. Instead of finding a limited field offering these relationships to narrow groups of youth, we found programs serving a diverse array of youth and using many different theories of change and intervention strategies in the youth they were serving. Among the most common theoretical frameworks used by e-mentoring programs were:
 - Offsetting youth isolation and increasing feelings of belonging and connectedness. This outcome was especially common, as noted above, in programs serving youth with isolating disabilities,¹⁷ youth with communication challenges that made in-person interactions



difficult^{18,19} and youth isolated because of chronic medical conditions.²⁰

- Providing access to high-level subject matter expertise and project/goal-setting support. As noted previously, a number of programs in this space connected youth to industry leaders and experts as project supports^{21,22} or offered mentors to support setting and achieving specific time-limited goals.²³
- Increasing social support and feelings of self-efficacy. Many programs endeavor to help youth feel extra support as they wrestle with a challenge²⁴ or build their self-efficacy and belief that they can manage or overcome their circumstances.²⁵
- Increasing social capital and the building of networks. Several programs were focused on helping youth build networks of support, usually within career spaces,²⁶ although this type of mentoring may have the ability to transfer social capital broadly.²⁷
- Offering mentees a safe space to share and process their feelings. While some of the literature talked about a majority of communication occurring through technology as a potential barrier to sharing and building trust and intimacy, others talked about how communicating remotely and through technology may offer youth a bit of a “shield” or a safer vantage point to share painful, deep, or complex emotions. Many articles discussed how youth often felt more comfortable sharing online as opposed to in person; online they could compose better responses, take time to gather their emotions, and opt out of a difficult conversation, if desired.^{28,29}

• **There are several factors that can moderate the**

impact of e-mentoring relationships – While little research exists on these factors, they were mentioned in much of the literature we reviewed and were repeated topics of discussion during our drafting of this supplement.

- Demographics. Some youth, such as those in rural locations or of lower socioeconomic status, may benefit from e-mentoring more than youth who do not have difficulty accessing transportation or a more stable family setting.
- Personal factors. Both a mentor and a mentee’s personal circumstances can influence the effectiveness of an e-mentoring program. For instance, a mentor who is not as technology literate as a young person may find using technology to communicate challenging or limiting. On the other hand, a youth who needs support that goes beyond infrequent face-to-face meetings may find it comforting to be able to reach a mentor in real time.
- Interpersonal communication styles. A mentor who is used to talking by phone or in person may struggle with the quick texts, emojis, or acronyms commonly used in chats, if it is not their usual form of communication. On the mentee side, emotional maturity may be important, as being able to share emotions in writing without the facial and body language cues available during in-person meetings is crucial. A mentee who has social anxiety may find e-mentoring more beneficial than traditional in-person programs, as this form of mentoring allows such individuals to relax and respond in a more comfortable setting.³⁰
- Accessibility. E-mentoring is potentially more accessible for youth with a physical,



intellectual, or developmental disability or chronic health condition,³¹ since it does not necessarily require that the mentoring interactions happen at a specific location. When the mentoring can happen in a youth's home or using the tools they need for support, it allows them to access mentors that might not be available if they had to meet them in-person.

- Program implementation. Access to stable mobile network or internet service is essential for the success of an e-mentoring program, as is easy access to technological support. Also, e-mentoring alone versus “blended” programs where the electronic communication is combined with traditional face-to-face meetings could produce different outcomes for youth.

• **Several factors that can mediate or facilitate the impact of e-mentoring relationships** – Perhaps the strongest themes we found in the research literature had to do with several factors that can influence just how strong those impacts from e-mentoring relationships can be.

- Relationship satisfaction and conversational compatibility. Some e-mentoring programs focus on relationships that are intended to be emotionally close and meaningful, while others focus on relationships that are task-focused and more instrumental in nature. But regardless of which approach programs take, there was a strong trend in the literature showing relationship satisfaction was closely tied to relationship outcomes. One of the leading factors in relationship closeness was what one researcher termed “electronic chemistry” — the ability of mentors and youth to connect electronically in ways that

were mutually satisfying, fun, and imbued with personality in spite of the limitations of communicating digitally.³² In fact, it was theorized that online relationships can often become what are called “hyper-relationships” where the closeness and satisfaction exceeds in-person relationships because status and other factors are stripped away in the virtual environment, and users can craft perfect responses that represent their best selves at all times.³³

However, because not all one-to-one mentoring relationships find that “spark” of compatibility, some programs opt for a group approach, creating an open group culture of mentoring where all participants see how mentors and youth interact in an open community. One prominent researcher, Dr. Kevin O’Neill, describes this as “mentoring in the open.” To see how this concept plays out in the classroom-based e-mentoring projects he has developed, see the following E-Mentoring in Action.

- Frequency of interactions. It should come as no surprise that for mentoring to be effective, participants in the relationship must be, well, participating. Several scholars noted that the frequency of communications in e-mentoring programs almost always dissipates over time (e.g., see the findings in Risquez & Sanchez-Garcia³⁴), even in cases where the program is providing a curriculum or prompting ongoing exchanges. Some of this reduction in participation frequency is completely natural, as initial enthusiasm wanes over time. Some may be a sign that the match is not communicating effectively or that one member is not holding up their



end of the “electronic chemistry” traits. But the research was quite clear that programs should do everything they can to boost the frequency and depth of interactions that mentors and youth have. This frequency was closely tied to outcomes and overall satisfaction with the experience.^{35,36,37,38,39} Our Working Group also noted the frequency

of interactions as a common challenge and offered several suggestions for addressing this (detailed later in this resource), such as setting communication expectations up front, ongoing communication reminders, and rigorous supervision of matches to see who is lagging in their participation.

E-MENTORING IN ACTION: “MENTORING IN THE OPEN” IN A CLASSROOM-BASED MODEL

“Mentoring in the Open” engages a community approach to e-mentoring. Mentors and mentees are assigned to small participation groups where guidance and conversation are exchanged. Each small group exists within a larger electronic platform space which is public to all program participants, allowing the communications happening within the small groups to be visible and accessible to all participating mentors and mentees. This openness enables each mentor and mentee to directly observe successful mentoring in action.

Dr. Kevin O’Neill, a professor of Education and Technology at Simon Fraser University in British Columbia, Canada, has studied the Mentoring in the Open approach. His research affords a compelling understanding of why “mentoring in the open” is a beneficial way to advance e-mentoring efforts. Participants in this approach are exposed to the mentoring relationships being built in other small groups, giving them an appreciative window into “what works” amongst their peers — what guidance and advice they would like to receive in their mentoring relationships, and how their peers have made it possible for their mentors to provide it. Mentees are thus given a platform to strengthen and enable pathways of support for their peers.

“Mentoring in the Open” offers mentoring practitioners some important reminders — to appreciate that knowledge-centered spaces can be found anywhere and to further explore the untapped potential of a community approach to e-mentoring.



2. WORKING GROUP OF EXPERT PRACTITIONERS AND RESEARCHERS

Given the research literature in the e-mentoring space is thin, we knew we would need the input and expertise of a diverse array of programs and researchers working in this space to identify practices that had real-world value and applicability. The representatives of this group are detailed below. They were absolutely instrumental in the development and refinement of the recommendations found in the remainder of this resource.



Michael Carter and Frances Maher

Strive for College

Every year in the United States, 500,000 academically qualified, low-income students who should go on to college fail to do so. Strive is changing that. We train volunteer mentors to help guide students through the college and financial aid application process via our online platform powered by proprietary technology. Ninety-seven percent of Strive students go on to college, and the majority of those do so without having to take on any debt for tuition due to scholarships and financial aid their mentors helped them secure.

Strive serves students who traditionally encounter the most barriers to accessing college:

- 88 percent of Strive students live in a household with less than \$50,000 in annual income
- 68 percent live in a household with no college graduates
- 58 percent identify as persons of color
- 40 percent live in nonurban areas

Strive is the only college access organization that serves students in all 50 states. Since 2016, over 600,000 students have opted in for a Strive mentor.

Matthias Mader

Universität Regensburg

Matthias Mader (Cybermentor, Global Talent Mentoring) has a Master's of Arts in German studies, musicology, and journalism; teacher training for the subjects German and history (high achiever track). Since 2017, he has served as a researcher and Chair for the School Research, School Development, and Evaluation at the University of Regensburg, Germany. He is part of a team developing and preparing "Global Talent Mentoring" (<https://gtmh.world>) a selective global e-mentoring program for highly talented and extremely motivated youth in STEMM, as a flagship offering of the upcoming "World Giftedness Center" (<https://worldgiftednesscenter.org/>). He is currently working on "Cybermentor" and a development/support program for school mentoring (as part of the German-wide research program "Leistung macht Schule"). His research interests include self-regulated learning, mentoring, network effects, and gifted education.



M. Michelle Derosier, Kate Schrauth, and Wendy Siegelman

iCouldBe

Mission: Provide at-risk middle and high school students with an online community of professional mentors, empowering teens to stay in school, plan for future careers, and achieve in life.

iCouldBe brings online mentors from all career backgrounds into classrooms where 50 to 100 percent of students live at or below the poverty line. Mentors and mentees engage on a technology platform and work one-to-one throughout the school year on structured activities focused on academic success, career exploration, and postsecondary planning. iCouldBe's program has shown promising outcomes of increased mentee self-efficacy (belief in one's ability to succeed) and development of career aspirations, as well as networking, communication, writing, teamwork, relationship-building, and other critical hard and soft twenty-first century skills.

Since 2000:

- 21,500 mentees served
- 273,545 mentoring hours completed by mentees and mentors
- 12.7 mentoring hours per mentee during a school year-long program



Jim Lauckhardt and Regina Leslie

iMentor

iMentor is a national organization that builds mentoring relationships that empower first-generation students from low-income communities to graduate high school, succeed in college, and achieve their ambitions. Since 1999, we have matched more than 26,000 mentors with students. Our model harnesses the power of long-term, personal relationships to help students succeed. Each year, we recruit thousands of volunteers who commit to mentor a high school student for at least three years



Ellen Mahoney

Sea Change Mentoring

Sea Change Mentoring matches emerging adults ages 16 to 23 who grew up across cultures and nations with adult professionals who did the same. Mentors help our protégés identify the skills and insights they gleaned overseas and apply them to their personal, academic and career goals. At the same time, they help kids develop networks and strategies to face some of the challenges that are specific to growing up global. Protégés and mentors meet weekly over video conferencing, no matter where they are in the world, for one year or more and engage in our social and emotional development activities. Mentors receive monthly coaching sessions, and registered families have access to vetted resources and guidance, including additional support via video conferencing. www.seachangementoring.com



Kevin O'Neill

Simon Fraser University

Dr. Kevin O'Neill is an associate professor of Education and Technology at Simon Fraser University in British Columbia, Canada, where he cofounded the graduate programs in Educational Technology and Learning Design. His program of design-based research on e-mentoring for secondary school students began in 1994, when he was a doctoral student in Learning Sciences at Northwestern University. In addition to e-mentoring, Kevin's scholarly interests include the teaching and learning of history, and the examination of analogies for educational research and practice.



Mary Sheka

Iowa Mentoring Partnership

The Iowa Mentoring Partnership (IMP) is a collaborative program of Volunteer Iowa and serves as the certifying body for quality local youth mentoring programs. Youth mentoring programs are offered training opportunities, advocacy initiatives, and statewide marketing and media campaigns. IMP also works to build collaborative relationships between government, private, and public agencies in support of these local mentoring programs, which are essential for strengthening families, communities, and the state of Iowa.

The Links to LNX mentoring program partners with the Iowa Mentoring Partnership (IMP) to utilize their online messaging platform as an e-mentoring tool. The Links program guides first-year students at Shenandoah High School in building relationships with local community members to encourage personal, academic, and career accomplishments.



Laura Woodside and Nina Zolt

CricketTogether and TryEngineering Together by Cricket Media

Cricket Media® (www.cricketmedia.com) is a mission-based global education company known for creating high quality print and multimedia products for children, families, e-mentors, teachers, and partners that improve learning opportunities for everyone. Led by its nine award-winning publications for children and customizable research-tested collaborative learning/e-mentoring platforms, CricketTogether (www.crickettogether.com) and TryEngineering Together (www.tryengineeringtogether.com), the company is committed to making, building, and supporting innovative learning experiences with high-quality, age-appropriate content.



3. DEVELOPMENT AND REFINEMENT OF RECOMMENDATIONS AND FULL PRODUCT

Once the literature review was complete and the Working Group was formed, the authors of this guide drafted the initial recommendations and received feedback from the group over the course of three meetings in May and June 2019. A second version of the recommendations was reviewed in late June. The final version of the recommendations in this guide, and the draft of the narrative text that surrounds them, was completed in a final meeting of the Working Group in late July 2019.

Tips for Using this Supplement to the EEPM

This Supplement to the *Elements of Effective Practice for Mentoring* will be most useful to those starting e-mentoring programs, as well as to those who are looking to strengthen their existing services. The sections of recommendations included here, from Recruitment through Closure, offer research- and practice-informed recommendations that should help e-mentoring programs implement effective services beyond just adhering to the generic practices suggested in the original EEPM.

For each Benchmark and Enhancement recommended in the original EEPM, the authors have either:

- Offered additional practice recommendations for these specific types of programs
- Noted where no additional recommendations were warranted
- Noted where a Benchmark or Enhancement might not be applicable at all for e-mentoring programs (these most often relate to parental involvement in

programs where mentees are over 18 and parental permission is no longer mandated, or where the mentoring program is implemented in a school during the regular school day)

Where possible, we have noted when certain recommendations are more or less applicable to some e-mentoring programs based on their technology platform and program goals or structure. But in general, the **colored recommendations** will provide critical advice to e-mentoring programs.

Following the listing of the recommended practices, there is an essay that highlights key themes for managing a successful e-mentoring program. This section discusses the Recommendations in more detail and offers examples from the research and literature reviewed that support the suggested practices.

Programs are encouraged to implement as many of the core Benchmarks and Enhancements of the EEPM as possible. There is always room to improve or strengthen the delivery of any program. But we feel that following the recommendations here will be helpful to any mentoring program that is:

- Using a technology platform to facilitate most or all of the interactions between mentors and youth
- Using technology to provide forms of mentoring that are not possible in person
- Using technology to offer the ideal form of mentoring for the needs of the youth served

If there is one thing that is clear in the literature we reviewed and in the conversations we had with our Working Group members, it is that these programs can open up a world of caring adult support to young people which was not possible even 20



years ago, at the turn of the twenty-first century. The spread of highly powered mobile technology has made this global network of mentoring even more possible. In fact, reading some of the scholarly articles on “telementoring” from even a decade ago was almost funny in terms of how out-of-date the technology discussion was. We have no doubt that the e-mentoring programs a decade or two from now will be radically different from what we see today as technology evolves. But MENTOR feels that by sharing these practice guidelines at this point in time, by putting a stake in the ground as to what quality e-mentoring should look like, we are setting the stage for solid programming in the future, no matter what bells and whistles future technology allows for. We encourage readers to remember that the efficacy of these types of programs is not really about the fancy technology, but rather its theory of change and how well that technology and mentors’ roles are aligned with the needs and experiences of the youth served.

There are universal, research-based truths about e-mentoring here — the importance of training participants to communicate well with one another via technology, the ability of technology to connect the disconnected and offer a safe space to the hurt or disenfranchised, the importance of nudging participants to remain active, the value of providing real-time coaching to mentors — that we think will carry forward. We hope the practitioners of today and the future find value in these recommendations and use them to build impactful, diverse e-mentoring experiences for all the youth who need them.

And for any policymaker or practitioner who is still skeptical about the benefits of e-mentoring, the first-person story from Strive for College alum, and current mentor, Frances Maher should inspire them to build e-mentoring programs that empower youth and change lives.



E-MENTORING IN ACTION:

REFLECTIONS FROM A STRIVE FOR COLLEGE ALUM WHO RETURNED TO MENTOR OTHERS – BY FRANCES MAHER

As a first-generation college student coming from a low-income household, I was initially intimidated by the prospect of applying to and attending college. A barrier for me was not having a person I could reach out to for help with my pressing questions about the college application process. Support came in the form of the partnership between the Common Application and Strive for College. Participating as a mentee provided me with the opportunity to be connected with a Strive for College mentor who would guide and encourage me throughout the college application and financial aid processes during my senior year of high school. Whenever I had a question regarding my college applications, scholarship applications, or financial aid, my mentor, Bill Copeland, a Partner [retired] at Deloitte, was there to guide me through the process. I was matched with Mr. Copeland through Deloitte's RightStep Virtual Mentoring program powered by the Deloitte Foundation RightStep Education Fund. Deloitte engages thousands of virtual mentors with Strive for College's platform. Mr. Copeland provided feedback about my college application questions and made it a priority to get to know me and share life advice through phone calls and video chats.

As a high school student, I felt my community lacked effective college preparatory resources, especially resources for students who are first-generation college students or who come from low socioeconomic backgrounds. E-mentoring through the Strive for College program gave me the opportunity to access many college preparatory resources I would otherwise have not had access to. The Strive for College virtual platform provided me with access to engage with the wider Strive community as well as free access to comprehensive guides through every part of the college application process. These guides include preparing, applying, selecting, and moving to college. The Strive for College app made it easy for me to interact with my mentor and to access college preparation resources on my phone. I could instantly send my mentor a message through the Strive for College app if I had an immediate question.

After having a positive experience as a mentee in Strive for College, I decided to apply to be a Strive mentor. I appreciated how Strive for College had a comprehensive screening process for prospective mentors to ensure the safety and suitability for mentoring youth. As a prospective mentor, I completed a comprehensive online application with several questions to assess my eligibility and fit for the program. The Strive for College program required I complete and pass a comprehensive criminal background check. Once I was approved as a mentor, my biography and other important details essential for the matching process were published on the online platform to be viewed by mentees. Strive prospective mentees have the opportunity to choose their mentors based on characteristics in the mentor biographies and answers to application questions. The program provided me with three guides during my mentor training: a guide to using the online UStrive platform, setting up an effective mentor profile, and mentorship 101 – my role as a mentor.



I have had the opportunity to mentor six students during my two years as a Strive mentor. I am truly grateful to support them during one of the most important times of their lives. One of my favorite parts about being a Strive mentor is reading personal statements (for college applications) and providing advice. Personal statements are a window into a person's unique story and resonate the passion and commitment to seek a brighter future. I am filled with joy when I hear the news of college acceptances from my mentees. This is the moment all Strive mentors look forward to. My mentees see how all their hard work and commitment has paid off, and I am grateful to have helped them start the next exciting chapter of their lives.

As a Strive mentor, I found the Strive for College staff are supportive and open to feedback that helps mentors achieve meaningful relationships with their mentees. Strive for College values input from mentors and mentees and implements positive changes to the virtual platform quickly. If issues arise, I am grateful that Strive for College has a committed team of supportive staff.

Having a Strive for College mentor gave me the confidence to believe no matter what background I came from, I had the opportunity to attend college. At Strive, mentors go above and beyond with guiding their students because we are passionate about giving students an opportunity to pursue a brighter future.



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RECOMMENDATIONS FOR E-MENTORING PROGRAMS TO SUPPLEMENT THE EEPM

The following supplementary recommendations (in red) can support e-mentoring programs as they implement services and build strong online or virtual relationships. These recommendations will be most relevant to e-mentoring programs where youth participants are matched with more experienced mentors, but some may also be relevant to programs that offer unmatched group mentoring and discussion platforms where mentoring “conversations” occur. Please note that the ability of participants to additionally interact in-person with one another will vary widely from program to program, depending on program rules and geographic proximity, and may influence the relevance of some of the recommendations here. Also note that in instances where the program is implemented by a classroom teacher, after-school program staff, or other employees of partner organizations and host sites, we have considered those

individuals to be part of the staffing of the mentoring program and may refer to them here as “program staff” even though they technically work for that partner organization.

STANDARD 1 – RECRUITMENT

Standard: Recruit appropriate mentors and mentees by realistically describing the program’s aims and expected outcomes.

BENCHMARKS:

Mentor Recruitment

B.1.1 Program engages in recruitment strategies that realistically portray the benefits (to society, the company, and to mentees), practices, supports, and challenges of mentoring in the program.

1. Program recruitment messages offer a realistic portrayal of this e-mentoring opportunity, including the benefits, practices, supports, and challenges associated with the program’s platform and mentoring activities.
2. Program recruitment messages convey the benefit of e-mentoring for the unique population served by the program (e.g., youth with disabilities).
3. Program uses recruitment messages that detail the training, technical support, and safety practices (both for participants and for data protection) of the program.
4. Program recruitment messages clarify any technology or network requirements for participating.



B.1.2 Program utilizes recruitment strategies that build positive attitudes and emotions about mentoring.

5. Program conveys benefits and advantages of communicating using technology as an exclusive or primary communication approach in the program and builds mentor enthusiasm for e-mentoring, generally.

B.1.3 Program recruits mentors whose skills, motivations, and backgrounds best match the goals and structure of the program.

6. Program recruits mentors who are comfortable using electronic means of communication to build a relationship.

7. Program recruits mentors who have relevant experience or familiarity using the specific technology employed by the program.

B.1.4 Program encourages mentors to assist with recruitment efforts by providing them with resources to ask individuals they know, who meet the eligibility criteria of the program, to be a mentor.

B.1.5 Program trains and encourages mentees to identify and recruit appropriate mentors for themselves, when relevant.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

Mentee and Parent or Guardian Recruitment

B.1.6 Program engages in recruitment strategies that realistically portray the benefits, practices, supports, and challenges of being mentored in the program.

8. For parents and guardians, program emphasizes the safety procedures and practices of the program.

9. For parents and guardians, program recruitment messages clarify any technology or network requirements for participating.

10. Program recruitment messages offer mentees a realistic portrayal of the experience of mentoring through electronic means.

11. Program recruitment messages convey the benefit of e-mentoring for the unique population of youth served by the program (e.g., youth with disabilities), when appropriate.

B.1.7 Program recruits mentees whose needs best match the services offered by the program.

PARTNER ORGANIZATION RECRUITMENT

New B.1.8 E-MENTORING: Mentoring program recruits schools, after-school programs, and other partners sites that can provide the staff time, technology resources, and other supports needed to successfully implement the e-mentoring program.

New B.1.9 E-MENTORING: Recruitment messages for partner organizations should include information about:

- a. Why e-mentoring is a good fit to meet the needs of the youth served by the partner.
- b. A realistic portrayal of the online or virtual mentoring experience.
- c. Information about the safety and technology support features of the program and the platform used for mentor-mentee communication.

ENHANCEMENTS

Mentor Recruitment

E.1.1 Program communicates to mentors about how mentoring and volunteering can benefit them.

E.1.2 Program has a publicly available written statement outlining eligibility requirements for mentors in its program.

E.1.3 Program uses multiple strategies to recruit mentors (e.g., direct ask, social media, traditional methods of mass communication, presentations, referrals) on an ongoing basis.

Mentee and Parent or Guardian Recruitment

E.1.4 Program has a publicly available written statement outlining eligibility requirements for mentees in its program.

E.1.5 Program encourages mentees to recruit other peers to be mentees whose needs match the services offered by the program, when relevant.

STANDARD 2 - SCREENING

Screen prospective mentors to determine whether they have the time, commitment, and personal qualities to be a safe and effective mentor and screen prospective mentees, and their parents or guardians, about whether they have the time, commitment, and desire to be effectively mentored.

BENCHMARKS

Mentor Screening

B.2.1 Program has established criteria for accepting mentors into the program as well as criteria for disqualifying mentor applicants.

1. Program should establish criteria for:

- Identifying whether prospective mentors have reliable access to the technology needed to participate in the program.
- Determining mentors' comfort using the relevant technology and if training can adequately address mentors' technology use challenges or if these factors are disqualifying.
- Determining mentors' competencies in communicating effectively using the relevant technology and if training can adequately address mentors' effective communication skills or if these factors are disqualifying.

B.2.2 Prospective mentors complete a written* application that includes questions designed to help assess their safety and suitability for mentoring a youth.

2. The application form should include methods for assessing mentors' comfort, competence, and preferences in communicating using the relevant technology that will be used to communicate with youth.

3. The application form should gather information about whether the prospective mentor has reliable access to the technology and/or network needed to participate in the program.

B.2.3 Program conducts at least one face-to-face interview with each prospective mentor that includes questions designed to help the program assess his or her suitability for mentoring a youth.

4. Program conducts either an in-person, video conference, or phone interview with prospective mentors.



B.2.4 Program conducts a comprehensive criminal background check on prospective adult mentors, including searching a national criminal records database, along with sex offender and child abuse registries and, when relevant, driving records.

5. Program searches for and reviews prospective mentors' online presence and publicly accessible social media accounts to see how they communicate in online settings.

B.2.5 Program conducts reference check interviews with multiple adults who know an applicant (ideally, both personal and professional references) that include questions to help assess his or her suitability for mentoring youth.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

B.2.6 Prospective mentors agree in writing to a one-year (calendar or school) minimum commitment for the mentoring relationship, or a minimum time commitment that is required by the mentoring program.

B.2.7 Prospective mentors agree in writing to participate in face-to-face meetings with their mentees that average a minimum of once a week and a total of four or more hours per month over the course of the relationship, or at a minimum frequency and amount of hours that are required by their mentoring program.

6. For programs that involve asynchronous communication, mentors agree to communicate with their mentee (both initiating interactions and responding) with the frequency and response time specified and required by the program.

Mentee Screening

B.2.8 Program has established criteria for accepting youth into the program as well as criteria that would disqualify a potential youth participant.

7. Program should establish criteria for identifying whether prospective mentees have reliable access to the technology and/or network needed to participate in the program.

8. Program should establish criteria for mentees' comfort using the relevant technology and determine if training can adequately address mentees' level of comfort to meet these criteria or if these challenges are disqualifying.

9. Program should set criteria around mentees' competencies with communicating effectively with the relevant technology and determine if training can adequately address mentees' communication competencies or if these challenges are disqualifying.

B.2.9 Parent(s)/guardian(s) complete an application[†] or referral form.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

B.2.10 Parent(s)/guardian(s) provide informed permission for their child to participate.

10. Parent(s)/guardian(s) should provide explicit permission for the program to collect and monitor electronic data about the child participating in the program.

B.2.11 Parent(s)/guardian(s) and mentees agree in writing to a one-year (calendar or school) minimum commitment for the mentoring relationship, or the minimum time commitment that is required by the mentoring program.

B.2.12 Parents(s)/guardian(s) and mentees agree in writing that mentees participate in face-to-face meetings with their mentors that average a minimum of once a week and a total of four or more hours per month over the course of the relationship, or at a minimum frequency and amount of hours that are required by the mentoring program.

11. For programs that involve asynchronous communication, mentees agree to communicate with their mentor (both initiating and responding) with the frequency and response time required by the program.

ENHANCEMENTS

Mentor Screening

E.2.1 Program utilizes national, fingerprint-based FBI criminal background checks.

E.2.2 Program conducts at least one home visit of each prospective mentor, especially when the match may be meeting in the mentor's home.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.2.3 Program conducts comprehensive criminal background checks on all adults living in the home of prospective mentors, including searches of a national criminal records database along with sex offender and child abuse registries, when the match may meet in mentors' homes.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.2.4 School-based programs assess mentors' interest in maintaining contact with their mentees during the summer months (following the close of

the academic school year) and offer assistance to matches in maintaining contact.

E.2.5 Programs that utilize adult mentors prioritize accepting mentor applicants who are older than college-age.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.2.6 Program uses evidence-based screening tools and practices to identify individuals who have attitudes and beliefs that support safe and effective mentoring relationships.

Mentee Screening

E.2.7 Mentees complete an application (either written or verbally).[‡]

12. For programs with open enrollment, the mentee application should include methods for determining mentees' comfort, competence and preferences in communicating using the relevant technology, especially to inform the matching process. Some programs enroll whole groups of youth (e.g., a whole classroom) and do not require an application at all.

13. For programs with open enrollment, the mentee application should gather information about whether the mentee has reliable access to the technology and /or network needed to participate in the program.

E.2.8 Mentees provide written assent agreeing to participate in their mentoring program.



STANDARD 3 – TRAINING

Train prospective mentors, mentees, and mentees' parents (or legal guardians or responsible adult) in the basic knowledge, attitudes, and skills needed to build an effective and safe mentoring relationship using culturally appropriate language and tools.

BENCHMARKS

Mentor Training

B.3.1 Program provides a minimum of two hours of pre-match, in-person, mentor training.

1. Training may be delivered through online or virtual methods, but ideally will involve direct interaction between program staff and those being trained and utilize the technology platform used by the program, when feasible. Similarly, the duration of the training may vary from program to program based on the way training is delivered and the amount of ongoing or just-in-time training and instruction provided throughout the match. Programs are still expected to provide robust and adequate pre-match training.

B.3.2 Program provides pre-match training for mentors on the following topics:

a. Program requirements (e.g., match length, match frequency, duration of visits, protocols for missing, being late to meetings, and match termination).

2. Program provides training on the use of the technology platform(s).

3. Frequency of communication and response time expectations.

b. Mentors' goals and expectations for the mentee, parent or guardian, and the mentoring relationship.

c. Mentors' obligations and appropriate roles.

4. Supporting the youth in networking with others and building a web of support, when relevant to program goals.

d. Relationship development and maintenance.

5. Skills for having an online voice and communication style that will relate to young people; tips for being personable online and displaying sufficient online etiquette; understanding online discourse (e.g., text slang, emojis, gifs, etc.).

e. Ethical and safety issues that may arise related to the mentoring relationship.

f. Effective closure of the mentoring relationship.

g. Sources of assistance available to support mentors.

6. Training on the technical support offered by the program.

h. Opportunities and challenges associated with mentoring specific populations of youth (e.g., children with an incarcerated parent, youth involved in the juvenile justice system, youth in foster care, high school dropouts), if relevant.

i. Initiating the mentoring relationship.

7. Icebreakers and conversation starters.

8. Encouraging mentors to share information about themselves that is age-appropriate for the mentee, ask direct and specific questions, and use an informal, friendly conversation style in the initial messages to the mentee.



j. Developing an effective, positive relationship with mentee’s family, if relevant.

B.3.3 Program provides pre-match training for the mentor on the following risk management policies that are matched to the program model, setting, and population served.

- a. Appropriate physical contact
- b. Contact with mentoring program (e.g., who to contact, when to contact)
- c. Relationship monitoring requirements (e.g., response time, frequency, schedule)
- d. Approved activities

9. Including approved contact between participants, if any, outside of the technology employed by the program

- e. Mandatory reporting requirements associated with suspected child abuse or neglect, and suicidality and homicidality

10. Common or unique ethical dilemmas created by asynchronous communication and how to resolve them

- f. Confidentiality and anonymity

11. Keeping the communication platform/technology secure and confidential if being accessed from home or other public spaces

- g. Digital and social media use

12. Sharing of social media outside of the platform provided by the program

- h. Overnight visits and out of town travel
- i. Money spent on mentee and mentoring activities
- j. Transportation

k. Emergency and crisis situation procedures

l. Health and medical care

m. Discipline

n. Substance use

o. Firearms and weapons

p. Inclusion of others in match meetings (e.g., siblings, mentee’s friends)

q. Photo and image use

r. Evaluation and use of data

s. Grievance procedures

t. Other program relevant topics

B.3.4 Program uses training practices and materials that are informed by empirical research or are themselves empirically evaluated.

New B.3.5 E-MENTORING: Programs training mentors remotely using technology should include learning checks or other methods of determining that mentors have fully completed the training and understood the content, especially if mentors are empowered to go through the training asynchronously on their own.

ENHANCEMENTS

Mentor Training

E.3.1 Program provides additional pre-match training opportunities beyond the two-hour, in-person minimum for a total of six hours or more.

This volume of pre-match training may not be relevant for e-mentoring programs depending on their structure and goals, but they may want to offer more robust training if mentors are offering support to youth with highly elevated levels of risk or mentors and youth will be working closely together on complicated projects or goals.



E.3.2 Program addresses the following post-match training topics:

- a. How developmental functioning may affect the mentoring relationship

13. How the developmental age of the youth might influence their use of and proficiency with communicating via technology

- b. How culture, gender, race, religion, socioeconomic status, and other demographic characteristics of the mentor and mentee may affect the mentoring relationship
- c. Topics tailored to the needs and characteristics of the mentee
- d. Closure procedures

14. Program offers ongoing training on improving the online communication styles and competencies of mentors

E.3.3 Program uses training to continue to screen mentors for suitability to be a mentor and develops techniques for early trouble-shooting should problems be identified.

Mentee Training

E.3.4 Program provides training for the mentee on the following topics:

- a. Purpose of mentoring
- b. Program requirements (e.g., match length, match frequency, duration of visits, protocols for missing or being late to meetings, match termination)

15. Use of the technology platform(s)

16. Frequency of communication and response time expectations; tips for being personable and conversational when interacting with their mentor and displaying sufficient online etiquette

17. Training on the technical support offered by the program

- c. Mentees' goals for mentoring
- d. Mentors' obligations and appropriate roles
- e. Mentees' obligations and appropriate roles

18. Pre-match (and ongoing) training on improving the online communication styles and competencies of mentees

- f. Ethics and safety in mentoring relationships
- g. Initiating the mentoring relationship

19. Icebreakers and conversation starters

20. Encouraging mentees to share appropriate information about themselves, ask direct and specific questions, overcome initial shyness or inhibitions, and generally use a friendly conversation style in the initial messages to the mentor

- h. Effective closure of the mentoring relationship
- i. Internet safety (NEW)

E.3.5 Program provides training for the mentee on the following risk management policies that are matched to the program model, setting, and population served. See B.3.3 for the list of policies to address during training.

Parent or Guardian Training

E.3.6 Program provides training for the parent(s) or guardian(s) (when appropriate) on the following topics:

- a. Purpose of mentoring
- b. Program requirements (e.g., match length, match frequency, duration of visits, protocols for missing or being late to meetings, match termination)

21. Use of the technology platform(s)

22. Frequency of communication and response time expectations

23. Training on the technical support offered by the program

- c. Parents' and mentees' goals for mentoring
- d. Mentors' obligations and appropriate roles
- e. Mentees' obligations and appropriate roles
- f. Ethics and safety in mentoring relationships

24. How and when to contact program staff with ethical or safety concerns

- g. Initiating the mentoring relationship
- h. Developing an effective, working relationship with your child's mentor
- i. Effective closure of the mentoring relationship

E.3.7 Program provides training for the parent(s) or guardian(s) on the following risk management policies that are matched to the program model, setting, and population served.

See B.3.3 for the list of policies to address during training.

STANDARD 4 – MATCHING & INITIATING

Match mentors and mentees, and initiate the mentoring relationship using strategies likely to increase the odds that mentoring relationships will endure and be effective.

BENCHMARKS

B.4.1 Program considers the characteristics of the mentor and mentee (e.g., interests; proximity; availability; age; gender; race; ethnicity; personality; expressed preferences of mentor, mentee, and parent or guardian; goals; strengths; previous experiences) when making matches.

1. Program considers the online communication styles and preferences of mentors and mentees when matching, particularly in programs where relationship closeness is important to achieving program outcomes.

B.4.2 Program arranges and documents an initial meeting between the mentor and mentee as well as, when relevant, with the parent or guardian.

2. Program provides mentors and youth with icebreakers (using the program platform(s)) and discussion topics to initiate the getting-to-know-you process.

B.4.3 Program staff member should be on site and/or present during the initial match meeting of the mentor and mentee, and, when relevant, parent or guardian.

3. Asynchronous programs should develop a policy around who initiates the first contact between the match and may consider having a staff member make a formal introduction between mentor and mentee as a way of initiating the match.

B.4.4 Mentor, mentee, a program staff member, and, when relevant, the mentee's parent or guardian, meet in person to sign a commitment agreement consenting to the program's rules and requirements (e.g., frequency, intensity and duration of match meetings; roles of each person involved in the mentoring relationship; frequency of contact with program), and risk management policies.

4. Commitment agreements may be handled electronically rather than in person depending on the setting and structure of the program.

ENHANCEMENTS

E.4.1 Programs match mentee with a mentor who is at least three years older than the mentee.

May not be relevant for e-mentoring programs that are offering a pure peer-to-peer mentoring experience; otherwise should still be a strongly considered practice.

E.4.2 Program sponsors a group matching event where prospective mentors and mentees can meet and interact with one another, and provide the program with feedback on match preferences.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.4.3 Program provides an opportunity for the parent(s) or guardian(s) to provide feedback about the mentor selected by the program, prior to the initiation meeting.

E.4.4 Initial match meeting occurs at the home of the mentee with the program staff member present, if the mentor will be picking up the mentee at the mentee's home for match meetings.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.4.5 Program staff member prepares mentor for the initial meeting after the match determination has been made (e.g., provide mentor with background information about prospective mentee; remind mentor of confidentiality; discuss potential opportunities and challenges associated with mentoring proposed mentee).

E.4.6 Program staff member prepares mentee and his or her parents or guardians for the initial meeting after the match determination has been made (e.g., provide mentee and parent(s) with background information about selected mentor; discuss any family rules that should be shared with the mentor; discuss what information family members would like to share with the mentor and when).

5. Program clarifies any school or family rules that would limit mentees' screen time or online availability.

STANDARD 5 – MONITORING & SUPPORT

Monitor mentoring relationship milestones and child safety; and support matches through providing ongoing advice, problem-solving, training, and access to resources for the duration of each relationship.

BENCHMARKS

B.5.1 Program contacts mentors and mentees at a minimum frequency of twice per month for the first month of the match and once a month thereafter.

B.5.2 At each mentor monitoring contact, program staff should ask mentors about mentoring activities, mentee outcomes, child safety issues, the quality of the mentoring relationship, and the impact of mentoring on the mentor and mentee using a standardized procedure.

1. Program discusses during each check-in:

- Whether the mentor has had any technical challenges using the program platform or relevant technology.
- Whether the mentor had any challenges engaging in program activities or conversation with the mentee using the program technology.
- Any important upcoming program dates, events, activities, or milestones.

B.5.3 At each mentee monitoring contact, program should ask mentees about mentoring activities, mentee outcomes, child safety issues, the quality of the mentoring relationship, and the impact of mentoring on the mentee using a standardized procedure.

2. Program discusses during each check-in:

- Whether the mentee has had any technical challenges using the program platform or relevant technology.
- Whether the mentee had any challenges engaging in program activities or conversation with the mentor using the program technology.
- Any important upcoming program dates, events, activities, or milestones.

B.5.4 Program follows evidence-based protocol to elicit more in-depth assessment from mentors and mentees about the quality of their mentoring relationships, and uses scientifically-tested relationship assessment tools.

B.5.5 Program contacts a responsible adult in each mentee's life (e.g., parent, guardian, or teacher) at a minimum frequency of twice per month for the first month of the match and once a month thereafter.

May not be relevant for some e-mentoring programs depending on their structure and setting, but may still be relevant for those that are serving youth under 18 and have an expectation of close, mutual relationships.

B.5.6 At each monitoring contact with a responsible adult in the mentee's life, program asks about mentoring activities, mentee outcomes, child safety issues, the quality of the mentoring relationship, and the impact of mentoring on the mentee using a standardized procedure.

May not be relevant for e-mentoring programs depending on their structure and setting, especially their ability to easily connect with these types of third-party informants.



B.5.7 Program regularly assesses all matches to determine if they should be closed or encouraged to continue.

B.5.8 Program documents information about each mentor-mentee meeting including, at a minimum, the date, length, and description of activity completed.

3. Programs regularly analyze data collected by the platform or technology, which includes log-in and usage data, as well as the content of mentor-mentee interactions, to:

- **Ensure that participants are not sharing inappropriate information or otherwise violating program rules.**
- **Identify matches that may need additional support, coaching, or encouragement to participate.**

B.5.9 Program provides mentors with access to relevant resources (e.g., expert advice from program staff or others, publications, Web-based resources, experienced mentors) to help mentors address challenges in their mentoring relationships as they arise.

4. Program makes on-demand or just-in-time training and support available to mentors who need to discuss issues or challenges in the relationship or who need to build additional skills.

B.5.10* Program provides mentees and parents or guardians with access or referrals to relevant resources (e.g., expert advice from program staff or others, publications, Web-based resources, available social service referrals) to help families address needs and challenges as they arise.

5. Program makes on-demand support available to mentees (and parents and guardians) who need to discuss issues or challenges in the relationship and/or in the use of the technology/platform.

B.5.11 Program provides one or more opportunities per year for post-match mentor training.

See training section for ongoing training topics.

B.5.12* Program provides mentors with feedback on a regular basis regarding their mentees' outcomes and the impact of mentoring on their mentees to continuously improve mentee outcomes and encourage mentor retention.

New B.5.13 E-MENTORING: Program provides ongoing match activity ideas and discussion prompts periodically throughout the duration of the program in accordance with its goals and objectives.

ENHANCEMENTS

E.5.1 Program conducts a minimum of one in-person monitoring and support meeting per year with mentor, mentee, and when relevant, parent or guardian.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.5.2 Program hosts one or more group activities for matches and/or offers information about activities that matches might wish to participate in together.

May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.5.3 Program hosts one or more group activities for matches and mentees' families.



May not be relevant for e-mentoring programs depending on their structure, setting, or other factors.

E.5.4 Program thanks mentors and recognizes their contributions at some point during each year of the mentoring relationship, prior to match closure.

E.5.5 At least once each school or calendar year of the mentoring relationship, program thanks the family or a responsible adult in each mentee's life (e.g., guardian or teacher) and recognizes their contributions in supporting the mentee's engagement in mentoring.

STANDARD 6 – CLOSURE

Facilitate bringing the match to closure in a way that affirms the contributions of the mentor and mentee, and offers them the opportunity to prepare for the closure and assess the experience.

BENCHMARKS

B.6.1 Program has a procedure to manage anticipated closures, when members of the match are willing and able to engage in the closure process.

1. Program coordinates closure timeline with organizational partners and implementation sites to ensure that matches are clear around final communication dates and that program schedules align with those of schools and other partners.

2. Program requires a final series of communications between mentor and mentee that allow them to thank each other and, when relevant, reflect together on the relationship.

B.6.2 Program has a procedure to manage unanticipated closures, when members of the match are willing and able to engage in the closure process.

B.6.3* Program has a procedure to manage closure when one member of the match is unable or unwilling to engage in the closure process.

B.6.4 Program conducts exit interview with mentors and mentees, and when relevant, with parents or guardians.

3. An online exit survey may be more appropriate for some programs.

B.6.5* Program has a written policy and procedure, when relevant, for managing re-matching.

B.6.6* Program documents that closure procedures were followed.

B.6.7* Regardless of the reason for closure, the mentoring program should have a discussion with mentors that includes the following topics of conversation:

- a. Discussion of mentors' feelings about closure
- b. Discussion of reasons for closure, if relevant
- c. Discussion of positive experiences in the mentoring relationship
- d. Procedure for mentor notifying the mentee and his or her parents, if relevant, far enough in advance of the anticipated closure meeting to provide sufficient time to adequately prepare the mentee for closure
- e. Review of program rules for post-closure contact



4. Program reviews policies around future social media interaction or required restrictions for social media accounts or other online communication between mentors and mentees.

- f. Creation of a plan for post-closure contact, if relevant
- g. Creation of a plan for the last match meeting, if possible
- h. Discussion of possible re-matching, if relevant

B.6.8* Regardless of the reason for closure, the mentoring program should have a discussion with mentees, and when relevant, with parents or guardians that includes the following topics of conversation:

- a. Discussion of mentees' feelings about closure
- b. Discussion of reasons for closure, if relevant
- c. Discussion of positive experiences in the mentoring relationship
- d. Procedure for notification of mentor, if relevant, about the timing of closure
- e. Review of program rules for post-closure contact
- f. Creation of a plan for post-closure contact, if relevant

5. Program reviews policies around future social media interaction or required restrictions for social media accounts or other online communication between mentors and mentees.

- g. Creation of a plan for the last match meeting, if possible
- h. Discussion of possible re-matching, if relevant

B.6.9 Program has a written public statement to parents or guardians, if relevant, as well as to mentors and mentees that outline the terms of

match closure and the policies for mentor/mentee contact after a match ends (e.g., including contacts using digital or social media).

ENHANCEMENTS

E.6.1 At the conclusion of the agreed upon time period of the mentoring relationship, program explores the opportunity with mentors, mentees, and (when relevant) parents or guardians to continue the match for an additional period of time.

E.6.2 Program hosts a final celebration meeting or event for mentors and mentees, when relevant, to mark progress and transition or acknowledge change in the mentoring relationship.

6. Programs may offer an online or virtual celebration event if doing one in-person is not feasible.

E.6.3* Program staff provide training and support to mentees and mentors, as well as, when relevant, to parents or guardians, about how mentees can identify and connect with natural mentors in their lives.

PROGRAM DESIGN & MANAGEMENT

Program Theory of Change - Program has a theory of change that clearly articulates the goals that the program is working toward for mentees, including the benefits of offering the mentoring in an electronic format rather than face-to-face (or in combination if the program also offers limited in-person contact).

Among the decisions a program needs to make during initial design are:

- Whether the program will be one-to-one, group, or some combination of mentoring pairs and other groupings of participants, including whether participants have the opportunity to form their own groups.
- The degree to which the program will offer activities and discussion prompts to spur participation by mentors and mentees.
- How key program practices such as training and ongoing match support can be delivered via technology.
- The role parents and guardians will play in the program, if any.

NEW Selection and Management of an Appropriate Technology Platform - Considerations for selecting an appropriate communication/technology platform for the program include:

- The goals and focus of the program (alignment with the theory of change)
- Ensuring accessibility for all users (access to appropriate technology/internet)
- Literacy skills needed to effectively use the technology (consider both adult and youth literacy skills)
- Accessibility for users with disabilities (508 and other compliance frameworks)

- Ease of use and familiarity of participants with the technology being considered, including “mobile-friendliness” of the technology
- The capabilities for password protection, keeping user data safe, and avoiding inappropriate access
- Managing users (e.g., creating new accounts, managing emails and passwords, ease of enforcing platform rules, purging former participants)

Policies and Procedures - Program should have written (and online) policies and procedures that cover aspects of the program such as:

- Appropriate use of the technology and other rules for participant communication
- Expectations around frequency of mentor-mentee communication and response times, as well as participation in scheduled activities provided by the program throughout the match
- Rules around in-person contact or other digital contact between participants outside of the sanctioned technology/platform of the program
- User privacy and confidentiality, including steps that the program takes to monitor matches and ensure the safety of participants, which may be more intrusive in these programs than for in-person programs.
- How to access on-demand technical or online relationship support
- Post-program contact, both in person and using the program’s or other technology



Adequate and Appropriate Staffing - Program has program coordinator or platform facilitator/manager roles that have broad responsibility for managing online conversations, monitoring interactions for inappropriate behavior, fostering user engagement and participation, and handling issues related to platform upgrades, maintenance, and expansion of features. Whether through this role or other staff positions, the program should also provide adequate technical support to end users and be able to address problems using or accessing the platform or technology used by the program as they arise.



Data and Information Management - Program engages in two activities that can both improve the user experience and inform implementation evaluation over time:

- Track user engagement and participation in the technology platform of the program (e.g., frequency of log-ins, number of messages exchanged over periods of time, average response time when a communication is received, viewer analytics, etc.)
- When feasible, analyzing or observing the content of messages exchanged by mentors and youth to ensure appropriateness of content and alignment with program goals and mentor roles; informing future training based on message quality; offering prompts and engagement tips to participants who are struggling with message frequency or quality.

JUSTIFICATION AND DISCUSSION OF MAIN PRACTICE THEMES

This section offers readers a more detailed explanation of the recommendations suggested in the previous section, each of which is referred to here in bold with the Benchmark or Enhancement number followed by the recommendation number (e.g., the first recommendation under the first Benchmark in the Training Standard would be listed as **B.3.1 #1**). Readers are encouraged to consult this section for more detailed implementation information and additional research citations that can further explain and justify specific recommendations, as well as provide solid overall guidance for developing and maintaining a quality e-mentoring program.

MAJOR THEME 1

Choosing or Building the Right Technology for the Program

The first major theme of this supplement for e-mentoring programs involves issues associated with choosing or building the right technology for each mentoring program to meet the program's goals and the needs of the youth served by the program.

This theme emerges from recommendations on a variety of practices across several sections, including available technology tools and issues of privacy, confidentiality, and monitoring. In addition, there are specific recommendations in the Program Design, Management, and Evaluation sections that are also discussed within this theme.

Mentoring programs that have made the decision to require program participants to communicate and build their relationships primarily (or exclusively) without in-person contact must determine which technology best fits their needs. For some e-mentoring programs, a low-tech solution such as building the relationship through telephone calls and texting may be sufficient to meet their goals and objectives. Other programs may need to purchase or build a software platform to meet their needs, particularly if the program requires complex interactions including video calls and completion of structured activities. The decision to build a proprietary platform may also be driven by a desire to emphasize youth safety by having access to and monitoring of all of the communications shared between match members.

Issues to Consider When Selecting Hardware and Software for an E-Mentoring Program

This section reviews the hardware and software needs of an e-mentoring program, which may or may not be proprietary or specifically developed for this purpose. There are both advantages and disadvantages to developing and deploying a custom software platform compared to use of generic software that is not customized or developed by the mentoring program. The issues, advantages, and disadvantages associated with each type of software solution are summarized in Table 1 on the following pages.



TABLE 1. ISSUES ASSOCIATED WITH THE TYPE OF SOFTWARE PLATFORM EMPLOYED IN AN E-MENTORING PROGRAM

| Issue | Custom Technology | Commonly Used Technology |
|----------------|---|---|
| Ease of access | <p>Advantage – A custom software platform could be designed to serve a subpopulation of youth who have a specific disability, making it more accessible and usable for them. Many of these platforms are web-based, which allow for simple access from a variety of locations and devices.</p> <p>Disadvantage – Would likely require use of a special app or another login for users to remember and manage. Could be a barrier to frequent or regular use because the software is not part of the natural flow of daily activities. Real-time communication between mentors and mentees is possible based upon how the platform is built, but building this functionality may be too expensive for the mentoring program.</p> | <p>Advantage – American teenagers (13 to 18 years old) spend about nine hours a day with entertainment media.¹ Texting or social media use for match communications facilitates frequent interaction because they are part of each person’s natural activities (e.g., 95 percent of teens have a smartphone or access to one, and 45 percent of teens report that they are online almost constantly;² over 75 percent of teens text and they send a large number of texts daily;³ the frequency of phone conversations is declining and about 25 percent of teens say they never talk on a cell phone;⁴ texting dominates teens’ communication choices, with 63 percent reporting they use texting to communicate with others every day,⁵ so adding sending texts to a mentor would be easy for adolescents to do; whereas, mentors may be using email at work, so emailing mentee(s) may be a more natural activity during the day for them). The use of existing technologies could facilitate real-time communication between mentors and mentees.</p> |
| Cost | <p>Disadvantage – Developing a software application or mobile app for an e-mentoring program could be extremely expensive and a multi-year project that could run into the millions of dollars. This could compromise the budget of the mentoring program and significantly delay its launch. Maintenance and updates to such software can also be expensive.</p> | <p>Advantage – Allowing match members to interact using their natural forms of electronic communication is cost effective. By doing so, e-mentoring programs can focus their effort and budget on activities such as staff training and professional development; program administration; and match recruitment, screening, training, monitoring, and support, rather than on software development.</p> |
| Curriculum | <p>Advantage – Curriculum-based activities can be integrated into the custom software and delivered to the match on an as-needed basis.</p> | <p>Disadvantage – Use of a curriculum may be more cumbersome and less flexible (e.g., can still use a document sharing platform, but it may have less functionality).</p> |
| Recruitment | <p>Advantage – Recruitment messages that advertise the safety and monitoring features of a custom technology built for the purpose of supporting a mentoring program may be more attractive to some potential participants. Volunteers may be reassured that they will get a lot of support and guidance because someone is engaged and watching their relationship development efforts. Parents or guardians of mentees may be attracted to a program that has strong focus on child safety.</p> | <p>Advantage – Recruitment messages that address the benefits of use of a common method of technology may be attractive. Some benefits include familiarity, ease of use, and relative ease of integration into one’s day-to-day life.</p> |

| | | |
|--------------------------|--|--|
| <p>Screening</p> | <p>Advantage – Mentoring and mentee applications, screening tools or questionnaires, and interviews can seamlessly be integrated into the software application for completion by mentors, mentees, and/or parents/guardians. Screening measures can be automatically scored and interpreted to facilitate use by program staff members.</p> <p>Disadvantage - Creating this functionality and obtaining licenses to use screening tools can be expensive.</p> | <p>Advantage – Purchasing single uses of screening tools or questionnaires can be cost-effective.</p> <p>Disadvantage – Deployment and tracking of completion of screening tools would require logging in and using an independent software system.</p> |
| <p>Monitoring</p> | <p>Advantage – The software could be built to allow for capturing all of the communications between mentors and mentees. If all of the mentoring interactions occur in the context of a closed software platform or system, then program staff members can observe and monitor all match interactions. Furthermore, algorithms can be written to screen for unsafe or unhelpful interactions, which can be useful for planning match support contacts.</p> <p>Disadvantage – Having an outsider observe all mentoring interactions could be off-putting to both match members. Feeling as if they have no privacy in their relationship can hinder the development of a close relationship between mentors and mentees. It may also be time consuming and expensive to read or watch all match activities.</p> | <p>Advantage – Use of software that does not allow for monitoring all match interactions and activities is similar to traditional community-based mentoring. This more natural monitoring arrangement could support the development of a close, enduring relationship.</p> <p>Some software platforms allow for monitoring of communications by an administrator, which could have the advantages suggested for custom-built technology that allows for constant monitoring.</p> <p>Disadvantage – If match communications are conducted using commonly used technology such as texting or telephone calls or video chats, then the program may not be able to directly observe match interactions. Mentoring program staff have often expressed the wish to be a “fly on the wall” and able to observe matches interacting with one another. They feel limited in providing support because everything they typically know about the match is based upon the reports of match members and parents/guardians, who filter information through their own lenses. Match support could miss important information that could compromise the safety and well-being of mentors or mentees.</p> |
| <p>Support</p> | <p>Advantage – With access to real-time and archival data on match interactions and activities, mentoring program staff can respond more quickly when they perceive problems are arising in the mentoring relationship or the lives of mentees. Staff can also provide mentors with ongoing training when they are able to monitor comments and interactions with their mentees to help mentors to be more effective.</p> | <p>Advantage – If the mentoring program purchases or obtains access to a platform that allows for an administrator view of match communications, then match support may be enhanced.</p> <p>Disadvantage – Program staff might rely on telephone calls or emails with mentors, mentees, and parents or guardians to provide match support. The information they obtain in these contacts will likely be abbreviated and incomplete, not in real time, and filtered through the eyes of the informant.</p> |



| | | |
|--------------------------------|--|--|
| Building social capital | Advantage - The custom software could be built to enhance network building, such as allowing for and supporting online interactions of mentees with other mentors and mentees. This can help mentees to build their social capital, support system, and affinity groups. | Disadvantage - Commonly used technologies may not have the capability of networking mentees with other mentors and mentees to help support building their social capital. |
| Evaluation | Advantage - By having a back-end database containing all match interactions, programs can conduct basic research on the relationship factors that may be associated with match and youth outcomes. Because this is an archival database, it could reduce the data collection burden on mentors, mentees, parents/guardians, and program staff members. Also, archival data, by definition, will be more reliable than self-report data. | Disadvantage - Without a back-end database that contains all match interactions, information about match activities and interactions will need to be collected. This adds a burden on match members and program staff members. Also, this self-report data on factors such as interaction frequency, duration, discussions, and activities are filtered through the lens of the informant and will be, by definition, less reliable than archival data. |
| PRIVACY | Advantage - Program will have more control over privacy settings; however, could be expensive to monitor and manage attempts to phish or hack or other threats to the database in the software. | Advantage - Individuals in the match may have more control over privacy settings. The cost of monitoring and managing possible phishing or hacking attempts or other threats is handled by the vendor. |

In addition to the many issues to consider with respect to selection of the type of software that will be used in an e-mentoring program, there are also issues to consider when selecting the hardware device(s) to be used in the program. For example, the program needs to choose whether mentees can access the software on any hardware. If the software platform is only installed on a computer in school, then it is only accessible during the school day, which limits when mentees can access their mentors. In contrast, if the program allows matches to use any hardware device or commonly available devices, such as phone-to-phone texting services, then mentees can contact their mentors outside of program hours. Thus, there are advantages and disadvantages associated with defining the hardware devices required for program participation. Furthermore, there are also advantages and disadvantages associated with

supplying versus not supplying hardware devices for program participants. For example, there is a large digital equality gap in the ownership of computers, tablets, and smartphones, with children in low-income homes being significantly less likely to have access to hardware devices in their homes compared to wealthier peers. For example, 78 percent of teens from high-income homes own a smartphone, where only 51 percent of teens from low income homes own a smartphone.⁶ The main advantage when devices (and internet access) are provided to participants is that program eligibility is not restricted to those with the financial resources to provide them for themselves. A disadvantage of the mentoring program providing hardware devices to match members is that the program would need to purchase an insurance policy to cover potential theft or damage to devices to protect their investment. Another issue regarding hardware



is that if the mentoring program requires use of specific hardware devices but does not supply them to match members, then it is highly likely that the pool of eligible match members will be narrowed.

There is no one best solution for the type of e-mentoring software and hardware technology adopted by the field of e-mentoring; and the same conclusion holds for each mentoring program that needs to decide which solution is best for them at each stage of their development as an organization. These decisions will be based upon many factors such as their budget, ease of use of different hardware and software devices, the timing of availability of software services, the age and type of mentors and mentees eligible for program participation, and the mentoring program's model and goals. When choosing or building the right technology for the program, there are several important criteria to consider, which are discussed below.

Aligning with the Program's Theory of Change and Desired Outcomes for Youth

The first and most important issue is that the technology must align with the mentoring program's theory of change and the requirements of the program. First, what program participants are expected to do together through the e-mentoring program will contribute to the decision about what technology is needed. For example, if the program requires participants to complete activities together, this will likely require mentors and mentees to see one another via video (or in a virtual world) to fully participate. As another example, for e-mentoring programs in which mentees complete an activity or task and then write to their mentor about the experience, asynchronous technology may meet the needs of the program.

Second, the desired outcomes of the program will also impact the selection of the technology best suited to the program. For example, an e-mentoring program may have the goal of improving mentees' reading and writing skills. In this case, text-based technology may be most beneficial for program participants. If the goals of the program are more diffuse and predicated on the development of a close relationship between the mentor and mentee, programs may want to offer multiple ways of connecting to one another (e.g., video, email, texting) in order to support the development of this relationship.⁷ For example, one STEM online group mentoring program for girls utilized a members-only platform that allowed participants to communicate using internal email, a forum, and chat functionality. This platform was found to support the development of effective group e-mentoring relationships.⁸

A key consideration relevant to the theory of change is the level of oversight of program participants needed to effectively support the program's goals or if the program is designed for vulnerable populations of youth; this oversight can include monitoring the activities and conversations between participants. A closed system in which program participants log in to complete activities or communicate with staff or their partners may be needed if the program determines it is necessary to review all the interactions between participants. This intense level of oversight and monitoring could be required in order to protect the safety of participants, or to assess if participants are engaging in the activities required by the program and working toward the desired outcomes. For example, e-mentoring programs that are integrated into a school or classroom and facilitated by a teacher may opt to use a closed system so the teacher facilitator can review the communications

between the mentee and mentor to determine if the mentee is communicating effectively and learning the required material. (For an example of a program that monitors communications in this way, see the brief E-Mentoring in Action snapshot below about the iCouldBe program.)

Programs working with mentees from more vulnerable groups (such as victims of sex trafficking, youth with chronic illness or serious disabilities, very young mentees) may also determine a closed system is necessary given the vulnerabilities of these groups to coercive, negative influences. The software chosen to support the program could set up mentors to do harm if they cannot read verbal

cues or there is a lapse in response time when mentees disclose something important.

Programs must also weigh how important it is for program participants to be able to observe nonverbal cues when communicating with their partner when selecting technology. Video-based communication platforms allow program participants to better observe nonverbal cues. These platforms may be particularly important for e-mentoring programs that aim to have participants improve nonverbal skills or programs that are concerned the absence of such cues will impact program effectiveness.

E-MENTORING IN ACTION: **KEEPING AN EYE ON PARTICIPANT MESSAGES IN THE iCouldBe PROGRAM**

The core of the iCouldBe program is a research-backed curriculum that takes mentees and mentors on a shared journey through online activities and relationship-building conversation areas. The curriculum incorporates inspiring graphics, quotes, videos, informative content, and helpful resources to engage mentees and mentors on a holistic level. The iCouldBe curriculum leverages “gamification” concepts to help mentees engage in self-reflection while imagining their future through practical steps. Several primary missions include “quests” with related sets of activities designed to build, practice, and demonstrate the comprehension of new skills.

Matched mentees and mentors participate in asynchronous conversations that allow busy mentors to participate from any location at any time, significantly growing mentor recruitment pools and increasing mentee-mentor engagement. After matched mentees and mentors respond to one another, automated emails or text messages are sent prompting participants to log in and reply at their earliest convenience.

To ensure the safety of all participants, advanced filtering systems constantly operate in the background as mentees and mentors share information and respond to activities. Filters, created and updated by iCouldBe, block and flag personally identifiable information, inappropriate content, and any content that may be an indication of danger to the mentee; all filters are reviewed daily by program staff. If blocked or flagged content is posted by a mentee, program staff review it and take immediate action as needed. If blocked or flagged content is posted by a mentor, program staff will contact the mentor directly as needed to resolve any issues.



In addition to the automated filters, mentors can directly contact program staff or teachers should they have any concerns about their mentee. For issues of high concern requiring urgent and immediate attention, a built-in emergency alert system can be used by mentors to automatically alert all levels of program and executive staff as well as the mentee’s teacher. Program staff immediately reach out to school staff to confirm they are aware of the issue and to ensure the safety of the mentee. School policies are followed to protect the mentee and ensure all mandated steps are implemented.

To support mentees and mentors, data science tools have been developed and embedded in the back-end administrative platform. Staff and teachers have access to the data science tools and all related data visualizations to measure and track mentee and mentor participation — both quantitatively and qualitatively.

For any timeframe (weekly, monthly, full program year, etc.), four data points measure mentee participation and program progress: number of log-ins and posts to activities, number of activity posts, average number of words in every activity post, and number of activities started/completed. Each data point is weighted according to its significance in mentees reaching program outcomes; these outcomes are based on an analysis of 15 years of mentee participation and online behavioral statistics.

Similarly, weighted mentor data points measure mentor engagement with their mentees: number of log-ins, number of activity posts, average number of words in every activity post, the ratio of reciprocated posts between mentors and mentees (to ensure meaningful conversations between the match members occur) and the average number of days it takes mentors to reply to mentees. The weighted data points for mentees and mentors generate color-coded “scores” to display simple data visualizations that program staff can easily act upon: Green = Celebrate, Yellow = Encourage, and Red = Extra Support.

The required speed and frequency of interaction between program participants can also inform the selection of technology.⁹ If the theory of change includes providing mentees with efficient, real-time support, then the technology should allow mentors to receive communication from their mentees as easily as possible such as through text message, email, or a push notification on their cell phone. For example, mentees may send an urgent question to their mentor regarding how to handle a specific situation and expect to receive a quick response. In other programs, this type of real-time support may not be expected of program participants to help build the relationship and have an influence on the desired outcomes.

Aligning with Users’ Abilities, Literacy, and Technology Access

Another major consideration when selecting technology for an e-mentoring program is the characteristics of the program participants, such as their abilities, access to technology, and technology literacy. The demands of the program and challenges with using the technology employed need to align with the abilities of the program participants.¹⁰ E-mentoring programs have demonstrated great promise for reaching populations that have traditionally been excluded from mentoring due to limitations in their ability to consistently meet in-person with a mentor.^{11,12} These



limitations may be due to physical or cognitive disabilities, illness, or location, among many others. For example, e-mentoring programs have demonstrated promise in connecting individuals with disabilities with a mentor.¹³ For mentoring programs that include mentees with low literacy skills, technology that utilizes video may be the preferred method of communication to help reduce the impact of these skills on the ability of the mentee to participate. Programs should also consider technology such as speech-to-text and text-to-speech, which may help individuals with lower writing or reading skills to participate.

Technology access can be a significant barrier to participation in e-mentoring programs and should be considered when selecting technology for facilitating an e-mentoring program. In the United States, the proliferation and prevalence of smartphones, laptops, tablets, and other devices has allowed for individuals to connect with others through a wide range of devices, social media, and channels. Also, access to Wi-Fi and reduction in the cost of texting and other data plans has reduced problems with accessibility to the internet and apps. However, there are still many who lack access to technology or who may have components of the technology, such as a cell phone, but do not have services, such as cellular data or Wi-Fi access, to take full advantage of the technology. This may be particularly true for young people who are among the target audience of mentees. Disruptions in communication between program participants due to an unreliable computer or cell phone or disconnected internet, among other issues, can cause significant frustration and threaten the development of an effective mentoring relationship. Thus, e-mentoring programs need to be familiar with their target populations and their populations' level of technology access, ensuring they are able

to provide support to program participants who have limited access or select technology that will be accessible to their participants.

Finally, the levels of technology literacy among program participants should also be considered when selecting technology for an e-mentoring program. Ideally, the technology platform chosen by the program would offer a range of functions (e.g., easy sign-on, video, chat, discussion boards) and support (e.g., easy password reset, online tutorials, live chat, easily accessible email support) that help meet the goals of the program and support the participation of participants who have significant variability in their technology skills. Platforms that feature an intuitive user interface and helpful tutorials can support the engagement of participants with lower levels of technology literacy. Training for mentors and mentees by the mentoring program should also address how to use the technology, with the option for additional training for program participants who need more support in getting started. For more insights and recommendations regarding preparing participants for the e-mentoring experience, see Theme 3: Preparing Participants for Good Online Interactions.

Aligning with Partners' Technology Systems and Policies and Procedures

E-mentoring programs that work in close partnership with schools or other organizations must consider the potential integration of software systems when selecting a technology platform — as well as the policies and procedures of any partner organizations — to ensure the technology will meet all of the necessary requirements. Integrating a mentoring software platform into a school setting may have additional requirements due to FERPA (see following Table 2) and school policies regarding internet use by students, as well as challenges

navigating the school's firewall and other security software. There may also be parents' rules about the amounts and types of screen time they allow for their children. In addition, the policies and procedures of the partner organization may require that all communications between mentees and mentors be monitored by program staff. In this case, administrative monitoring would be a requirement for the selection of the software platform. Furthermore, the partner organization may utilize its own technology for tracking mentoring program participants and would prefer their system integrate with the e-mentoring program's technology. How and whether these systems can be integrated should be considered when selecting technology.

Federal and Legal Compliance Issues

A summary of laws, statutes, and government policies that are relevant to e-mentoring programs can be seen in Table 2. Each of these issues has specific implications related to the use of software for communication purposes. Because of the rise in security breaches, hacking attempts, viruses, phishing, spyware, and other technology security risks, both U.S. and international governments have taken notice and created laws and regulations regarding use of data. Furthermore, with the proliferation of computers and other technology, laws and regulations have also been written to make software accessible to users with disabilities. These and other issues are discussed below.

TABLE 2. BRIEF OVERVIEW OF LAWS, STATUTES, AND GOVERNMENT POLICIES RELEVANT TO E-MENTORING PROGRAMS

| ACCESSIBILITY | | | |
|---|--|--|---|
| Law, statute, or policy | What is it? | What is its purpose | How is it relevant to e-mentoring |
| Section 508 | A federal law that is an amendment to the United States Workforce Rehabilitation Act of 1973 | It mandates all electronic and information technology developed, procured, maintained, or used by the federal government be accessible to people with disabilities. | Although there are advanced technical skills and knowledge associated with compliance with these standards (and may not be required if your mentoring program is not funded by the U.S. federal government or through state grants), achieving 508 compliance is becoming the norm in software development, avoids potential changes in the law that make noncompliance problematic, and provides an opportunity to offer your e-mentoring program to both mentors and mentees with a disability. |
| Web Content Accessibility Guidelines of the World Wide Web Consortium | Standards created by an industry consortium | It provides international standards for websites, web applications, browsers, and other tools so that people with disabilities can use them. It is also designed to benefit people without disabilities. It is the basis for 508 compliance. | |

PRIVACY

| Law, statute, or policy | What is it? | What is its purpose | How is it relevant to e-mentoring |
|-------------------------|---|---|--|
| COPPA | Children's Online Privacy and Protection Act enacted by Congress in 1998 requiring the Federal Trade Commission to issue and enforce regulations concerning children's online privacy. Rules were put in place in 2000 and amended in 2013. | It is a law regarding how online operators of commercial websites, online services, and mobile apps notify parents and obtain their consent before collecting any personal information on children under the age of 13. | This law probably applies to e-mentoring programs serving children under the age of 13. The law focuses on commercial software services; however, even proprietary software applications developed by schools or nonprofit organizations probably integrate commercial software solutions or plug-ins, or have their data hosted on third-party servers. All federal websites and applications are COPPA compliant, so if a program's website or application was developed using federal funds, they will have to follow the Act. Thus, whatever software solution is used by a mentoring program, be it a custom platform that the program creates or something that is more publicly available, they will likely have to be COPPA compliant. |
| HIPAA | Health Insurance Portability and Accountability Act of 1996 | It provides security provisions and data privacy to keep patients' medical information safe. | E-mentoring programs located in a health care organization or who partner with a health care organization will need to be conscious of HIPAA. This is particularly the case if the mentoring program collects data from health records to examine the effectiveness of its program on the health outcomes of mentees. |
| FERPA | Family Educational Rights and Privacy Act | It is a spending statute that requires educational institutions and agencies to obtain written permission from a parent or eligible student to release any educational information from the student's educational record. | E-mentoring programs located in an educational institution or agency or who partner with one may need to be conscious of FERPA. This is particularly the case if the mentoring program collects data from educational records to examine the effectiveness of its program on the educational outcomes of mentees. |



PRIVACY

| Law, statute, or policy | What is it? | What is its purpose | How is it relevant to e-mentoring |
|-------------------------|---|--|---|
| GDPR | General Data Protection Regulation - Regulation (EU) 2016/679 of the European Parliament and of the Council | It is a set of rules designed to give citizens of the European Union (EU) more control over their personal data. It also aims to simplify the regulatory environment for business. | E-mentoring programs serving individuals who live in the EU have to be compliant with the GDPR. The key issues an e-mentoring program must address include the types of data that can be stored, processing of electronic data, information given to individuals whose data is being processed, how long and under what conditions data can be kept, and the technical and organizational safeguards that ensure data security. |

Accessibility Considerations

E-mentoring programs should be familiar with the various technology accessibility laws and guidelines when selecting technology for the program. Funding sources and the populations served by the program will primarily determine what accessibility laws and guidelines are relevant to an e-mentoring program. For instance, some e-mentoring programs may be required to comply with Section 508, a component of the Rehabilitation Act of 1973, that requires federal agencies to ensure that all electronic and information technology they develop, procure, maintain, or use is accessible to people with disabilities. This law is related to three federal laws: the Americans with Disabilities Act, Section 255 of the Communications Act, and the 21st Century Communications and Video Accessibility Act of 2010. Section 508 includes websites and software, including educational and training programs, developed through any agency of the U.S. federal government. The Section 508 guidelines were recently updated and include the requirement that agencies follow the Web Content Accessibility Guidelines (WCAG 2.0) that were developed in

2008 to establish international standards for creating accessible web content.

Even if programs are not required to follow the Section 508 or the WCAG due to their funding, it is important to be aware of these guidelines and determine if they are relevant to a program's participants. There are 85.3 million people in the United States, or 27 percent of the population, who have a disability,¹⁴ and even if an e-mentoring program does not explicitly recruit mentors and mentees with a disability, it is very likely that these individuals are involved in these programs in some capacity. Thus, all e-mentoring programs should be aware of these guidelines and use them to evaluate any technology that is required for participating in the program. They should also be used to inform any decisions about technology that might be purchased or developed to support the program. Text-to-speech, speech-to-text, closed captioning, form controls, and distinguishable content are all examples of accessibility elements that may be beneficial or required for participants to fully engage in the e-mentoring program.



Some strategies e-mentoring programs might use to achieve 508 compliance include:

- 1. Learn the laws and requirements related to compliance.**
- 2. Hire an accessibility consultant.**
- 3. Begin by creating reasonable accommodations in software and documents.**
- 4. Create an accessibility plan and timeline.**

Privacy Issues

With recent breaches in security in some of our most trusted websites, the U.S. Congress and other non-U.S. regulatory bodies have enacted several laws that should be known by e-mentoring programs.

The first law that is relevant to privacy is COPPA, or the Children's Online Privacy and Protection Act, which has a number of requirements that protect the privacy of children. More important, it gives parents greater control over their children's access to the web and the collection of personally identifiable information (PII) about their children by commercial vendors. Parenthetically, PII is broadly defined by COPPA and includes a wide range of information about a child such as name, address, and Social Security number; photos, video, or audio files that contain a child's image or voice; username or screen name, if that information could be used to make contact with the child; geolocation information, such as street name and city or town; and what are called persistent identifiers that might allow a child to be tracked across time or websites. It is less clear whether COPPA also defines PII in terms of the metadata from their computer such as their IP (internet protocol) address, device identification number, or their browser. One thing to

There are a number of resources available to learn more about Section 508 compliance and the WCAG guidelines. A few website links are listed below for reference.

Section 508:

- <https://www.section508.gov/content/learn/laws-and-policies>
- <https://www.learningsolutionsmag.com/articles/2193/section-508-refresh-the-clock-is-ticking-on-elearning-accessibility-requirements>

WCAG 2.0:

- <https://www.w3.org/TR/WCAG20/>
- <https://www.w3.org/TR/2014/NOTE-WCAG20-TECHS-20140408/pdf.html>
- <https://www.w3.org/WAI/WCAG20/quickref/>

note is that COPPA concerns only the information children directly provide, but not the information that is collected about them. Thus, software that collect information from parents is not covered by COPPA, even if some of that information is about their children. It is hard to imagine an e-mentoring program that does not collect at least some of this information from child participants.

The requirements of the law include that commercial companies making websites, mobile apps, and other online tools for children under 13 years of age must provide notice and get active, verifiable parental consent before collecting information online from children. It is important to be aware of the fact



that the privacy policy has to be written in easy to understand terms and be posted on the website. Parents also have the right to prohibit companies from disclosing any information about their children to a third party (unless the disclosure is integral to the site or service, but this must be disclosed to parents as well). Furthermore, parents can have access to their children’s personal information and have all of their child’s information deleted. This last requirement may be the hardest one for a small program to implement, given the labor involved in deleting information from back-ups or data files. In addition, companies must have a “clear and comprehensive” privacy policy. Finally, software companies must keep all of the information they collect from and about children confidential and secure. Even though this law does not directly regulate the websites of schools, state government agencies, or nonprofit organizations, many of these organizations use third party vendors for software functions or data hosting. Use of a third-party vendor may result in a nonprofit organization conducting an e-mentoring program needing to be COPPA compliant.

If the e-mentoring program is taking place in a school context, the Federal Trade Commission (FTC) does allow schools to give consent on behalf of parents; however, legally, it is risky. Because the legal basis for providing permission for children to access software on the internet and for the software to retain PII is unclear, Recommendation 2.10 states that parents or guardians should provide explicit permission from parents. In fact, the FTC encourages nonprofit organizations to post their privacy policies online and provide COPPA protections for child visitors in their web applications and other software. Similarly, U.S. federal policy has required that all websites and software services operated by the federal

government and contractors operating on behalf of federal agencies comply with COPPA. Hence, COPPA is wide-reaching and broadly applied, even when it is not legally required or the legal precedent is not clear.

Some strategies that an e-mentoring program can use to be COPPA compliant include:

- 1. Create a privacy policy with respect to children in the program under 13 years of age.**
- 2. Publicly post the privacy policy describing what information is collected from children in the program, how that information is used, whether information collected from children is disclosed and to whom, contact information for any third parties that may also be collecting information through the program’s website or web application, and how parents can have information about their children deleted from the software system.**
- 3. Choose the third-party software carefully or keep COPPA in mind when developing proprietary software.**
- 4. Provide parents with complete information about what software and other tools are used in the program.**
- 5. When recruiting new mentees into the program, obtain active, verifiable parental consent prior to having mentees or prospective mentees provide the program with any PII.**
- 6. Consult with an attorney who is an expert in COPPA and who can help develop the program’s privacy policies and procedures.**

There are two other laws that are relevant to different types of e-mentoring programs in the United States. One has to do with programs that

If you are interested in learning more, additional information about COPPA can be found here:

- <https://www.ftc.gov/tips-advice/business-center/guidance/complying-coppa-frequently-asked-questions>
- Electronic Code of Federal Regulations – Children’s Online Privacy & Protection Act
http://www.ecfr.gov/cgi-bin/text-idx?SID=ad417dd5af1c499aa56467636227509e&tpl=/ecfrbrowse/Title16/16cfr312_main_02.tpl
- FTC COPPA Rule
<https://www.ftc.gov/enforcement/rules/rulemakingregulatoryreform-proceedings/childrensonline-privacyprotectionrule>
- Federal Register
<http://www.gpo.gov/fdsys/pkg/FR201301-17/pdf/201231341.pdf>
- FTC Press Release about changes to COPPA
<https://www.ftc.gov/newsevents/press-releases/2012/12/ftc-strengthens-kids-privacy-gives-parents-greater-control-over>

have health-related data, and the other relates to programs situated in educational settings.

FERPA, or the Family Educational Rights and Privacy Act, was designed to protect the privacy of the education records of students and prevent the improper disclosure of PII from educational

records. The federal agency with oversight of this statute is the U.S. Department of Education (DoED), and because it is a spending statute (“no funds shall be made available . . .”), DoED can encourage compliance only through the threat of discontinuing federal funding to an educational institution. Individual parents and students may not file a federal lawsuit against an educational agency or institution for a FERPA violation; however, they may be able to sue in state court. FERPA covers the actions of anyone with access to students’ educational records, and a FERPA violation occurs if a student’s education records are released to any unauthorized persons. The statute requires that education institutions and agencies obtain written permission from a parent or eligible student (age 18 or over) to release any information from a student’s education record. If a mentoring program is housed in an educational institution or agency, then it will be subject to FERPA and cannot examine any educational records without written parental permission. Data also may be used for monitoring mentees’ educational functioning during the mentoring relationship and be useful to match support staff when having contact with match members during the life of the relationship.

Just like FERPA was designed to safeguard educational records, HIPAA was designed to safeguard health records of patients and strictly control when Protected Health Information (PHI) is divulged and to whom. Since the Enforcement Final Rule of 2006, OCR has had the power to issue financial penalties (and/or corrective action plans) to covered entities that fail to comply with HIPAA Rules. The Privacy Rule applies to any health provider, health plan, or health care clearinghouse that transmits health information in electronic form that are considered covered entities. In order for a covered entity to disclose any health information that is not for treatment or payment of health

Additional information about FERPA can be found here:

- Electronic Code of Federal Regulations Family Educational Rights and Privacy Act
https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title34/34cfr99_main_02.tpl
- U.S. Department of Education -Family Educational Rights and Privacy Act
<http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>

care (to an e-mentoring program, for example), written authorization needs to be obtained first. The authorization must be in plain language and contain specific details about the information that is being shared, the person or persons receiving the information, and the right to revoke in writing access to the data, among other items. E-mentoring programs located in a health care organization or who partner with a health care organization will need to be conscious of HIPAA and the sharing of PHI with staff and mentors. This situation is particularly the case if the mentoring program collects data from health records to examine the effectiveness of its program on the health outcomes of mentees. Data also may be used for monitoring mentees' health functioning during the mentoring relationship and be useful to match support staff when having contact with match members during the life of the relationship.

Some strategies that an e-mentoring program might use to be FERPA or HIPAA compliant are similar to those described above for COPPA. The key one is to obtain written parent permission to obtain and use

any records from an educational institution or health care organization.

Finally, for e-mentoring programs in the European Union (EU) or providing services to residents in the EU, compliance with the General Data Protection Regulation (GDPR) is relevant. Some reasons why GDPR was developed was to create a unified law and set of rules that would apply across the EU in order to simplify the process of compliance for businesses, clarify the rights of EU citizens, and save money by having one supervisory authority. In GDPR, personal data are broadly defined, as they are in U.S. laws, to include anything from a name, to a photo, to an email address, or even a computer IP address. Given this broad definition, GDPR appears to be relevant to almost any public-facing organization that collects personal data about or from EU citizens, and this relevance is regardless of the software's country of origin. Furthermore, businesses and organizations that process private or sensitive data are required to ask for consent and permission each and every time they access the data; thus, there is no such thing as a continuous blanket consent. Each time data are used for a new purpose, a new request for consent is required. Furthermore, GDPR also clarifies something called the "right to be forgotten," which gives people the right to have their data deleted and destroyed from an organization's database. In addition, citizens have the right to access their personal data and information that is saved in the database. Thus, whatever software system is developed or used

Additional information about HIPAA can be found here:

- HIPAA privacy rule
<https://www.hhs.gov/hipaa/for-professionals/privacy/laws-regulations/index.html>



Additional information about GDPR can be found here:

- <https://eugdpr.org/>
- https://ec.europa.eu/info/law/law-topic/data-protection_en

needs to be designed with these capabilities in mind.

The penalties for failure to comply with GDPR are severe and carry significant risk for a company or organization. Thus, e-mentoring programs should work with an attorney to develop their policies and web application to be GDPR compliant. In addition, other countries are moving toward instituting new or changing software and internet privacy laws since GDPR was released. News reports suggest that privacy laws are being reviewed by legislative bodies in countries such as Brazil, Japan, South Korea, and India to include GDPR requirements. Thus, international e-mentoring programs operating in these and other countries need to be aware that privacy has become an important legal issue around the world, so they need to monitor the activities of their legislative bodies to avoid being taken by surprise by changes that may impact their software design or consent procedures.

Based upon this overview of relevant laws, statutes, and policies related to the use of web-based applications and software for e-mentoring programs, another recommendation that programs should consider is to have privacy policies in place that are GDPR compliant and insurance coverage related to potential data breaches.

Technical Support

A final consideration is the level of technical support that will be required for the technology platform.

Any technology selected for use by an e-mentoring program will require some level of technical support for both staff and program participants. Difficulties signing into the communication platform, lost passwords, incompatible media, and outdated software or hardware are a few of the issues that can hamper participants' ability to fully engage in an e-mentoring program. These challenges could impact the development of the mentoring relationship. When evaluating the various technology platform options for e-mentoring, programs should determine if they have the staff and financial resources to support the implementation of the technology and the program participants who will be using the technology. If the program is not able to support participants in troubleshooting these problems and challenges, they should look to other forms of technology to achieve the goals of the e-mentoring program.

How Technology Considerations Pay Off in the Long Run

There are many factors, concerns, and laws to consider in the choice of hardware and software technology for a new e-mentoring program. Although it seems daunting at first, these issues parallel the same decisions that in-person mentoring programs have to think through and figure out as well. Regardless of the mode of communication between mentors and mentees, all mentoring programs need safety- and research-based policies, procedures, tools, and resources to meet their goals and the needs of their participants. Smart, well-thought decisions at this stage of program development will make all the difference later on in terms of implementation fidelity, ease of use, and participant experience, and the fit between what the technology is capable of and the needs and wants of program participants.



MAJOR THEME 2

Recruiting and Matching the Right Participants

Selecting and building an appropriate communication platform for mentors and mentees is just the first step in providing a quality e-mentoring experience. Programs must also recruit the right individuals to participate in the program and ensure they are connected to appropriate mentors, getting relationships off to a good start. There are many recommendations in this guide that are focused on getting the right people into the program, making sure they can access and use the technology in the ways intended, and facilitating connections across participants. This section will discuss the many different examples and approaches we noted for these practices in e-mentoring in both the research literature reviewed and in conversations with our Working Group.

But there is another layer to this “participant” recruitment that is worth calling out specifically: The recruitment of host sites and implementation partners by the program itself. One of the interesting features of e-mentoring programs is that they can have an easier time taking their service to scale, often across wide geographic areas, compared to in-person programs. The online technology platforms of these programs can often be implemented just about anywhere that has reliable internet access. In other cases, the program uses technology, such as cell phones, provided by the end users themselves. And while e-mentoring programs often have a “home office” where the program leadership works and the platform is developed and maintained, that office location does not necessarily need to be tied to the location

of program services. In fact, some e-mentoring programs have no real physical “locations” at all, as each participant joins remotely using their own technology in a completely de-centralized experience (for example, the Camp Zora virtual world detailed by Cantrell and colleagues).¹⁵ This means that many e-mentoring programs can scale their services across regions easily, as they are often not as burdened by “brick and mortar” facility costs.

But in many of the models we encountered, there was some in-person interaction (particularly with youth) in the delivery of the program. In these cases, the “staffing” of the delivery program was often a combination of individuals working for the program itself and on-the-ground implementers working for the host organization or institution partnering with the program. We saw numerous examples in the literature of programs that were developed and managed remotely but had partnered with schools (or individual classrooms) or other youth-serving organizations across wide regions (for example, the Digital Heroes Campaign described by Rhodes and colleagues). In these instances, the host site does not need to invent a mentoring program so much as commit staffing and infrastructure, and often access to the youth themselves, to bring in an existing program.

This circumstance led to the development of two new Benchmarks in the Recruitment Standard in this supplement, **B.1.8** and **B.1.9**. The first of these notes that programs should limit their recruitment to program locations or organizations that can demonstrate the staff capacity, resources, and commitment to implementing the program with full fidelity; and the second addresses the content of messages used to recruit program partners. In many instances, program partners may want to know why e-mentoring is a preferred option for the goals of

the program or how well it fits with the needs of the young people they will bring to the program. These potential sites will also be curious as to how their own staff will play a role in facilitating the program and managing the relationships. There might be special concerns from site to site about issues of youth safety, data safety, and confidentiality that the program will need to address. Each partnership will raise its own questions, but programs are well advised to develop strong recruitment messages at the organizational, in addition to the individual mentor, level. For a great real-world example of how an e-mentoring program convinces teachers that

their program will be a good fit for their classroom, and all the ways the program will make their role easier, see the case study about the programs run by Cricket Media below.

These new Benchmarks encourage programs to think about what messages will convince partners that e-mentoring relationships will have value to the youth served and the partner organization, while also ensuring that potential partners are well aware of their obligations, roles, and responsibilities in hosting and supporting the program.

E-MENTORING IN ACTION:

E-MENTORING IN ACTION: EMPOWERING TEACHERS TO IMPLEMENT A QUALITY MENTORING EXPERIENCE

Cricket Media® (CM), cricketmedia.com, has found providing purposeful e-mentoring with younger students (third through fifth grades) expands their worldview and increases their academic skills, helping them be better positioned to realize their personal and academic potential. CM has two e-mentoring programs for this age group: Cricket Together (CT), which focuses on interdisciplinary literacy and TryEngineering Together (TET), which focuses on STEM (and was created in partnership with the Institute of Electrical and Electronics Engineers). Knowing personal relationships fuel learning relationships, Cricket Media programs provide each student with their own e-mentor who commits to a full academic year of correspondence, giving adequate time to develop a meaningful relationship through written correspondence. Since exchanging ideas in writing and learning digitally may be new skills for young students, in-person teachers are fundamental to successful implementation of these mentoring programs.

Teachers determine the cadence of letter exchanges, select the subjects of the units, approve all incoming and outgoing communication, and reinforce the programmatic curriculum with in-classroom discussions, editing, and related learning activities. All of these activities work together to support the building of the virtual learning friendships. Since teachers are so important to the programs' success, CM has devoted much time and attention to attracting, selecting, training, and supporting teachers.

Although e-mentors are a powerful incentive for teachers who value reading and writing and community engagement, CM understands teachers will not devote classroom time to e-mentoring unless the e-mentoring programs directly support their instructional priorities. To attract and empower teachers and make it a win-win, CM has worked with former CT and TET program teachers and national literacy



experts to refine its content and teaching strategies to align directly with third to fifth grade teachers' instructional priorities. Through informal feedback, CM learned teachers appreciate the opportunity to increase their students' digital literacy and social skills.

Teachers want students to become independent learners, and CM provides a host of resources specifically for students, including a library of dozens of articles, accessible 24/7, on the platform. Teachers are empowered with a customizable curriculum; an easy-to-use platform that enables safe, convenient, community engagement; individualized instruction; prescreened and prequalified e-mentors; rich professional development resources and opportunities; and ongoing program support, including real time notifications and an easy-to-use moderation dashboard.

Teachers learn about and apply to the programs through the CT and TET websites (www.crickettogether.com) and (www.tryengineeringtogether.com). The application process is designed to attract teachers in underserved communities who have the experience and skills to implement the CT and TET programs and view bringing virtual role models/e-mentors into their classrooms as important. Teachers fill out an online application identifying their teaching expertise and academic background, school and classroom description, and explain why they think the CT and TET programs would support their classroom instruction. Teachers are asked to confirm their students have sufficient ongoing access to digital devices and bandwidth to communicate regularly. If teachers meet the screening requirements, they are asked to respond to a more targeted set of questions on video via SparkHire explaining why they want to be a program teacher. CM looks for experienced teachers who are technology savvy and have worked with community members or express a strong desire to do so. CM reviews the full application and notifies teachers of their decision status.

Once teachers are selected, the CM Program Coordinator begins building personal relationships with the teachers to understand each individual teacher's work and learning style. The Program Coordinator ensures teachers understand their responsibilities, know how to get support, and help identify and put in place other elements fundamental to successful implementation. Once the mechanics are in place, teachers are trained by attending interactive 1:1 video conferences. The Program Coordinator often supplements those sessions to help teachers customize their implementation to the needs of their particular classroom. In addition to the "how" of the platform and the "why" of the platform resources, teachers are instructed on how to use the many resources available to them and their students on the platform.

A key aspect of the Program Coordinator's work with teachers and e-mentors is to remind them to communicate regularly. In addition to being available upon request, the Program Coordinator has online office hours, weekly check-ins, and coordinates automatic email notifications, platform notifications and instructions to teachers and e-mentors.



Recommendations for Participant Recruitment

Many of the recommendations around the recruitment of mentors, youth, and occasionally parents and guardians mirror the basic ideas presented in the core *Elements of Effective Practice for Mentoring*, but with a technology twist based on the communication platform used by the program.

In general, mentoring programs should realistically portray the e-mentoring experience to mentors and youth, which can help reduce feelings of unmet or unrealistic expectations around the experience down the road. There are a few additional nuances for recruiting to an e-mentoring program:

- Convincing participants that mentoring virtually is not only a fun and enjoyable experience (**B.1.1 #1; B.1.6 #10**), but that this type of mentoring is actually a preferred form of support that has many advantages over in-person mentoring, specifically for supporting the needs of the young people in the program (**B.1.1 #2; B.1.6 #11; B.1.2 #5**). Some participants may be skeptical that e-mentoring can be as rich and a rewarding experience as face-to-face interactions, while others may be intrigued by the flexibility of participation and the ability to craft thoughtful responses. Programs are encouraged to think about how they can convince all participants that this approach to mentoring is not only impactful, but also enjoyable and personally rewarding.
- Recruitment messages need to ensure participants that they will have access to the required technology and that any concerns they have about using the technology will be alleviated (**B.1.1 #3 and #4; B.1.6, #9**). Both prospective mentors and youth will ideally bring some experience and comfort level using the relevant technology to

the program (**B.1.3 #6 and #7**), which can greatly reduce concerns individuals may have about participating. But youth and parents in particular may need special reassurance that the program has strong safety policies and procedures (**B.1.6 #8**) that are equivalent, if not stronger, than the safety practices found in traditional in-person mentoring programs.

As internet-based communication technologies become increasingly ubiquitous in modern society, it may become easier to recruit participants to e-mentoring programs. The idea of forming a close, rewarding relationship with someone you might never meet in person is certainly less extraordinary than it was even just a decade ago, as platforms such as Facebook have acclimated several generations to the possibility of finding meaningful connections globally through online dialogue. The task for recruitment then becomes convincing participants this is a great fit for them. Common “selling points” noted in the literature include the ability to prepare and send thoughtful, detailed responses asynchronously using technology,^{17,18} the ability to overcome shyness and social anxiety in personal relationships,^{19,20} and the ability to disclose personal information (such as disability status) at one’s own pace and comfort level.²¹ While the research literature certainly noted some of the frustrations mentors and youth had communicating online only, there were also many examples where participants noted liking the asynchronous nature of the communication and felt it offered as much of a “shield” protecting their vulnerability as it did a “barrier” that prevented a close relationship.²²

Screening Participants

The screening practices recommended for e-mentoring programs build on these recruitment criteria and areas of emphasis by ensuring that

participants can access and effectively use the technology required by the program.

Some e-mentoring programs provide youth or mentors with the hardware and internet access they will need to participate — think here of a company that allows their employees to virtually mentor youth from the workplace or a school classroom that provides computers and access to the e-mentoring platform to students. In other cases, it is up to participants to ensure they can provide or access the relevant technology themselves. This may involve ensuring they have a sufficiently fast internet connection (especially in programs that involve streaming video or interactions in virtual worlds), specific hardware (such as a webcam), or specific software (e.g., Skype for videoconferencing). Some of these factors may be challenging for some participants to meet, and programs are encouraged to set criteria for the minimal technology and access needed to participate in the program (**B.2.1 #1a; B.2.8 #7**) and make these parameters very clear to participants during the recruitment and screening processes. Using the technology employed by the program to facilitate the application process (**B.2.2 #3; E.2.7 #13**) and screening steps such as the interview (**B.2.3 #4**) can help programs determine whether the applicant can simply log-in and participate at the level of proficiency needed by the program.

The other aspect of screening mentors beyond simple technology access is technology *comfort*. While it is true, as noted above, that generations are increasingly comfortable and competent using technology to communicate, it is also true that many individuals are not as good at it as they might think. Some individuals do not like to, or struggle to, share complicated thoughts in written form. Some can communicate via technology but prefer

a personal interaction that allows them to feel more connected and read nonverbal cues. Others may not be comfortable putting personal disclosures in writing or have trouble interpreting the written thoughts of others. In e-mentoring programs that use written communication, such as email or texting, simple literacy can be a barrier to participation. Thus, several recommendations here encourage mentoring programs to assess the comfort level and competency of mentors and youth in communicating using the technology employed by the program throughout the application and screening processes (**B.2.1 #1b and #1c; B.2.8 # 8 and #9; E.2.7 #12**).

Programs will need to determine if a potential participant's discomfort or communication capabilities can be improved with pre-match and ongoing training and coaching, or if their challenges would be disqualifying from the program. In most instances, training can teach participants how to be much more effective in their online communications, but there were studies we reviewed suggesting that some participants, older adult mentors in particular, are just not great at communicating virtually.²³ Red flags to look for include an overly formal and distant tone, the use of vague questions easily ignored by their match partner, awkward or developmentally inappropriate personal disclosures, and messages that convey viewing mentoring as a unidirectional, rather than a reciprocal, interaction.

Other screening recommendations to note include examining prospective mentors' public social media accounts to see how they communicate online and assess the likelihood of them sharing inappropriate exchanges with their mentee (**B.2.4 #5**). While one's social media presence is highly personal, and often not indicative of behavior in other in-person or virtual environments, these accounts do offer a

window into the lifestyles and online communication habits of prospective mentors, and as such may yield useful information for programs.

We have also recommended a special screening step with parents and guardians that is often overlooked: data use comfort. Even in school-based programs where parents or guardians have given permission for their child to generally participate in the program, e-mentoring providers may want to ask for special permission to collect and monitor data associated with their child's participation (**B.2.10 #10**). E-mentoring programs may often be

collecting or monitoring data about students that is beyond what is normal for the school or district, and extra permission may be required. For programs not set in schools, a parent or guardian should certainly be informed about and give consent for not only their child's participation, but the data collection and sharing inherent in the program. To see how one program conducts a comprehensive screening process, one that consistently uses the technology of the program throughout, see the snapshot about the screening practices of Sea Change Mentoring in the following E-Mentoring in Action snapshot.

E-MENTORING IN ACTION: USING PROGRAM TECHNOLOGY TO SCREEN MENTORS AND LEARN ABOUT PARTICIPANTS

Sea Change Mentoring keeps in mind that young people and adults in their program may be separated by oceans and continents and responsively operates as if pairs will likely not have the opportunity to meet in person. Knowing this, the program uses technology they expect pairs to communicate with from the very beginning of the intake process all the way through to match closure. Right from the beginning, all meetings are conducted using the video technology they expect mentors, mentees, and family members to use. This set expectation allows them to troubleshoot any technical issues early and creates consistency for the participants.

Sea Change uses technology resources to replicate the feel and experience pairs might have in an in-person program; they approach online engagement with participants as if each online realm is an in-person realm. For example, looking at a mentor's Facebook or Instagram page could be likened to bumping into the mentor at a social event. It gives us the opportunity to observe the choices they make to represent themselves, their additional interests, what other communities they may be a part of, as well as their ability to effectively communicate and healthily address conflicts online. Since meeting in person is likely not an option, a video interview is likened to an in-person interview. Program staff observe the environment from which they are calling, their attire, their social behavior, and how well they avoid other online distractions. Attention is paid to their comfort and ease with online technology. If the interview takes place in an office where the mentor is constantly interrupted by coworkers, program staff make a note to discuss other options for future call locations. When references (a friend, family member, or coworker) are interviewed, they are asked if they know the mentor online and/or in-person, how often they communicate with the mentor, and the last time they had a quality conversation. These questions help program staff



assess the significance of the relationship and if there are any concerns to be addressed. Getting a full sense of the mentor's "real life" and online presence has been significant in helping the program screen for quality mentors who are a good fit for the Sea Change Mentoring community.

Once the pair is matched, they are coached to think of ways where they use technology to support their relationship development. For example, one pair used a private Pinterest page to share images of what their respective communities look like. A mentor, who lived in Mexico, took photos of the science lab she worked in, the beach where she liked to spend time, the market where she bought her food. Her mentee, who lived in the Netherlands, took pictures of her bike route to school, her favorite park, and her family.

In another case, a pair experienced challenges with consistent conversations. The program explored other activities and interests where the mentee did not feel as shy. Gaming was discovered to be a place where the mentee communicated with ease. The mentor loved video games as well. After speaking with the parents about choosing an appropriate game, the pair played the game together — the mentor in Australia, the mentee in Europe, all the while they communicated as they played. The gaming activity helped to break the ice and ease communication when the pair was not gaming. The game provided an opportunity for the mentee to teach the mentor how to play the game better, which gave the mentee extra confidence to open up.

Screening around Participants' Commitment

The final recommendations around screening have to do with participants' formal commitment to the program and its rules of participation. The EEPM emphasizes that mentors and youth commit to meeting with the frequency, volume, and duration of participation required by the program (most often about once a week, for an hour or two per meeting, over the course of a school or calendar year). E-mentoring programs are well advised to get that same commitment from both mentors (**B.2.7 #6**) and youth and their parents/guardians (**2.12 #11**), although they will likely need to be more specific in their requirements.

If there was one strong theme in the research literature, it was that the frequency and quality of interactions made a major difference in terms of relationship quality and program satisfaction.

^{24,25,26,27,28,29} There was also a strong consensus that these relationships can wane a bit over time, either because one or more participants in the match has grown frustrated — with the technology, the interaction frequency and quality, or some combination of these factors — or because the natural momentum and enthusiasm at the start of the program has simply worn off. Thus, e-mentoring programs will want to be very specific about the expectations they have for participants in terms of frequency of communication. In some programs, that communication follows a set timeline and a curriculum-driven set of activities, making it easy to see when participants have missed sessions or not logged into the platform. But in many other programs, it is up to the mentor and mentee to initiate contact with one another, and in these instances, it can be very helpful to require minimal communication timing, such as at least once a week for the duration of the program. It is worth noting



that some e-mentoring programs do not have matches at all, meaning there is little expectation around how frequently one should be submitting or responding to messages. But even in these programs, frequency of engagement is still a key to benefitting from the program—it is hard to benefit from mentoring interactions if one is infrequently taking part in them.

It can also be helpful to set parameters around how quickly participants need to respond to messages from their mentee or mentor. While frequency of interactions is important, there were also several examples in the literature where participants (often mentors) were frustrated by a delay in response time from their match partner.^{30,31} E-mentoring programs may want to stipulate a set window of time that a message needs to be responded to, especially if mentoring pairs or groups are largely unsupervised. A long delay in response, even for benign reasons, can cause anxiety and feelings of mistrust for participants. If everyone is aware of the expectations around message response times, a lot of hard feelings can be avoided.

Making and Initiating Matches

As noted many times throughout this publication, e-mentoring programs come in all shapes and sizes, with a variety of formats and match structures. Some programs match mentors and youth in a traditional one-to-one dyad, while others employ group mentoring formats or self-selected affinity groups as a structure (for a good example of this, see the DO-IT program detailed in the work of Burgstahler³²) or offer no match structure at all.³³ But assuming that most programs will be connecting youth with a mentor in some formal way, there were several recommendations that stood out in the literature and in discussions with the Working Group.

The research on making matches in mentoring programs is rather mixed in terms of the criteria to consider. Some mentoring programs, such as those studied by Stoeger³⁴ and O’Neill,³⁵ purposefully connect youth in specific classes or with similar career interests to mentors from related disciplines or fields to provide project-specific support or encourage consideration of specific career paths. In these programs, the mentors theoretically bring very homogenous career skills and knowledge, and the mentees are all of similar ages with similar career interests and abilities. In these types of programs, the pools of mentors and students could be considered to be fairly uniform, meaning matching processes can be totally random or based on somewhat superficial factors such as hobbies or other interests outside of the career or project focus of the program.

But in other e-mentoring programs, there is as much a need to match carefully based on youth needs, mentor skills, and other factors as in face-to-face programs. In our review of the literature, we found programs that emphasized very specific matching criteria, such as pairing youth with disabilities with mentors who had the same or similar disabilities,³⁶ believed these mentors could share personal experiences and offer disability-specific empathy and problem-solving that other mentors might not. We also, however, found examples³⁷ of programs serving youth with very specific challenges using mentors who had not faced those challenges themselves, but who had special training in how to provide appropriate support.

Even common aspects of matchmaking, such as compatibility of gender, racial background, or lived experience, took on a slightly different spin in e-mentoring programs. One study in particular³⁸ noted the importance of “perceived similarity”

rather than actual real-life similarity based on demographic characteristics of the mentor and mentee. Because pairs were not meeting in person, many aspects of “similarity” were effectively muted, and it became less important how similar the individuals were in terms of gender, ethnicity, or personal background and more important that they had similar and compatible online communication styles and values. Matches with high “perceived” similarity reported higher levels of mentor support, as well as higher match satisfaction.³⁹

So what is an e-mentoring program to do when so many factors used in making matches in traditional programs may not have as much value in e-mentoring contexts? A few things did rise to the level of a formal recommendation. Programs should use the information and communication examples gathered during the application, screening, and training processes to note how participants

communicate electronically (e.g., do they display a sense of humor, use emojis or GIFs to add meaning and flair to their messages, do they seem comfortable sharing values and discussing personal issues, etc.). This can give programs a sense of each individual’s online communication style, allowing them to find mentors and youth who are “digitally compatible” and likely to be high in “perceived” similarity once in an e-mentoring relationship (**B.4.1 #1**). While not common in the literature, some programs also gave participants a choice of with whom they were matched after a trial period where they could get to know one another or view user profiles (for a great example of a program that puts mentees in control of their match, see the following E-Mentoring in Action snapshot about the iCouldBe program). Generally, programs are encouraged to match based on virtual personas as much as real-life similarities.

E-MENTORING IN ACTION: **EMPOWERING YOUTH TO CHOOSE THEIR MENTORS IN iCouldBe**

iCouldBe’s e-mentoring program provides students in under-resourced high schools with skills to build relationships that help them navigate high school and reach future goals. The program is embedded in classrooms led by trained teachers and implemented one class session per week during the school year. Mentees and mentors engage in weekly online activities that strengthen and expand real-life connections to help mentees develop self-knowledge, map academic and career paths, and identify tactical steps to achieve their goals. iCouldBe believes broad networks of support will open up new opportunities for academic and career success and increase income equality for mentees.

When mentees and mentors register on the iCouldBe platform, they create customized avatars and profiles. Mentees search for and select mentors based on their career interests. Mentees can review the profiles of mentors in their preferred career field and explore career and educational backgrounds, interests, hobbies, and personal biographies of all available mentors. Mentees invite the mentor of their choice to work with them throughout the program year. This approach continues to prove successful in garnering early program buy-in from mentees and ensuring mentees feel empowered by their selection and their leadership role in the mentoring relationship.



Getting Things Started on the Right Foot

There are a few recommended practices related to match initiation worth noting here:

- Programs need to determine who is responsible for making the initial contact between mentors and mentees (**B.4.3 #3**), assuming the program has a formal matching structure. At least one study⁴⁰ noted that the program put considerable effort into getting mentors to make initial contact with the mentee, and the quality of the opening message and response often set the tone for the remainder of the pair's interactions. It was crucial mentors set the stage with some personal information sharing, an informal tone, and open-ended yet direct questions (e.g., "What is your favorite part of school?" rather than "So, tell me about school."). Other programs, such as several in our Working Group, do a facilitated introduction where a program staff member introduces the pair and gets them conversing, even if just via email or text introductions. Critically, programs should have a formal process for making the initial contact and follow it with fidelity.
- If staff members are facilitating the initial communication, that is also an excellent time to address any formal commitments to the match as recommended under **B.2.7 #6** and **2.12 #11**. These match commitment agreements are often signed at the initial meeting in face-to-face mentoring programs, but because all of this may be happening virtually in an e-mentoring context, the program may have a digital version of these agreements that participants "e-sign" online or share via the technology platform (**B.4.4 #4**). This is also a good time to check with parents and guardians or partner site staff whether there are rules or barriers to the youth accessing the technology of the program, such as family rules

limiting "screen time" or times of the day at school where students do not have computer access (**E.4.6 #5**).

- It is also recommended programs provide mentors and youth with conversation starters, icebreakers, or other activities that can get the pair sharing information with each other in creative ways (building that "perceived" similarity) and learning each other's communication styles (hopefully building some "electronic chemistry" noted in the Introduction). The degree of prescribed activity here will be determined by how much information about mentors and mentees the program shares with participants before they "meet" for the first time. Some programs simply make the introduction and allow the mentor and youth to communicate based on the expectations set during training. Other programs are much more open about sharing important personal details, such as disability status or career interests, with mentors so that they are prepared to offer appropriate help right away and are not caught off guard by something their mentee or mentor reveals. It is up to each program to determine what information to share before matches meet. But in most programs, there is some initial set of talking points or activities matches should engage in to get the relationship off to a good start (**B.4.2 #2**). For one example of how programs can structure early interactions to set the stage for long-term success, see the snapshot about how iCouldBe handles those early conversations below.

Additional information about what makes for effective e-mentoring communication, including in the critical early stages of the match, are discussed in the next section addressing the need for training and skill building for program participants.



E-MENTORING IN ACTION:

GOOD RELATIONSHIP COMMUNICATION EARLY AT iCouldBe

iCouldBe is intentional about training mentors to see each mentee as an individual with unique life experiences, abilities, goals, strengths, and challenges, and encourages mentors to approach them with that mindset.

The iCouldBe curriculum starts with an initial “Meet Each Other” quest with activities that facilitate relationship development between mentors and mentees. Once mentees select their mentors, they start the initial conversation by sharing their interests, role models, milestones, past experience with mentoring, and desired program outcomes. The primary focus is on relationship-building so mentors can get to know their mentees as a person before they work on setting and achieving long-term goals. This is part of the trust-building process to allow the pair to feel comfortable with one another.

iCouldBe has built-in features to ensure mentors and mentees maintain frequent and consistent communication from the initial match through the end of the program year. Since iCouldBe leverages its proprietary platform to facilitate mentee and mentor communication, program staff take an omnipresent approach to managing — always present without being intrusive. Program managers can view and engage with mentoring pairs as they communicate but do not intervene unless necessary. This approach allows mentees and mentors the freedom to develop their relationship at a comfortable and mentee-driven pace.

As the relationship develops and the mentors learn more about their mentees, the mentees are more open to guidance and feedback. This affords mentors the opportunity to share their own professional and life experiences to support their mentees.



MAJOR THEME 3

Preparing Participants for Good Online Interactions

While it is true that any participant in any program will need training on how to maximize the mentoring experience, meet program expectations, and follow program rules, e-mentoring programs present some different needs when it comes to training participants. As one can imagine, the use of technology to facilitate mentor-mentee interactions changes things considerably. Participants are left without visual cues to guide the meaning and interpretation of their communication with one another. Technology issues can disrupt the flow of communication and frustrate even matches that are going quite well. And the remote, online nature of the relationships raises some different challenges related to youth safety, confidentiality, and approved activities. So while mentors and youth in these programs still need training in many of the basic relationship skills that in-person program participants receive, they also have some special needs in both training content and delivery that we will address here.

Content of Training for Participants

As with any youth mentoring program, the training topics for mentors, youth, and in some cases parents or guardians will largely be driven by the goals and activities of the program. We found examples in our literature search of programs that provided participants with frequent, even weekly, activities and a host of curriculum-driven or facilitator-provided discussion topics and learning opportunities.^{41,42,43,44} But we also found examples of programs where mentors and youth were largely

left to manage things on their own after some type of formal introduction. Obviously, mentors in these two scenarios will need different training, with one group needing instruction on key aspects of moving through the activities with the youth and the other group needing more coaching about how to build a strong relationship and offer support in the absence of set activities and talking points.

There are some training methods and topics that both the literature and our Working Group practitioners noted would be particularly helpful for any e-mentoring program.

- *Training participants on using the technology platform of the program* – While this may be most important for e-mentoring efforts that are providing their own homegrown communication platform that is unfamiliar to participants, all e-mentoring programs should consider training participants on appropriate use of the technology that mentors and youth will use to communicate, regardless of the popularity of the technology among the general public (**B.3.2 #2; E.3.4 #15; E.3.6 #21**). This may be true even for programs using participant’s own hardware (e.g., cell phones) or software (e.g., Skype) to communicate. Rarely will all participants be experts in the platforms used by the program — there will always be new features, bugs, and tips for getting the most out of any combination of hardware and software. Users of proprietary platforms should be trained on how to log in, how to access different features on the platform, and how to manage their accounts. Training for all participants on the technical support offered by the program or partner site should also be offered, including hours and modes of tech support availability (**B.3.2 #6; E.3.4 #17; E.3.6 #23**).



- *Training participants on how to be an effective online communicator* – Mentors and youth will need plenty of guidance on how to communicate effectively. Research suggests mentors may need guidance around how to be youth- and relationship-oriented (rather than task-oriented); how to use emojis, GIFs, and memes to liven up mundane text communications; how to use strategic disclosures to build rapport and trust; how to convey complex emotions like empathy online (or at least not face-to-face); and how to ask clear questions that youth would feel comfortable answering.^{45,46,47} Mentors may also need training in how the developmental stage of their mentee influences their online communication (**E.3.2 #13**) and how to understand internet “slang” and other less formal communication styles that mentees might employ (e.g., the meaning of acronyms such as “LOL”). All of these topics will not only help the mentor understand their mentee, but they will also be helpful in allowing them to improve their own online “voice,” at least when it comes to relating to a young person (**B.3.2 #5**). In some programs, mentors may be tasked with helping the youth to network with others to build a web of support and may need training around how to help the mentee make other virtual connections that can support their goals (**B.3.2 #4**). Mentors will also need to know how to handle certain situations, such as verbal aggression or other “acting out” behaviors by the mentee, the sharing of intense emotions or major disclosures related to harmful experiences, and how to respond to ethical dilemmas or crisis situations.⁴⁸ (**B.3.3 #10**)

Youth, on the other hand, may need to work on skills such as increasing the length of their responses and not giving one-word answers, feeling comfortable sharing personal information or feelings, and how to maximize the advice and

instrumental support of a mentor (**E.3.4 #18**). Programs may also wish to provide youth with training on internet safety in general, especially if the program model encourages them to connect with other adults online (**E.3.4 new topic i**).

As noted in the previous section, both participants will need training on icebreakers and initial conversation starters so that the match can get off to a strong start, which seems to be especially critical in e-mentoring relationships (**B.3.2 #7 and #8; E.3.4 #19 and #20**). While there is always room to improve communication skills, programs may also want to provide ongoing training that can further build mentor and youth communication abilities, particularly if issues or misunderstandings arise (**E.3.2 #14**).

- *Expectations around communication frequency and commitment* – Given the importance of communication frequency in the success of e-mentoring relationships, it is likely impossible for programs to stress this enough in training, particularly the training provided to youth (**E.3.4 #16**). There were plenty of examples in the literature of mentors expressing frustration with the timing, frequency, and minimal content of mentee responses (e.g., the Digital Heroes campaign described by Rhodes). But mentors will also need these reminders, particularly in responding to messages that may have critical disclosures or sensitive personal information, where a delayed response could feel like a rejection to a vulnerable young person (**B.3.2 #3**).
- *Program rules related to safety, confidentiality, and approved activities* – Another overarching theme found in the literature was that strong e-mentoring relationships often evolve to a point of closeness where the mentor and mentee



desire some form of in-person communication. This concern is lessened in programs where mentors and youth are separated by great distances, but it is not uncommon for mentors and youth to feel dissatisfied with their electronic-only communication after a while. As noted in the introduction, some programs, such as iMentor, purposefully blend online and in-person interactions. Others simply allow for face-to-face meetings if parents and guardians approve. Others strictly forbid in-person interactions and actively scan shared messages to see if anyone is attempting “real world” contact. Thus, a key aspect of training is reiterating the rules around approved contact and whether any contact is allowed outside of the program platform (**B.3.3. #9**, which covers both mentor and youth training under **E.3.5**).

Programs will also want to reiterate any rules around whether mentors and youth can connect on social media that is outside of the platform provided by the program (**B.3.3 #12**).

Lastly, if mentors and youth will be accessing the platform of the program and communicating from hardware that is in public spaces (e.g., the school computer lab) or private spaces where the equipment is shared (e.g., the youth’s home), programs may want to reiterate the importance of logging off after each session, protecting passwords, and other tips that can keep the pair’s interactions confidential and keeps nonparticipants out of the platform (**B.3.3 #11**).

While it was rare to see parents deeply involved in e-mentoring programs or relationships in the literature, especially in comparison to face-to-face programs, any program that will be relying on parents to facilitate the youth’s access to the

technology should also offer parents some training on many of the topics noted above. This includes using the technology platform and the expectations around frequency and volume of communication (**E.3.6 #21-23**), who to contact with ethical or safety concerns (**E.3.6 #24**), and the risk management policies detailed under **B.3.3** and **E.3.5**, such as extra-program contact and social media policies.

The Delivery of Participant Training

The somewhat obvious challenge of training in an e-mentoring program is how to deliver it. Unlike an in-person program where mentors or youth can gather together in a physical location and everyone is ensured the same training experience, e-mentoring programs can be widely dispersed over large areas where participants simply cannot get together (or at least not easily). This situation makes compliance with some of the regular practices in the EEPM a challenge, necessitating a few recommendations here we thought would clarify quality training in e-mentoring contexts.

It is worth noting that most of the program examples we encountered in the research literature put considerable effort into training mentors and youth. In fact, in many cases, the programs seemed to offer access to more training content and information than would be expected in a typical in-person program. These programs were much more likely to have online, self-paced tutorial-type training content, online mentor and mentee handbooks and activity guides, and more frequent ongoing training provision than one might expect to find in a face-to-face program. To their credit, e-mentoring programs are taking advantage of their technology tools to ensure that mentors and youth receive a robust pre-match and ongoing training experience that can deliver the content noted above right when it is needed. We noted many examples in both the

literature and in our Working Group of programs offering Just-in-Time training when issues arose or when a critical activity needed reinforcement, as well as numerous examples of supplementary materials like mentor newsletters, special chat-based peer-learning opportunities for mentors, and real-time staff availability using the platform for handling delicate or crisis situations. Just because these programs might never gather trainers and participants in the same room to learn, in many ways they can provide a stronger overall training experience.

The recommendation for **Benchmark B.3.1 #1** addresses the delivery and duration of training for mentors. Most programs focus on the “two hours” of pre-match training required by this original benchmark; however, we found considerable variety in how, and for how long, mentors were trained in e-mentoring programs. That said, given the amount of content that most e-mentoring programs need to cover in training (use of the technology, communication styles, program rules, schedules, etc.) that two hour minimum should still be adhered to.

What Recommendation 1 really stresses, then, are some key aspects of training in e-mentoring programs:

- We suggest delivering the training via the same communication platform with which mentors and youth will engage (when possible). Obviously, not every program’s technology platform will allow for this kind of training function; but if possible, doing training in the same system will help users get familiar with the interface and might identify mentors or youth who are struggling to use the technology.
- When possible, staff should still be directly

interacting with participants during these trainings. Remember, pre-match training is an excellent time to keep looking for red flags that may disqualify someone from being a mentor. There is a temptation to make all training self-directed in these programs, especially if there is a robust technology platform in place that can offer online learning with a heavy multimedia component. But we encourage programs to stick with facilitator-led instruction as much as possible.

- While real-time, facilitator-led training may be the ideal, we also recognize that many e-mentoring programs offer at least part of their training in self-paced tutorials or online learning modules that participants access on their own and complete prior to matching. When this is the case, we encourage programs to design the training so that they have some ability to monitor not only completion, but the users’ engagement with the training content. When online training is well-designed, software can be programmed to require the learner to spend a certain minimum amount of time on each page or programmed so that mentors can’t skip sections. In addition, the back-end database can often be viewed by a mentoring program administrator to see how much time a prospective mentor spent on each page or spent on the whole course. See the discussion of new **Benchmark 3.5 E-MENTORING** below for additional considerations on how programs can maximize the fidelity to online training.
- Programs should think about what training topics should be delivered pre-match and which topics might be best covered after matches have communicated a few times and have a better sense of how the relationship is progressing. Some programs, especially those using written communication, use the first message mentors

or youth share to teach critical concepts during pre-interaction training. Using drafts of that first message, they emphasize communication skills, such as using a less formal tone, asking good questions, or strategically sharing personal information. This teaches participants what a good message looks like and gets the relationship off to a strong start once they hit “send.” Other programs may wait until the pair has been sharing messages for a while and use analysis of the content of those early messages to reinforce certain teaching points and improve the quality of messages over time. Programs may also wait until the matches have got past the “getting-to-know-you” stage to offer training on how to take the conversation to a deeper level. There is no right answer as to what content will be good for pre-versus post-match training, but keeping track of the issues that come up as matches communicate over time will eventually reveal the sticking points that may need to be addressed with ongoing training.

While we still encourage the two-hour pre-match training duration for e-mentoring programs, it is worth noting that our recommendation for programs serving youth with elevated risk or that involve complicated adult-youth projects may want to think about providing extra training (**E.3.1**). In the original EEPM, we recommend six or more hours for these programs. While that may not be feasible in an e-mentoring program, we do think mentors who are working with vulnerable youth need additional training beyond what other programs might offer. The potential for harm is perhaps higher here, as these youth are relying on messages from a remote person. As noted, many times in this publication, remote and text-based communication has the potential to be fraught with misunderstandings, unclear intentions, and other miscommunications.

So if your program is working with vulnerable youth, consider what might be a robust amount of training that will give mentors the skills they need to keep those young people safe.

In addition to the training delivery recommendations under **B.3.1**, we also developed one new Benchmark to address a training recommendation we did not see another spot for in the EEPM. New **Benchmark B.3.5 E-MENTORING** notes that programs should use learning checks, quizzes, remote role plays and scenarios, and other training strategies to ensure that trainees are absorbing the content and learning the important lessons the training is trying to impart. An expert trainer knows to build in learning checks and practice activities that apply knowledge when doing in-person training, and it can be easy to check and see if those being trained “get it.” But e-mentoring programs may not get that feedback easily from remote trainees unless they ask for it and build in training activities and learning checks that ensure the training content is understood. If the e-mentoring program does use a self-paced, online mentor training, then mentors still need some “face time” with staff. An online training strategy doesn’t absolve the program of the responsibility of providing time to interact with the mentor, even if it is just to allow the mentor to ask questions of staff.



MAJOR THEME 4

Ensuring Safe and Effective Participation Over Time

The fourth major theme of the supplemental practices for e-mentoring programs is ensuring participants have a safe and effective experience in the program over time. This theme encompasses all of the monitoring and support recommendations as well as training on ethical and safety issues (**B.3.2 #4; E.3.6 #23**) and topics related to risk management policies (**B.3.3 #8-11; E.3.7**).

Promoting Safe E-Mentoring Relationships

Protecting child safety is a top priority of e-mentoring programs, and the format of e-mentoring programs presents unique challenges and opportunities to promoting safe mentoring relationships. The *Elements of Effective Practice for Mentoring*, 4th edition, considers practices that promote and protect both the physical as well as the psychological or emotional safety of mentoring program participants. As described above, there are specific recommended screening practices associated with protecting the physical safety of program participants (see Theme 2). In addition to these practices, the orientation and training for all individuals involved in the mentoring relationship should address the topics relevant to the program's population and model that promote a safe e-mentoring relationship (**B.3.2, B.3.3, E.3.5 and E.3.7**). If there any consequences of violating these program policies, such as dismissal from the program, those should also be communicated to and acknowledged by program participants prior to participating in the program. Compliance with these policies should also be actively monitored

throughout participation in the program and discussed as situations arise.

Some e-mentoring programs include an in-person component as part of their approved or required match activities, whereas others strictly prohibit program participants from meeting in person. There has been some suggestion in the literature that supplementing the electronic communication with face-to-face contact can be beneficial for e-mentoring relationships to help foster a closer relationship;⁵⁰ however, many factors inform the decision regarding whether program participants are allowed to meet in person. Two primary factors are the goals and objectives of the program and logistical factors such as geographic proximity or transportation considerations of program participants. For example, e-mentoring programs that emphasize project work to accomplish the desired goals of the program and place less emphasis on a close relationship between the mentor and mentee may determine that in-person contact is not necessary. Programs that pair mentors and mentees from geographically distant locations, such as programs matching youth with disabilities or rare diseases, are less likely to require or encourage in-person contact due to the significant logistical challenges. If the program does not allow in-person contact, it should have policies that explicitly state what is and is not allowed within the context of the program, even if it may seem obvious (**B.3.3 #9**). For example, if in-person contact is not allowed, programs should still have a statement regarding whether overnight visits or out of town travel with program participants are permitted.

In addition to establishing a policy and training about in-person contact among program participants, programs should have a policy regarding whether participants can communicate

at all outside of the approved communication platform used by the program. This may include social media interaction or phone calls, among many other potential forms of communication (**B.3.3 #12**). These types of communication may feel more comfortable to program participants if they are already familiar with communicating electronically and may serve to strengthen their relationship, as there is some evidence that e-mentoring program participants prefer multiple methods of connecting electronically to enhance their relationship.⁵¹ However, there may be important safety and programmatic considerations when determining if program participants can share communication or social media outside of the designated communication platform. Program participants may express frustration with the program rules regarding contact, and training should directly address any potential frustrations as well as the reasons why mentors and mentees must communicate using the approved methods. For example, mentors in one e-mentoring program for at-risk youth described frustration with using a secure email communication platform to communicate with their mentee, but they understood the necessity of the platform.⁵² When program participants understand the rationale for specific rules and policies within the program, they may be more compliant with the policies.

The forms of communication utilized by e-mentoring programs can present some unique ethical dilemmas that must also be considered by programs (**B.3.3 #10**). For example, mentors should receive training regarding the specific procedures for how to respond if their mentee discloses any information suggesting the mentee is intending to harm themselves or others. This may be particularly concerning if there is a significant delay between when the mentee writes or sends this disclosure to the mentor and when the mentor receives the

message.⁵³ Mentees may be more likely to disclose this information to a mentor in an e-mentoring program given the more impersonal nature of this type of communication and the emphasis on self-disclosure to promote closeness in the mentoring relationship. The lack of nonverbal cues or tone of voice can also make it difficult for mentors to know if the mentee is saying something in jest or if it is a serious threat. Furthermore, if the mentor and mentee have not established an emotionally close relationship, and the mentee discloses highly sensitive information, it may be more difficult for the mentor to deal with these sensitive issues. The policy (and accompanying procedures) should also clarify for program participants how the program will respond to these disclosures.

Another unique safety topic for e-mentoring program participants includes how to protect the confidentiality and anonymity of communications (**B.3.3 #11**). To promote trust, self-disclosure, and closeness in e-mentoring relationships, program participants need to feel secure and that their conversations are not shared with individuals outside of the program, except under specific circumstances such as a threat of harm to self or others. Thus, program participants should generally not share excerpts from conversations between program participants with friends, family, or colleagues,⁵⁴ although for certain programs serving young children, providing parents or guardians with access to the platform may ease their fears about online mentoring and might even deepen their helpful engagement with the program. In general, computers, websites, cell phones, and software programs that are utilized for participation in the e-mentoring program should have secure passwords that are required for access, and online platforms may include encryption technology for additional security.

As noted throughout this publication, one unique advantage of e-mentoring programs that utilize a closed platform for allowing mentors and mentees to communicate with one another is the ability to closely monitor the communications and interactions between program participants (**B.5.3 #3**). Many of these platforms automatically scan for forbidden content such as inappropriate words, images, or the exchange of phone numbers or email addresses and alert program staff if they identify this content in participant exchanges. Program staff may also have the ability to review communications between program participants and may do so periodically to check for any communications violating the program's policies and procedures. These practices can provide additional insight to program staff and provide an additional level of security for promoting safe e-mentoring relationships. However, this functionality does not take the place of rigorous screening and training for mentors and mentees, and mentees should receive additional training on internet safety rules (**E.3.4 topic i**) to help them be aware of any behavior that could be inappropriate or crossing a boundary and how to protect themselves when communicating online.

Promoting Effective E-Mentoring Relationships

Effective e-mentoring relationships are formed through high-quality interactions and conversations between mentors and mentees. Mentoring programs must monitor and assess the quality of these interactions to support the development of effective relationships (**B.5.4**). Monitoring of e-mentoring relationships may consist of reviewing the communications between participants on the program's platform but could also be accomplished through conversations with program participants or

a combination of both approaches. Regardless of how a program conducts monitoring, program staff should consider a common set of safety and quality characteristics of e-mentoring relationships and develop protocols for determining if relationships demonstrate these characteristics (**B.5.8 #3**).

The e-mentoring program should feel like a safe space for program participants to have open and honest conversations to build their relationship,^{55,56} and the research has identified several factors that can contribute to high-quality and more effective mentoring relationships. For example, communication between mentors and mentees should be frequent, primarily youth- or mentee-focused, and two-way such that both mentor and mentee are contributing to the relationship.⁵⁷ In addition, self-disclosure is a critical component of the development of any type of relationship and is particularly useful for the development of a close e-mentoring relationship.⁵⁸ However, for e-mentoring relationships that are primarily text-based (email, SMS, chat), there is a greater likelihood for misinterpretation or miscommunication such as a failure to identify a sarcastic comment from a serious comment,⁵⁹ especially when mentors and mentees do not know each other well. Program staff should monitor and assess whether there have been any misinterpretations or miscommunications in the relationship, how and whether they were resolved, and whether the program should provide any ongoing support to the relationship to address these challenges (**B.5.2 #1 & B.5.3 #2**).

Another frequently discussed factor influencing the quality of e-mentoring relationships is social presence, or the feeling of being in-person even when communicating remotely.^{60,61} When communicating using text-only methods, mentors and mentees can foster social presence through

the use of emoticons and other techniques like typing short encouraging comments (e.g., hmm, mmm, okay) that indicate to their partner they are paying attention. They can also encourage their partner to say more by describing their emotional reaction (e.g., LOL or laughing out loud) and/or nonverbal reactions to news and information written by their partner (e.g., “my heart started racing just reading about your experience”).^{62,63} This feeling of social presence may help to foster trust and self-disclosure within the relationship and may contribute to higher quality and more effective e-mentoring relationships.⁶⁴ Ongoing monitoring and support for e-mentoring should assess whether program participants are cultivating social presence and provide guidance for incorporating it into their relationship.

One of the most common findings from the research on e-mentoring relationships is the importance of the frequency of interactions between mentoring partners.^{65,66,67} Unfortunately, it is very common for mentoring program participants to not respond to communications from their partner in a timely manner.⁶⁸ Mentees may experience significant disappointment or even distress and anxiety if they do not receive a prompt response from their mentor^{69,70} or even worse, if their mentor stops responding to their communications without warning. However, when there are high levels of interaction between mentors and mentees, mentees are more likely to report feeling the relationship was beneficial and successful.^{71,72} With these implications in mind, e-mentoring program policies and training must minimize the risk for harm and promote safe, secure mentoring relationships by having clear and consistent policies regarding the frequency of communication and response time expectations.

In addition to questions about the frequency of

communications, e-mentoring programs must consistently check in with program participants to determine if they have experienced any technical issues with contacting their partners in the program. Technical problems can be a major barrier to the development of effective relationships (**B.5.2 #1 & B.5.3 #2**), and these problems should be addressed as quickly as possible to prevent these challenges from having an impact on the frequency of communications among program participants. Whenever possible, e-mentoring programs should have on-demand support available to help with any technical issues (**B.5.9 #4, B.5.10 #5**). On-demand support can also be valuable for supporting mentoring relationships in the moment when mentors and mentees need help with a task or support regarding how to respond to their partner.

Similarly, just-in-time or on-demand training that is immediately accessible to program participants when the need arises can address both technology issues as well as challenges related to the e-mentoring relationship. On-demand training could include topics specific to the goals and activities of the mentoring program or broader topics, such as how to communicate effectively in an e-mentoring relationship. On-demand support and just-in-time training can help to reduce any feelings of disconnection from the program that may be more common among participants in e-mentoring programs due to the lack of in-person contact or the asynchronous nature of the communication.

The content of mentor-mentee communications is another area where mentoring programs will want to clarify expectations and address challenges. While there are no universal guidelines regarding what activities mentors and mentees should engage in together within the context of an e-mentoring relationship, it is generally suggested that they



should complete task-based activities together that are provided by the program staff and in alignment with the program's goals and objectives⁷³ (**B.5.13**). Many of the existing mentoring programs described in the research and evaluated thus far are more instrumental than developmental in nature, such as an e-mentoring program for girls interested in STEM⁷⁴ and a mentoring program to support the development of older high school mentees' career aspirations.⁷⁵ Exactly how much structure and guidance the mentoring program should provide to support the interactions between program participants will depend on the goals and model of the program. At a minimum, programs should have conversation prompts and activity suggestions available for program participants to refer to as needed throughout their relationship when they need ideas for what to do or talk about. In addition, mentoring program staff can customize these resources for the various stages of the mentoring relationship and tailor them to the unique interests, goals, and challenges of a match.⁷⁶

Promoting safe and high-quality e-mentoring relationships requires some additional considerations and modifications of the practices outlined for traditional face-to-face mentoring relationships. However, there are some unique advantages of e-mentoring that programs leverage to create effective e-mentoring relationships.

Closure of E-Mentoring Relationships

Closure of e-mentoring programs should be planned and managed to prevent program participants from feeling abandoned by their partner. There is little guidance from the research literature on specific practices for the closure of e-mentoring relationships; thus, the recommended practices for e-mentoring programs are informed by the Working Group and provide an extension of the

practices for in-person mentoring relationships.⁷⁷ When mentoring relationships end abruptly or with uncertainty, this can leave participants feeling as if they did something wrong and can undermine the impact of the program.^{78,79} As the e-mentoring relationship comes to an end, which may be due to a planned ending of the program or because one member of the relationship is no longer able to participate, staff should facilitate a series of final communications between program participants (**B.6.1 #2**). These communications should provide an opportunity for members to reflect on the relationship and thank their partner, as appropriate. The final e-mentoring activities may also include an online or virtual celebration event (**E.5.2 #6**). For example, the program may coordinate program participants creating a souvenir of their relationship like a web album or presentation,⁸⁰ or the program could send program participants a small gift or virtual card that they open simultaneously. Part of the business of ending e-mentoring relationships should also include a discussion with all program participants about the policies for any future interactions, both in-person and online, such as through personal social media accounts (**B.6.7 #4**). These policies should allow each participant in the relationship to express their personal preferences regarding future contact since some individuals may not want to have ongoing contact after their involvement in the program has formally ended.

For e-mentoring programs that collaborate with partner organizations for the implementation of the program, such as schools or business, it is important to coordinate the closure of e-mentoring relationships with the timeline and deadlines of these organizations to increase the likelihood of participation (**B.6.1 #1**). For example, end-of-year testing or activities within schools is often associated with changes in the regular classroom

schedule, which can vary by school. Programs implemented within a school or classroom must be aware of these changes and how they could impact closure activities.

Finally, it is recommended that e-mentoring programs conduct an exit interview or survey with all program participants when their participation in the e-mentoring program is coming to an end. The exit interview should solicit feedback about topics such as participants' perceptions of the support provided by program staff, challenges encountered during the online interactions, the benefits they

perceived as a result of e-mentoring, and ideas for ways to improve the program. E-mentoring programs may prefer to conduct the exit interview through an online survey if program participants are more familiar with completing program activities online and depending on the size of the program.

For a great example of how one e-mentoring program encourages reflection at the end of the match through structured activities, see the snapshot about how closure is handled in the programs offered by Cricket Media.

E-MENTORING IN ACTION:

PERSONAL REFLECTION AS A KEY COMPONENT OF CLOSURE IN THE CRICKET MEDIA PROGRAMS

Cricket Media® (CM), www.cricketmedia.com, has two e-mentoring programs: Cricket Together (CT), which focuses on interdisciplinary literacy, and TryEngineering Together (TET), which focuses on STEM (developed in partnership with the Institute of Electrical and Electronics Engineers). These programs help students in third through fifth grades in underserved communities achieve their academic and personal potential. Both programs, delivered through a safe, digital platform, encourage students and e-mentors to develop online learning friendships through exchanging emails about collaboratively read articles and various life updates while under the continuing guidance of classroom teachers.

CM has found providing structured learning experiences, created with purpose and clear expectations, is an essential component for thriving e-mentoring relationships. Knowing personal relationships fuel learning relationships, Cricket Media programs provide each student with their own e-mentor who commits to a full academic year of correspondence, giving adequate time to develop a meaningful relationship through written correspondence. Cricket Media programs emphasize the establishing, building, and closing aspects of participant relationships. The programs begin and end with the academic year and are divided into three parts: Introduction/Getting to Know You, Curriculum Units, and Reflection/Saying Goodbye. Training (and ongoing messaging) for teachers and e-mentors stress the importance of gracefully establishing and ending the e-mentor/student relationships.

Since the end of the school year is the stated endpoint of the programs, expectations for a continuing relationship beyond the school year are kept in check. The Reflection/Saying Goodbye unit, which begins one month before the end of the school year, completes the program experience with a “final letter”



exchange. E-mentors are reminded by their teachers, through the platform and email notifications, as to when their initial letters are due and how important they are to students' experience. Teachers use the Reflection/Saying Goodbye unit as an opportunity for class reflection and analysis of the learning experience. Email notifications and additional resources on the platform share guidance about how to prepare for and write a compelling "goodbye" letter. E-mentors have told CM one of the resources that has been most useful for writing caring, reflective letters includes a retrospective review method, which involves reviewing the previous letter exchanges and rereading the articles. Writing prompts, graphic organizers, and suggested "encouraging" statements are also helpful resources of letter writing support. E-mentors encourage their students to maintain an openness to possibilities for learning while sharing ways they have learned from the students.

E-mentors' letters model for students how to say goodbye and express appreciation for the shared learning relationship. E-mentors are asked to share specific moments and exchanges that captivated them throughout the program to support their comments and model what it means to share evidence of opinions and assertions.

CM's e-mentoring coordinator plays an important role in bringing the programs to a successful close by helping keep teachers and e-mentors on schedule with timely reminders and check-ins. CM encourages ongoing additional reflection by continually requesting feedback from its e-mentors, students, and teachers via surveys, emails, and on the platform. The e-mentors and teachers complete three surveys during the course of the year: the pre-program survey, a mid-year survey and a post-program analysis. This formal process for reflection helps CM continue to improve the programs to better serve students, e-mentors, and teachers.



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