This book is intended to have two purposes. One purpose is to encourage and support and the other purpose is to extend an invitation. Encouragement and support is provided for those professionals in the P-12 environment who are engaged in the valuable enterprise of telementoring, the practice of online mentoring. A warm invitation is extended to those professionals who have not yet ventured into telementoring to consider, explore, and begin to make use of this beneficial practice. I encourage and invite these professionals who include classroom educators, technology specialists, administrators, teacher educators, and all who seek to promote the use of telementoring to read further and reflect upon the limitless possibilities and outstanding opportunities that telementoring provides.

It is important to understand the richness of the scope of telementoring partnerships and processes in order to facilitate the continuing growth of those who participate in these exciting virtual mentoring relationships. The latest research and best practices in the field of telementoring are presented in this volume. Theoretical and pragmatic viewpoints will provide guidance to the professionals who will use this book to inform their practice and reaffirm their enthusiasm for telementoring. A solid base of current information and an expansive vision of this practice will combine to promote the understanding and the successful implementation of telementoring.

A BRIEF DESCRIPTION OF TELEMENTORING

Telementoring, the practice of online or virtual mentoring, is based upon the traditional roles of a mentoring relationship. The concept of mentoring dates back to Homer’s Odyssey when Odysseus entrusted his son, Telemachus, to the tutelage of his trusted friend Mentor. Many of the benefits of mentoring have been documented with telementoring, especially the social connectivity that telementoring provides. One added benefit is that telementoring transcends temporal and spatial boundaries to engage participants in learning that can occur at their convenience instead of a prescribed time and place.

A number of telementoring models involve the use of subject matter experts who mentor students who are engaged in inquiry-based projects. Content-centered processes along with effective telecommunication processes combine to produce successful telementoring projects.

Adult learners have found telementoring to be an opportune means of furthering their learning as well as a functional collaborative tool. When the constraints of a work schedule inhibit collaboration, telementoring opens the door to expansive new possibilities for learning with colleagues.

Text-based media, such as email, form the communication method in many models. Communication can be synchronous or asynchronous. Asynchronous communication is one of the features that facilitates interaction at a time and place that is convenient for the participants.
Although telementoring has been in use for several decades at this point, there is still much to learn about its implementation. Telementoring practices and the related research into this valuable process are ever-emerging. The collected wisdom, research, and inspiration in this book will provide abundant resources and new insights for those professionals already engaged in telementoring and those professionals who are about to foray into this enriching endeavor.

**TELEMENTORING TODAY**

There are a variety of ways that telementoring is put into practice currently. Telementoring is predominantly used between adult subject matter experts and students in the P-12 setting. The use of telelementoring to further professional development is rapidly emerging as another use. Web 2.0 technologies now are able to bring even more interactivity and social connectedness to the telementoring relationship.

In the P-12 setting, telementoring brings adult experts into partnership with students to promote deep learning. These adult subject matter experts act as guides and models. Within these relationships, the students are given control of their learning.

The inclusive nature of telementoring is receiving increasing attention so that participants of all abilities are able to fully participate. All learners can find a place at the table when focus is given to accessibility issues. When inclusivity is considered in the development of telementoring projects and partnerships, each and every learner can benefit from the virtual mentoring experience.

Telementoring is increasingly being used to promote teacher learning. With the time constraints that are placed upon teachers within the school day, virtual mentoring offers a viable solution to promote professional learning. Pre-service and well as teachers in the field are engaging in telementoring to further their learning and gain knowledge and expertise that reach beyond the constraints of time and space.

Perhaps one of the most essential ingredients to a successful telementoring partnership is relationship. Telementoring does indeed hold the potential to create strong relationships which are conducive to learning. Web 2.0 technologies offer a wide range of interactive tools that facilitate the building and sustaining of telementoring relationships. Awareness and understanding of how to effectively use Web 2.0 tools will empower participants to take their virtual partnerships to a new level and strengthen the social connectivity and interactivity that will enrich the telementoring relationship.

**ORGANIZATION OF CHAPTERS**

The book is divided into four sections: (a) implications for practice, (b) addressing the needs of persons with disabilities, (c) professional development, and (d) Web 2.0 technologies. The chapters in each section will examine issues of practice and research related to each section topic.

The section on Implications for Practice explores issues of practice. The following chapters address these issues.

*Designs for Curriculum-Based Telementoring* offers a pragmatic and research-based view of the potential and challenges that telementoring provides. Judi Harris focuses on the use of telementoring in the classroom. She discusses the activity types involved in curriculum-based telementoring so that teachers can make informed decisions for the learning in which their students will engage.
Dimensions of Design in K-12 Telementoring Programs discusses issues of design. Kevin O’Neill analyzes the design of telementoring programs and sets forth the premise that knowing what doesn’t work is as important as what does work. Teachers are seen as vital in the process of project design and development. It is through sharing research with the intent to find out what needs to be strengthened that can help to move the field of telementoring forward.

Telementoring and Project-based Learning: An Integrated Model for 21st Century Skills focuses on using project-based telementoring to address the need to keep pace with economic and technological changes and challenges that impact education. Joyce Yukawa notes that the Partnership for 21st Century Skills has identified essential skills such as critical thinking, solving complex open-ended problems, creative and entrepreneurial thinking, collaboration with diverse multi-national teams, and using knowledge for innovation. The chapter makes the case for project-based telementoring to address these skills to equip today’s students for tomorrow’s world.

You Had to be There: What Telementoring Researchers can Learn from Classroom Observations emphasizes the importance for researchers and teachers to actively interact in order to richly develop effective telementoring programs. Kevin O’Neill and Sheryl Guloy invite researchers to consider stepping into the classroom to observe what is happening during the process of telementoring. They note that researchers often rely on captured interchanges to make decisions on the process. Teachers are encouraged to open their classrooms and practice to researcher and to participate in providing valuable insights to guide the design of successful telementoring programs.

The Transformative Capacity of Telementoring on Self-efficacy Beliefs: A Design-Based Perspective examines the tremendous capacity that telementoring holds to impact self-efficacy beliefs, especially with the implementation of intentional design. Self-efficacy is defined and discussed to build context. A research study that focused on using the four influences on self-efficacy of mastery experience, vicarious experience, verbal persuasion, and physiological state is used as an exemplar to show the design possibilities. The capacity of telementoring to address each influence is then discussed along with illustrative vignettes and design implications.

The section on Implications for Addressing the Needs of Persons with Disabilities examines inclusive practices. The following chapters address these issues.

In Fully Including Students, Teachers, and Administrators with Disabilities in Telementoring explores the challenges that need to be addressed in the elementary and secondary environments to fully include students, teachers, and administrators with disabilities. Sheryl Burgstahler and Terrill Thompson discuss access issues for telementoring participants with disabilities and present approaches for full inclusion in the telementoring process. Principles of Universal Design are discussed richly and pragmatically in order to guide the successful implementation of telementoring programs that address the needs of all participants.

Electronic Mentoring in the Classroom: Where Mentors and Students are Persons with Disabilities discusses the empowerment that telementoring can provide for individuals with disabilities. E-mentoring intervention programs for young people with disabilities are explored. Carmit-Noa Shpigelman, Patrice L. (Tamar) Weiss, and Shunit Reiter discuss the implementation of two studies that they conducted where protégés with disabilities were partnered with mentors with disabilities. They also describe the four stages of a successful e-mentoring program as well as practical suggestions for implementing a successful e-mentoring program for students with disabilities.

Meeting the Needs of Adolescents and Young Adults with Disabilities: An E-mentoring Approach discusses how telementoring is a promising practice to aid in the transition to adulthood for youth with
disabilities. Katharine Hill, Joe Timmons, and Christen Opsal discuss an e-mentoring program, Connecting to Success, which seeks to increase the understanding of educational and employment opportunities for transition-age youth who have disabilities. The ability of e-mentoring to increase resilience in youth with disabilities is explored. Implementation implications are discussed for issues such as safety and confidentiality, mentor training, and mentee/mentor matching.

The section on Professional Development considers the professional development of educators. The following chapters address these issues.

_Telementoring in Teacher Education_ discusses the need that has been voiced by pre-service teachers to know what it is like in the classroom before they reach their student teaching experiences. Virtual mentoring is shown as a way of connecting these pre-service teachers with teachers in the field. Citing the obstacles to face-to-face mentoring between the pre-service and veterans teachers such as time and place constraints, Sandy White Watson notes that telementoring provides a valuable vehicle for the pre-service teachers to be mentored. A study involving a six-week telementoring initiative is discussed. Issues such as classroom management, assessment, and classroom materials were among the real-life teaching experiences that were able to be shared. This virtual glimpse into the practical aspects of life in the classroom gave desired information to the pre-service teachers that otherwise would not have been gained until later in their university experience.

_Virtual Mentoring: A Response to the Challenge of Change_ presents the capacity-building capabilities of virtual mentoring in effecting change. Thomas Peters and Terrie Dew take a pragmatic approach to discussing the improvement of instructional strategies and student achievement. The mentoring relationship is explored in building reflective practitioners who can efficaciously act within ever-increasingly complex school environments. The importance of building trust in a mentoring relationship and how this can be accomplished virtually is a point of emphasis.

_Telementoring and Virtual Professional Development: A Theoretical Perspective from Science on the Roles of Self-Efficacy, Teacher Learning, and Professional Learning Communities_ examines how telementoring can facilitate the involvement in professional learning communities. Matthew Maurer explores one of the goals for this professional learning which is to positively impact teacher self-efficacy. A featured focus of the chapter is the professional development of science teachers. The research-based approach to professional development that professional learning communities provide lends support for inquiry-based learning. Successful examples of telementoring with science-based professional development as well as future recommendations for the use of telementoring in professional development are explored.

The section on Web 2.0 technologies looks at the interactivity that these tools bring to the practice of telementoring. The following chapters address these issues.

_An Orientation to Web 2.0 Tools for Telementoring_ gives an overview of Web 2.0 applications. This guide is designed to familiarize those who are new to the use of Web 2.0 technologies so that they feel more comfortable in implementing them in their telementoring projects. Robin Hastings explores the perfect fit for telementoring relationships that Web 2.0 provides with capabilities that include networking, social sharing, and interactive communication. This chapter focuses on making Web 2.0 tools work to enhance the virtual mentoring relationship.

_Web 2.0 for Telementoring_ explores the collaborative capacity that Web 2.0 tools provide to enhance the telementoring relationship. The constructivist capabilities that Web 2.0 technologies bring to student learning are emphasized. Shari McCurdy Smith, Najmuddin Shaik, and Emily Welch Boles discuss case studies to illustrate successful implementations using Web 2.0 applications to build social presence. An in-depth and extensive discussion of specific applications and their uses is provided.
CONCLUSION

The practice and research of telementoring, although decades old, is a relatively-new and ever-emerging field. The conversations and discussions in each chapter of this book provide new insights, research, and implications that will enhance and broaden the successful use of telementoring and give indications for future research.

For the professionals in the P-12 environment as well as teacher educators, the collected vision provided in this book serves as a research-based and pragmatic guide. Those professionals who are already implementing telementoring projects will find support for their practice as well as new horizon to explore.

The professionals who have not yet engaged in telementoring will find an invitation to engage in this valuable practice. They will find sound and practical advice on how to make the most of telementoring to promote student learning and their own professional learning.

It is my sincere hope that this volume will reaffirm the enthusiasm for those already engaged in telementoring and ignite a spark of willingness to venture into telementoring for those who have not yet tried it. The rich potential of telementoring to impact learning is a call and a challenge to make the best use of this exciting technological relationship. May those who read this book heed that call and take up that challenge.

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