The primary goal of this chapter is to document the growing interest in blended learning and describe the essence of this emerging approach to course design. We also make the case for a framework that has practical value in guiding blended learning designs and describe the challenges in understanding and implementing such a potentially significant change in higher education. We encourage educators in higher education to re-examine current practices and the need to actively engaging students in their learning if we are to achieve the higher-order learning outcomes so needed in higher education (Boyer Commission, 2001). New ways of thinking about course design are required to reconcile traditional values and practices with evolving expectations and technological possibilities.

**INTEREST IN BLENDED LEARNING**

Curtis Bonk and his colleagues have documented the strong and growing interest in blended learning (Bonk & Graham, 2006). They concluded in a recent survey of higher education that respondents clearly expected a dramatic rise in their use of blended learning approaches in the coming years” (Bonk, Kim & Zeng, 2006, p. 553). In another survey, Arabasz and Baker (2003) revealed that 80 percent of all higher education institutions offer blended learning courses.
Underlying these data is the increasing awareness that blended learning approaches and designs can significantly enhance the learning experience. Bob Albrecht (2006) reports high student satisfaction with blended learning, while others have reported faculty satisfaction (Vaughan & Garrison, 2006a). This is confirmed by Cara Marquis (2004) in a survey that found 94% of lecturers believed that blended learning “is more effective than classroom-based teaching alone”. This is also consistent with a study by John Bourne and Jeff Seaman (2005) who found that the primary interest in blended learning is to benefit the educational process. They report that blended learning is perceived to be a means to combine the best of face-to-face and online learning.

The need to provide more engaged learning experiences is at the core of the interest in blended learning. Many faculty have begun to question passive teaching and learning approaches such as the lecture. The lecture is a method of disseminating information that emerged before the printing press. The lecture is not particularly effective in engaging learners in critically filtering and making sense of a glut of information. Complex topics also require more in-depth engagement for students to construct meaning than what is possible in a typical lecture. In this regard, Rena Palloff and Keith Pratt (2005) argue that interactive and collaborative learning experiences are more congruent with achieving higher-order learning outcomes.

Concurrent with the recognition of the importance of interactive and engaged learning experiences, there is the growing understanding of the potential of the Internet and communications technology to connect learners. As such, the interest in blended learning
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can also be attributed to the advances and proliferation of communications technology in most segments of society – advances that have not seen the same degree of uptake in the higher education classroom. While this is changing, there is a considerable lack of understanding of how best to use technology to advance the goals of higher education in terms of engaging students in critical thinking and discourse.

We argue that the time has come to reject the dualistic thinking that creates a forced choice between face-to-face and online learning. It is no longer tenable, theoretically or practically, to view higher education as a split between conventional face-to-face and online learning. There is a better approach. With the increasing awareness and adoption of the Internet and communications technology to connect learners, it would seem that the only sensible way forward is to better understand the potential of these technologies and how they might be integrated with the best of the face-to-face learning environment.

We explore here a new educational paradigm that integrates the strengths of face-to-face and online learning. This is the promise of blended learning – a design approach where both face-to-face and online learning are made better by the presence of the other. Blended learning offers the possibility of recapturing the traditional values of higher education while meeting the demands and needs of the 21st century. The next task is to describe the nature of blended learning.
Recognizing true blended learning is not obvious. At its core, blended learning is the thoughtful fusion of face-to-face and online learning experiences. The basic principle is that face-to-face oral communication and online written communication are optimally integrated such that the strengths of each are blended into a unique learning experience congruent with the context and intended educational purpose. While the concept of blended learning may be intuitively apparent and simple, the practical application is more complex. Blended learning is not an addition that just builds another expensive layer. It represents a restructuring of class contact hours with the goal to enhance engagement and extend access to Internet based learning opportunities. Most importantly, blended learning is viewed here as a fundamental redesign that transforms the structure of, and approach to, teaching and learning. The key assumptions of a blended learning design are:

- Thoughtful integration of face-to-face and online learning
- Fundamentally rethinking the course design to optimize student engagement
- Restructuring and replacing traditional class contact hours

Blended learning emerges from an understanding of the strengths of face-to-face and online learning. This opens a wide range of possibilities for redesign that goes beyond enhancing the traditional classroom lecture. Attaining the threshold of blended learning means replacing aspects of face-to-face learning experiences with appropriate online learning experiences such as labs, simulations, tutorials, assessment. Blended learning
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represents a new approach and mix of classroom and online activities consistent with the goals of specific courses or programs.

Blended learning must be approached with the awareness of the broad range of flexible design possibilities and the challenge of doing things differently. It must be based upon a sound understanding of higher-order learning environments, communication characteristics, disciplinary needs, and resources. Blended learning redesign is a catalyst and means to fundamentally reconceptualize and restructure the teaching and learning transaction. Its basic assumption is to open the educational mind to a full range of possibilities. Blended learning brings into consideration a range of options that require revisiting how students learn in deep and meaningful ways.

Blended learning is no more about reshaping and enhancing the traditional classroom than it is about making e-learning more acceptable. In both contexts one is left with essentially, either face-to-face or online learning. Blended learning is created by fusing the properties and possibilities of both to go beyond the capabilities of each separately. Blended learning recognizes the strengths of integrating verbal and text-based communication. It is a unique fusion of synchronous and asynchronous, direct and mediated modes of communication where each design is qualitatively unique. Blended learning is a qualitatively enhanced experience that could not be possible in a strictly face-to-face or online environment.
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Blended learning necessitates that educators question what is important and how much time should be spent in the classroom. We approach the possibilities of blended learning only when we step back and allow our minds to escape the paradigmatic trap of either the traditional lecture or web-based learning. Blended learning is an approach to educational redesign that can enhance and extend learning and be scalable. Blended learning represents a distinct design methodology that transcends the conventional classroom paradigm. The proportion of face-to-face and online learning activities may vary considerably, but blended learning is distinguishable by way of the fusion of face-to-face and online learning – a fusion that is multiplicative, not additive.

**CHANGE**

Higher education must start delivering on its promise for learning experiences that engage and address the needs of society in the 21st century. As Swail (2002) states, the “rules are changing, and there is increased pressure on institutions of higher education to evolve, adapt, or desist” (p. 16). To paraphrase Peter Drucker (1999), we must ask ourselves: would we, knowing what we now know, design learning experiences as we do with two and three hundred students in a lecture hall? With what we know about the potential of blended learning, the need to create communities of inquiry, and the vast array of accessible and affordable communications technology, it is hard to imagine we could answer this question in any other way than there must be a better way.
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Jonathon Levy (2005) has stated that the field of e-learning “is marked by a juxtaposition of new technology and old pedagogy.” In essence, higher education is only just beginning to grasp the significance and educational potential of asynchronous communication networks. The mistake of most traditional campus-based institutions was to see the potential of online learning in terms of access and serving more students instead of serving current students better. However, to serve the student better from a learning perspective necessitated the adoption of a new pedagogy. For the traditional campus-based higher education institution, the breakthrough came when online learning was no longer regarded as a substitute but as an integral and valued component to address the need for a new pedagogy. This was the watershed moment for higher education.

The transformation of teaching and learning in higher education is inevitable with the use of web-based communications technology (Newman, Couturier & Scurry, 2004). Fundamental redesign based on blended approaches to teaching and learning represent the means to address the challenges associated with providing a quality learning experience in higher education. While the catalyst for change in teaching and learning has been technology, it is the need to enhance quality standards that is drawing attention to the potential of blended approaches to teaching and learning in higher education. Technology is an enabling tool. Blended learning is the approach and design that merges the best of traditional and web-based learning experiences to create and sustain vital communities of inquiry. As a result, many higher education institutions are quietly positioning themselves for the transformational potential of blended learning.
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THE FRAMEWORK

Blended learning is at the center of an evolutionary transformation of teaching and learning in higher education. However, transformational growth can only be sustained with a clear understanding of the nature of the educational process and intended learning outcomes. In higher education there is an expressed focus on opportunities for learners to construct meaning and confirm understanding through discourse. At the core of this process is a community of inquiry that supports connection and collaboration and creates a learning environment that integrates social, cognitive and teaching elements in a way that will precipitate and sustain critical reflection and discourse. Blended learning opens the possibility of creating and sustaining a community of inquiry beyond the classroom.

We approach the understanding of blended learning designs through the framework of a community of inquiry. The community of inquiry (CoI) framework was created by Randy Garrison and his colleagues (2000) to guide the research and practice of online learning. The CoI framework was generated from the literature and experiences of the authors grounded in the larger field of education. In particular, the framework was grounded in a critical, collaborative learning community consistent with the ideals of higher education. The generic nature of the framework and its resonance with both face-to-face and online education make it a useful guide to understand and design blended learning environments.
Ben Arbaugh (2006) indicates that the CoI framework has shown considerable promise and has been widely cited in the literature. The reasons for this are that it is a comprehensive yet parsimonious and intuitively understandable framework. Another reason is that it builds upon two core ideas synonymous with higher education – community and inquiry. Community recognizes the social nature of education and the role that interaction, collaboration and discourse play in constructing knowledge. On the other hand, inquiry reflects the process of constructing meaning through personal responsibility and choice. A community of inquiry is a cohesive and interactive community of learners whose purpose is to critically analyze, construct and confirm worthwhile knowledge. The three key elements for a viable community of inquiry are social presence, teaching presence, and cognitive presence. A community of inquiry appropriately integrates these elements and provides a means to guide the design of deep and meaningful educational experiences.

We use the CoI framework to shape this book and how we structure many of the chapters. The first part of this book focuses on an understanding of this perspective and describing how it can shape practice and professional development. Design scenarios, guidelines, strategies and tools described in the second part of this book all emerge from the CoI framework. The CoI framework will be described in greater detail in the next chapter.
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CONCLUSION

There has been little fundamental change with regard to how we approach teaching and learning in higher education. This is at a time when there is increasing dissatisfaction from faculty, students and society with the quality of the learning experience. While technological advancements in society have been unrelenting (e.g., Internet, pocket sized computers, wireless web, cell phones, satellite radio/television, games/simulations), technological innovation in higher education has been largely restricted to administration and research. Significant technological innovations in teaching and learning have been confined to addressing issues of access and convenience. The need to address the relevance and quality of the learning experience, demands that higher education have a fresh look at how we approach teaching and learning and utilize technology in the 21st century.

For the previously stated reasons and the success of blended learning designs, considerable attention has begun to shift to blended learning. There is a convergence of interest (intuitive appeal to combine strengths of face-to-face and online learning), need (educational demands of the 21st century) and opportunity (potential of communications technology) with regard to blended learning. The reality of engaging students across time and place make possible the educational ideal of an engaged community of inquiry. Blended learning designs remove the constraints to create and sustain communities of inquiry in higher education.
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The concept of a community of inquiry that frames this book is consistent with the timeless goal of higher education and provides a much needed roadmap for blended learning approaches and designs. The CoI framework provides the order and rationality to understand the nature, purpose and principles of blended learning. It provides the context for the practical examples and the selection of strategies and tools presented in this book. It also generates the rationale for the templates and rubrics found in the Appendix.

Blended learning is not new. What is new is the recognition of its potential to fundamentally redesign the learning experience in ways that can enhance the traditional values of higher education. Blended learning can address the ideals and core values of higher education in terms of creating and sustaining communities of inquiry. The challenge higher education faces is how to merge the distinct approaches and properties of face-to-face and online learning. This is the focus and challenge presented in the remaining chapters of this book.