The Blended Advising Model: Transforming Advising with ePortfolios

G. Alex Ambrose
University of Notre Dame

Laura Williamson Ambrose
Saint Mary’s College

This paper provides the rationale and framework for the blended advising model, a coherent approach to fusing technology—particularly the ePortfolio—into advising. The proposed term, “blended advising,” is based on blended learning theory and incorporates the deliberate use of the strengths from both face-to-face and online environments, as well as synchronous and asynchronous technologies and interactions. ePortfolios and an advising syllabus will be offered as core examples of practical applications of the theoretical blended advising model in redefining and reengineering the advising process. Current and emerging advisor support systems and delivery technologies are also organized and applied to the proposed model to illustrate the possibilities, potential, and processes that are created from a transformative blended advising redesign.

The increase in the adoption of Internet-related technologies that provide learning anytime, anyplace, and to anyone has led to rapid growth in courses being offered in the blended learning format, a format in which a portion of the face-to-face time is augmented with online activities designed to enhance and enrich face-to-face interactions (Chen, Lambert, & Guidry, 2010; Robinson & Hullinger, 2008; Vaughan, 2010). In considering these developments, Garrison and Vaughan (2008) claim that higher education has reached a point where three key areas have begun to intersect: interest (e.g., intuitive appeal), need (e.g., educational demands) and opportunity (e.g., potential of communications technology). The convergence of these trends offers new possibilities for engaging students, particularly in the areas of technology-enhanced education and advising. Nonetheless, the application of technology use in distance education and blended learning should not simply be about being more efficient in serving more students; instead, these practices should be about serving and engaging more students more effectively.

The purpose of this paper is to provide a discussion of the transformative potential of the blended advising model, in the contexts of both on-campus and online higher education settings, for full-time advisors and faculty advisors. A review of the current state of academic advising will both identify the optimal perspective of the advisor with regard to institutional goals and establish advising as a teaching practice—a learning process explicitly laid out in an advising syllabus and documented in an ePortfolio. Supported by blended learning theory, a new paradigm in advising is then presented and explored using the example of an ePortfolio as a way of demonstrating the importance of rethinking and reengineering the current processes that characterize student-advisor interaction. Following this, a review of the current and emerging technologies in advising will serve as a platform for extending the potential applications of the proposed blended advising model. Finally, future research and scenarios outline the possibilities for organizing current technologies into dynamic advising support and delivery systems.

Problem

Current Approach to Technology in Advising

Junco (2010) claims two imperatives for the use of technology in advising: first, with the reality of the current economic hardships, institutions are being forced to do more and to do better with less; second, as a profession and a practice, advising must meet the digitally savvy students “where they are.” From an advising perspective, Leonard (2008) describes the ways in which technology-assisted advising can be more effective and efficient when using technology to anticipate and manage routine activities and situations, as well as to increase convenience through availability (anytime) and accessibility (anywhere). Additionally, Leonard (2008) claims that appropriate technology integration in advising implies the enhancement of the advisor-advisee relationship by raising the discourse and interaction of the advising to a level beyond the mundane (e.g., small talk and re-introductions), the administrative (e.g., forms and signatures), and the informational (e.g., checklists and handouts).

In the same vein, Junco (2010) addresses some of the problems inherent in standard advising paradigms, pointing out a clear difference between advising sessions in which students wait for the advisor to tell them what courses to take and those sessions in which students have done their homework, researching, for example, general education requirements, prerequisites, and possible programs. Pre-engaged students who arrive prepared for advising sessions are, unfortunately, not the norm.

McKamey (2007) points out that many students come to their advising appointments with no real understanding of why they are there and, as a result, have nothing prepared for the meeting. This lack of pre-engagement leads to other problems, namely the
potentially negative, demoralizing tone of interaction that transpires when advisors query students about issues they are unprepared to discuss. Yarbrough (2002), too, remarks that advising encounters which are restricted to probing questions designed to illuminate and clarify the shortcomings of the student can create a confrontational environment that both the student and the advisor seek to avoid. This dynamic may also contribute to tendency to favor “safer” transactions that avoid confrontation and discomfort but nonetheless fail to engage the student beyond a surface-level interaction. Such tendencies and practices are especially problematic early on, given the impact these brief exchanges can have on a student’s sense of self-efficacy in his/her academic career.

Even in instances in which technology is more commonly deployed in advising (through e-mail, advising-notes databases, and websites) the problem of transactional, surface-level interactions remains. In other words, technology expedites information access, but it fails to transform advising practice: e-mail becomes a means of simply exchanging short bits of information; advising databases such as Microsoft Access do nothing more than replace individual paper versions of student files and advising notes with individual digital versions; and advising websites serve as digital brochures and one-way informational delivery systems, albeit in visually appealing, easily accessible formats. In meeting the needs of today’s digital student, advisors could use technology to enhance rather than replace face-to-face interactions—to do more and do better with less. In short, opportunities for collaboration, interaction, and reflection through technology are being lost when efficiency alone is the goal. Such ineffective uses of technology perpetuate transactional, consumer-like interactions instead of fostering mentoring relationships that prioritize effectiveness and engagement.

**Literature**

**Blended Learning**

In recent years, the theory of blended learning has emerged as a useful pedagogical model for teaching with technology and meeting the needs of twenty-first-century students. It is the contention of this article that blended learning theory also lends itself to the advising of these students. Blended learning is both simple and complex. At its simplest, it combines asynchronous Internet technology with face-to-face learning (Garrison & Kanuka, 2004). Where the complexity emerges is in the thoughtful integration of the strengths from the online and on-campus components, as opposed to practices that simply “tack on” technology. Blended learning does not involve a mere layering or bolting on of one approach to the other. In other words, it is not enough to deliver old content in a new medium. Instead, blended learning requires the true re-examination of educational goals, structures, and processes. Garrison and Vaughan (2008) claim that blended learning is at the center of an evolutionary transformation of teaching and learning in higher education and is based on three key assumptions: restructuring and replacing traditional class contact hours, thoughtfully integrating face-to-face and online learning, and fundamentally rethinking course design to optimize student engagement. Done effectively, the blended design offers a significant departure from both ends of the teaching spectrum (i.e., face-to-face learning and fully online learning) and represents a fundamental re-conceptualization and reorganization of dynamic teaching and learning based on these new interactions.

The core issue at hand in integrating technology into the overall educational process is how to fuse effectively the most desirable and valued characteristics of both contexts in order to generate a kind of quantum shift in both the nature and the quality of the educational experience. Each environment, the online computer-mediated space and the face-to-face environment, has its own strengths and weaknesses. For example, flexibility is considered a strength of the asynchronous online computer-mediated environment and a weakness of the face-to-face environment. Online environments extend time and space so that students have the ability to contribute at the most convenient time for them. However, Mikulecky (1998) asserts that spontaneity is a strength of the face-to-face interaction and a weakness of the online environment, since students and instructors working together during the same time and space can generate rapid chains of associated ideas and serendipitous discoveries. Moreover, since the online medium is considered to be impersonal by many (Benbunan-Fich & Hiltz, 1999), it may cause a lower satisfaction level with the process (Haytko, 2001). Indeed, this human connection factor is considered one of the greatest benefits of the face-to-face environment because it provides social presence, opportunities for bonding, and ease in developing trust. The online asynchronous technology-mediated environment can also bring a set of characteristics unique to that environment: from the challenges students face with procrastination in the online atmosphere (Benbunan-Fich & Hiltz, 1999) to the potential for a greater depth of reflection, because students have more time to carefully consider and provide more detailed, thoughtful reflections than in a face-to-face environment with a set class time (Benbunan-Fich & Hiltz, 1999; Mikulecky, 1998).

It is important to represent blended learning on a continuum of degrees of learning that incorporate
technology. Graham (2005) categorizes blended learning into three levels or blends: enabling, enhancing, or transforming. Enabling blends focus on improving efficient, convenient, and digitized access. Enhancing blends allow for incremental change to pedagogy, whereas transforming blends bring a radical transformation to the teaching and learning process. As a result of this transformational shift, teaching moves away from the dissemination of information toward the creation of learning environments in which students co-construct knowledge through interactions with the instructor, peers, and course content.

What makes blended learning particularly effective is its ability to facilitate and deepen the sense of engagement while simultaneously facilitating the conditions for a community of inquiry to provide dialogue, debate, negotiation, and agreement (Garrison & Kanuka, 2004). Asynchronous Internet communication technology platforms can facilitate the written and reflective elements that prepare students for the dynamic, fast-paced, and spontaneous verbal communication that occurs in a face-to-face interaction. In other words, in a blended design the online and face-to-face components work together to mutually reinforce elements, skills, and content derived from both environments. Online writing and discussion board postings enhance classroom conversation; classroom group work sets up asynchronous collaboration online.

Blended learning provides an effective, low-risk innovation strategy for not only integrating and applying technological tools, but, most importantly, for envisioning this integration as one that transforms learning through blended design. These essential components of blended learning offer powerful applications for advising—a field, indeed, a discipline uniquely and strategically situated to provide significant impact on student engagement at the university or college level.

The Strategic Place and Opportunity of Academic Advising

Advisors, as educators, share the challenge of meeting the needs of digitally savvy students, not only in acknowledging but also in embracing fully the role technology promises to play in higher education, particularly as these students begin transferring and applying the knowledge, skills, and experiences from their academic lives to their professional lives.

As higher education continues to find itself increasingly subject to internal and external scrutiny, leaders in higher education must identify strategic ways to demonstrate student satisfaction, success, and learning. Quality advising can yield improved student retention rates and student relationships and to help clarify academic and career goals (Rinck, 2006). Graduation rates are important, but the ultimate measure of student success and progress is whether the students have learned what they need to be successful in their personal, professional, and civic lives (Campbell & Nutt, 2008). Academic advising has increasingly been acknowledged for its strategic place in providing an opportunity to support student engagement by connecting students with learning opportunities (Campbell & Nutt, 2008; Rinck, 2006; Schulenberg & Lindhorst, 2008). Advisors are among the first representatives of an institution that incoming students encounter and may be one of the few that remain consistent as they move through and exit the institution, offering personalized and sustained interaction. So, too, can advisors help students sequence, scaffold, and shape meaningful learning experiences both in and out of the classroom (Campbell & Nutt, 2008).

Looking forward, Campbell and Nutt (2008) claim that academic advising in the twenty-first century is being recognized nationally and internationally throughout colleges and institutions for the powerful strategic potential advisors can play in engaging and supporting student learning in the total institutional educational strategy. Academic advising can be seen as an engaging educational process that moves away from a paradigm of teaching as information input toward a paradigm of learning with an emphasis on outcomes. Academic advising can support key institutional conditions and directly impact and influence student engagement.

Advising is Teaching

Research and scholarship in advising are two key factors shaping the academy’s recognition that advising is a distinct interdisciplinary scholarly field of applied research, one with a national association and a peer-reviewed journal publication (Campbell & Nutt, 2008; Schulenberg & Lindhorst, 2008). In 2006, the National Academic Advising Association (NACADA) developed a concept of academic advising that affirms the integral role advising plays in fulfilling the teaching and learning mission of higher education. This concept of advising is based on three factors: advisors have a curriculum (what advising deals with), pedagogy (how advising does what it does), and student learning outcomes (the result of academic advising; NACADA, 2006). Central to this perspective is the guiding principle that “advising is teaching.” This notion originated from Crookston’s (1972) developmental advising method, which contrasted developmental approaches with prescriptive ones found in medical analogies that characterized advisees as patients. Similarly and more recently, Appleby (2008) extends
this theme of advising as a practice of teaching and learning by suggesting that advisors gradually give more responsibility to the students by helping them develop problem-solving and decision-making skills, challenging them to develop higher-order processes, and facilitating deeper insights into their goals. If advising is a teaching process—one with a curriculum, a pedagogy, and student learning outcomes—then it follows that advisors and advisees should be guided by an advising syllabus. The advising syllabus offers an opportunity to clarify the role of advising in a student’s education (e.g., its procedures, relationships, expectations, and benefits) and can help prepare students to make the most of their face-to-face sessions (McKamey, 2007; Trabant, 2006). Furthermore, Appleby (2008) asserts that the advising syllabus is a step toward improving the perception of academic advising as a legitimate educational process that can support the trickle-down mission and vision of the larger institution.

The Advising ePortfolio

If the advising syllabus serves as a teaching tool that identifies learning outcomes that can be achieved throughout the advising process, then the ePortfolio could play a crucial role in both facilitating and documenting student progress with regard to key advising outcomes such as major selection, intellectual development, and academic and career goal-setting (Ward, 2008). The ePortfolio enables students to collect, organize, and present multimedia evidence (e.g., papers, projects, pictures, reflections) of learning experiences including class, work, research, time abroad, and/or service. ePortfolios and advising share similar developmental processes such as reflection and transferability of knowledge and skills from classroom to career. For example, collections of student artifacts, evidence, and reflections from the ePortfolio can also be shared with an advisor, thereby creating both a foundation and a medium for advising sessions to improve engagement and intellectual and personal development.

Two recent advising and portfolio studies have been conducted. In 2010, the Stanford Vice Provost for Undergraduate Education, Undergraduate Advising, and Research and the Registrar’s Office launched a pilot using ePortfolios (Chen & Black, 2010). The pilot had two goals: (a) to explore how the ePortfolio medium could assist in the advising of pre-major first- and second-year students, and (b) to explore how ePortfolios and a culture of folio thinking can enhance face-to-face interactions between students and their advisors. The promise of this effort is that the program seeks to capture and document students’ learning and engagement through reflection, rationale building, and planning. In addition, emphasis is placed on a shared responsibility and ownership of a student’s “learning career”—inside and outside the classroom, on campus and off campus, in face-to-face and virtual environments, and during and after the student’s time in college. A second advising and portfolio study was conducted at an undergraduate engineering program at Taylor University in Malaysia, which developed and tested an “integrated portfolio and advising system” called the Educational Advisory System (EASY) (Al-Atabi, Mahdi, Younis, & Chung, 2011, p. 533). Although this study used paper-based portfolios instead of ePortfolios, it provides a definition for an integrated portfolio-and-advising system, one that requires students to track the progress of their learning outcomes, to provide documentation, and to meet regularly with their academic advisors for feedback. The EASY also aimed to make students intentional and active learners by having them take ownership of their academic progress.

Taken together, the following points provide the logic and framework for reimagining and improving both the advising process and the field, particularly as they relate to technology: advising is strategically and uniquely positioned at the student, class, program, and institutional levels; advising is a teaching process that can utilize an advising syllabus as a tool to identify learning outcomes; the ePortfolio can serve as a medium for documenting evidence of growth and achievement of these learning goals, as well as encouraging thoughtful reflection and active, integrative learning. While the ePortfolio serves as one of many potential technological platforms and tools that could extend blended learning theory to the advising process, we focus on ePortfolios here because they serve as a particularly powerful and adaptive platform for applying blended learning to advising. In what follows, ePortfolios function as an integral part of two distinct applications for blended advising: as a component of a one-credit course (complete with syllabus) with a full-time academic advisor; and for upper-level students, as a capstone experience with a faculty advisor in a major area. Collectively, these scenarios and applications demonstrate how this blended approach could transform the advising field from a variety of perspectives, including full-time advisors and faculty advisors (to either first-year students or students in their specific fields).

Discussion

A New Approach and Applications: The Blended Advising Model

A new framework, model, and theory are needed in order to give purpose and direction to the
transformational potential offered by the infusion of technology into the advising process. Because advising is an evolving discipline, one that is positioned at a pivotal location in the educational landscape, it is also ideally situated to both accommodate and adapt blended learning theory, extending this theory beyond the domain of “classroom” pedagogy. Nonetheless, as an emerging scholarly field, advising faces the risk of adopting catchy, fleeting lingo such as virtual advising, e-advising, and hybrid advising, labels that carry no model or underlying theory. These terms perpetuate problems inherent in using technology for technology’s sake—the absence of a clear purpose or goal. The proposed term blended advising is based on an established theory of learning and deliberately incorporates the strengths of both the face-to-face and online environments through synchronous and asynchronous technologies and interactions.

All methods of advising involve two elements: space and time. Students and advisors interact either synchronously (same time) or asynchronously (different time). Similarly, students might engage with their advisors on campus (same place) or online (different place). Blended advising draws directly from the benefits of synchronous, on campus advising—“same time, same place” experiences that enable human connection and spontaneity—while simultaneously taking advantage of the asynchronicity and computer-mediated environment of online advising—or “different time, different place” experiences that afford more opportunities for flexibility and accessibility, thereby leaving out any weaknesses from either method.

The purpose of infusing technology into the blended advising process is not simply to replace the face-to-face practice but rather, to enhance and extend the quality of engagement. By using technology to enhance and extend the space and quality of engagement before, during, and after the advising session, this new paradigm of “pre-engage/engage/re-engage” aligns the advising process better with the developmental process of teaching and learning. Instead of transactional and surface-level interactions dealing with pins and paperwork, advisors and advisees have a space and a place for quality engagement to uncover, discuss, and develop both passions and purpose. Figure 1 shows a new dynamic cycle of interaction based on the transformational power of blended learning design.

Figure 1
New Approach to Advising

Pre-Engage
Asynchronous Online: Student “does his/her homework” and prepares for advising session by posting reflections on an ePortfolio based on prompts from the advising syllabus

Re-Engage
Asynchronous Online: Student is able to capture, archive, reflect and review important documents, forms, and academic plans in the ePortfolio

Engage
Face-to-Face Advising Session: Student is engaged through deeper and more meaningful interaction by discussing reflections, clarifying goals, and reviewing artifacts and evidence of growth from the ePortfolio
The cycle of engagement enabled by the blended advising model and ePortfolios, in particular, can be applied to both full-time advising and faculty advising scenarios. In the former, a 1-credit first-year advising seminar utilizes this blended design, guiding students throughout their first semester meeting both as a group (face-to-face and online) and through one-on-one sessions with the advisor (face-to-face or online via video conference). The seminar makes use of an advising syllabus (see Appendix A) and the ePortfolio platform to structure and document the learning outcomes and development. As an alternative to this course-based approach, advisors could simply scale down the scope of the syllabus and connect required ePortfolio postings to a registration pin process. In this application, students “do their homework” by completing a pre-appointment assignment based on a prompt listed on the advising syllabus, which asks that they research majors of interest or reflect on goals. Responses to these prompts are posted in their ePortfolios as preparation for a face-to-face advising session. The student and the advisor now have a shared space to discuss reflections, clarify goals, and review artifacts and evidence of growth. After the advising session, students could capture, scan, and maintain a record of important documents or forms, as well as develop an academic plan that could be used later to measure and document progress towards academic, personal, and professional goals.

Faculty and departmental advisors, too, can benefit from the cycle of engagement generated by the ePortfolio, whether as an extension of work begun in the first year or as an entirely new assignment offered in a student’s junior or senior year. This assignment might be offered as a part of an upper-level course in the major or as an external requirement in the department or program and tied to a senior seminar, capstone experience, or exam (see Appendix B). At this stage in a student’s learning and development, the ePortfolio could facilitate a student’s transition to life beyond the undergraduate institution. Prior to an office hours visit, students might be required, for example, to pre-engage: to post a resume, compile a showcase of important projects and papers, upload a senior comprehensive exam, report on internship hours and experiences, reflect on the role of their educational experiences (e.g., in a liberal arts program), draft a personal statement, and post research on graduate school programs. Using these ePortfolio artifacts as a guide, office hour sessions would advance to more detailed engagements with specific projects and to more complex conversations about the scope of a student’s learning after four years, rather than remain focused on editing resumes and discussing graduate school options. After the meeting, the student could re-engage by returning to the space of the ePortfolio, revising, updating and sharing content with his/her advisor online. Undoubtedly, the experience of designing ePortfolios also provides students with crucial skill sets, both in terms of refining their techniques of self-representation and in developing marketable digital media skills. The website addresses of these showcase ePortfolios could be listed on business cards, e-mail signatures, or at the top of graduate school applications. Individual departments, too, might turn to ePortfolios as a repository for outcome-based assessment data, in which students post particular reflections or artifacts in relation to department- or institution-level requirements.

As teaching faculty, departmental advisors are also uniquely situated to foster the linkages between the classroom and advising sessions, to reinforce the notion that advising is teaching. The ePortfolio serves a crucial role in this regard, as it provides both students and faculty with a learning community that extends beyond the physical classroom. Thoughtful reflections on course readings in journal posts might be only a click away from a related presentation from another course or a wiki study guide collaboratively authored by a group of students. Critical thinking skills developed in the scope of writing a reflection statement for the ePortfolio are linked, both literally and conceptually, to other areas of a student’s life—academic, professional, and personal. As both process and product, ePortfolios exemplify the “place” of the upper-level student: simultaneously poised to look back on his/her work, synthesizing learning and carefully selecting artifacts to produce a snapshot of these educational experiences, and primed to move forward, continuing the dynamic process of self-reflection and life-long learning.

In short, blended advising with ePortfolios has the power to enhance student engagement at deeper and more dynamic levels by both pre-engaging and preparing the students before advising sessions and extending engagement during and after the sessions through reflection and review. One could ask, however, why would students prepare online if they do not already prepare for their face-to-face advising sessions? The real question underlying this inquiry, however, is whether students simply do not care to prepare or, rather, that they do not know how to prepare in productive and timely ways. By accommodating the technological needs of the twenty-first-century students in this way, advisors will reach more students in more varied ways. With the new blended advising paradigm and syllabus-directed approach, greater proportions of students can be channeled into active preparation for, participation in, and engagement with the total advising process. In other words, those who lack the developmental readiness of their more intellectually and academically mature peers will, in this more responsive digital model, move from transactional to...
transformational involvement in the advising process. In addition, pre-engagement (asynchronous online), pre-advise prompts in an ePortfolio could be tied to required and graded assignments, through either an advising syllabus or an assignment in an upper-level course. Or from an administrative “carrot-and-stick” perspective, the blended advising engagement cycle could be built into the paperwork process required to obtain pins for registration. In short, the syllabus offers students a road map: expectations and intentionality are clearly foregrounded and laid out. Similarly, just as a discussion board thread requires all students to participate (vs. selective hand-raising in a face-to-face class), the online environment of blended advising demands active, full participation and preparation on the part of each student. The student is now asked to reflect beyond the space of the academic advisor’s office walls or the professor’s classroom, posting comments, reflection statements, and artifacts in an ePortfolio. Mediated by a clear syllabus as part of a one-credit first-year seminar course and through a combination of online and face-to-face interactions—all of which utilize the ePortfolio as the basis of conversation and reflection—this advising model turns the tables on students, “flipping” the advising process in a manner much like flipping the classroom. Advisors no longer carry the burden of capturing and documenting the meeting in their notes; instead, the students are responsible for their own learning career, freeing the advisors to comment and provide detailed feedback. Advising originates with the students: they provide the groundwork for all subsequent conversation and interaction, both face-to-face and online. As exhibited in Figure 2, in the blended advising model, learning and advising become active and self-directed processes rather than passive and transactional ones, inviting new patterns of exchange and offering new opportunities for interaction and engagement.

Figure 2
New Paradigm for Blended Advising

<table>
<thead>
<tr>
<th>Transactional</th>
<th>Surface-Level</th>
<th>Old Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asynchronous Online: Student emails advisor a question, and advisor answers</td>
<td>Synchronous Face-to-face: Student and advisor engage in mundane small talk and re-introductions</td>
<td>Pins &amp; Paperwork</td>
</tr>
<tr>
<td>** Transformational **</td>
<td>** Deep **</td>
<td>** New Paradigm **</td>
</tr>
<tr>
<td>Asynchronous Online: Student comes prepared and pre-engaged with his/her ePortfolio</td>
<td>Synchronous Face-to-face: Student and advisor engage through deeper and more meaningful interaction by discussing the ePortfolio</td>
<td>Passions &amp; Purpose</td>
</tr>
</tbody>
</table>
Future Tools, Scenarios, and Research

As the core technological platform, the ePortfolio offers a dynamic method for transforming advising, both face-to-face and online. Nonetheless, many other current and emerging technologies must also be considered in the total blended advising approach. Ample lists of advising support and delivery technologies exist (Leonard, 2008), but a comprehensive system of organization and an assessment of these applications has been lacking. To fill this void, Appendix C presents advisor support systems, while Appendix D indexes current and emerging advisor delivery tools, organized under subcategories of synchronous (same time) or asynchronous (anytime). Considering ePortfolios in the context of a broader range of current and emerging technologies—from advisor tracking systems to learning management systems—allows for a more holistic picture of blended advising. In other words, as has been argued above, ePortfolios function as the central component in a comprehensive transformation of advising, which focuses on the cycle of engagement and the importance of student ownership of the advising and learning processes. However, the ePortfolio does not exist in isolation and will likely have the most significant impact and provide the greatest variety of both qualitative and quantitative data when incorporated into a broader suite of complementary tools and technologies that collectively can support this shift in paradigms as well as provide a more diverse set of learning analytics.

With such a robust and diverse variety of advisor support systems and delivery technologies at play, though, several questions emerge: What is on the horizon? What more can be done? Or, in what ways have approaches to using these technologies essentially failed to capitalize on the unique and influential position of the advisor? What technical, social, educational, and practical impact does the blended advising model have in higher education? In an effort to begin to address these questions, this final section draws upon the suite of technologies listed in Appendices C and D and considers a sample future scenario and potential research agenda. Although such technological integration is not a new phenomenon in advising, most approaches have only emphasized efficiency. The following full-spectrum, blended advising scenario will illustrate the range of possibilities and potentials for effective engagement when a suite of advisor support systems and delivery technologies are thoughtfully integrated into an advising pedagogy, an advising syllabus, and a set of practices.

The academic advisor logs in to the advisor tracking system and runs a query to determine which students have not yet declared their majors. An email goes out to a student, notifying her of this deadline. In response to the email, the student logs into Moodle, the University’s learning management system, and clicks on the link to her advising course. Here the student accesses the advisor’s syllabus and content management system. The student finds the required assignment for “declaring your major” (graded for the course or tied to an administrative registration pin for scheduling), completes the “exploring majors” tutorial with exercises and prompts, and then writes a reflection about her strengths, passions, and majors of interest, posting it on her ePortfolio. This student then clicks on the “book an appointment” link listed in the email signature or on the course website, views her advisor’s availability, and books an appointment online for the next week to meet with the advisor. On the day of the appointment, the student automatically gets a text and an email reminder of her appointment. The student arrives on time and swipes her student ID card at the front desk. This adds a tally to the advisor administration tracking count and also sends an instant message to the advisor indicating that the student has arrived and is sitting in the waiting area. The student receives a text, e-mail, or app on her smart phone to fill out an online pre-meeting screening and a form with a few survey questions.

Meanwhile, the advisor reviews the admissions files scanned into the OnBase document management system, pulls up the student’s case notes in the advisor tracking system, checks the student’s transcript on Banner for grades from the previous semester, checks the assessment management systems for the student’s most recent test grades, and reviews the student’s latest reflection on her ePortfolio. The advisor then greets the student in the waiting area, and they begin their individual face-to-face advising session. After reviewing and discussing the student’s low Chemistry scores, a projection on the grade point average (GPA) calculator shows that the student is in danger of academic probation. After discussing the student’s ePortfolio reflection, the advisor notices passions, interests, and strengths in the humanities. Together, the advisor and student conduct a degree audit using the graduation progress system to develop a checklist, timeline, and academic plan for new majors. These planning documents are e-mailed to the student as Microsoft Excel files and stored in the ePortfolio for future review and revision. The student leaves the advising session engaged, with a new sense of purpose in her education.

Later that month, the student reads the advisor’s wiki of frequently asked questions (FAQ) and watches screencasts on how to register for classes and build her own schedule. The student then uses the online Schedulizer to find all combinations for course
selection. Because the advisor has found an efficient and effective suite of advisor support systems and delivery technologies to build his blended advising approach, he is now able to increase his case load. In addition to automating the drudgery of informational transactions and administrative tasks, forms, and checklists, the advisor now has more time and creative energy to put towards researching more effective advising strategies, models, best-practices, qualitative ePortfolio data (e.g., word clouds of student interests, evidence of University/College outcomes), and learning analytics.

Based on the scenario detailed above, the table of current and emerging advisor support systems and delivery technologies, and the proposed blended advising model, future research questions and an agenda might include the following:

- What impact and benefits does a blended advising model with ePortfolios provide?
- How might data be generated to determine the extent to which a blended advising model using ePortfolios improves student success, student satisfaction, student engagement, and student retention and probation rates?
- How can advising ePortfolios support the trickle-down assessment of an institutional strategy and goals?
- How can faculty advisors implement the use of ePortfolios and blended advising into their courses and assess program outcomes?

**Conclusion**

In combining the strengths of the face-to-face and online advising environments, blended advising produces a dynamic cycle of engagement between advisors and students in which transactional, surface-level interactions (“pins and paperwork”) give way to more meaningful, transformational and deep exchanges (“passions and purpose”). As a way of presenting the groundwork for this blended model, advising was first established as a teaching and learning process that can be articulated in an advising syllabus, allowing technology to be instructionally-designed into the advising process. The proposed term ‘blended advising’ represents the deliberate use of the strengths of both face-to-face and online environments with synchronous and asynchronous technologies and interactions. ePortfolios were offered as a core example of what the theoretical blended advising model would look like in redefining and reconceptualizing the advising process for both full-time and faculty advisors and at various stages of a student’s educational development. Advisor support systems and delivery technologies were then indexed and organized to inventory and evaluate a larger range of the available suite of tools that could be used in reengineering advising through a blended approach. In addition, a future scenario was envisioned to illustrate the new possibilities that emerge from a transformative blended advising redesign. Lastly, a future research agenda was offered to guide discussion, implementation, and research toward the scholarly formation of advising as a discipline. As advising is being redefined in the academy and as technology continues to play an increasingly larger role in higher education, there is a key opportunity for transformational technology infusion to be an essential factor of this redesign.

**References**


G. ALEX AMBROSE, the Interim Coordinator of the Notre Dame ePortfolio Engagement Project (nDEEP), currently serves as an academic advisor and co-director of the Balfour Hesburgh Scholars Program in The First Year of Studies at the University of Notre Dame. He is a doctoral student in the Computing Technology in Education program at Nova Southeastern’s Graduate School of Computer and Information Sciences. Alex’s dissertation research examines the impact of advising ePortfolios on student engagement with first generation students. Alex is a Google Certified Teacher, Google Apps in Education Certified Trainer, and founder of Googlios.com. He is an active member of the Association for Authentic, Experiential and Evidence-Based Learning (AAEBL) and the National Academic Advising Association (NACADA). Alex has over a decade of teaching experience, ranging from diverse suburban and inner-city Blue Ribbon elementary schools to higher education institutions in private, state, and community colleges—both face-to-face and online. For more information, see his faculty portfolio at www.gAlexAmbrose.com

LAURA WILLIAMSON AMBROSE is an assistant professor of humanistic studies at Saint Mary’s College in Notre Dame, Indiana, where she teaches and writes on the literature and culture of the early modern period, both face-to-face and online. She also serves as a first-year faculty advisor to incoming students and a departmental advisor to Humanistic Studies majors. Her research interests include travel writing, Renaissance drama and prose, and the history of cartography. Inspired by the digital humanities, Laura incorporates project-based digital assessment and instruction into her Medieval, Renaissance/Reformation, and Restoration/Enlightenment literature seminars through the use of ePortfolios and collaborative online assignments. For more information, see her faculty portfolio at www.laurawilliamsonambrose.com.
Appendix A
Sample Advising ePortfolio Syllabus

First-Year Advising ePortfolio Independent Study
First Year of Studies, University of Notre Dame

Course Description:

In this one-credit First-Year ePortfolio Independent Self Study students will work with their advisors to design and develop their ePortfolios. The course will proceed as a hybrid course, utilizing both online and face-to-face instruction. The students’ ePortfolios will be used as a way to reflect on the learning process, document skills, set goals, make academic plans, and explore areas of interest. Before the end of the semester, students will modify their learning portfolios to become showcase portfolios (i.e., online enhanced resumes) that can be used as the basis for conversations with departmental advisors as well as applications for internships, research grants, summer positions, graduate schools, and/or first jobs.

Course Goals:

1. Build an advising ePortfolio for personal development, career planning, and lifelong learning.
2. Apply portfolio process and thinking skills to log evidence of student learning, skills, and growth through artifacts, reflections, and a matrix.
3. Increase student engagement and develop a self-managed, lifelong, and life-wide learning attitude across informal and formal a-curricular, co-curricular, extra-curricular spaces.
4. Navigate through the First Year of Studies Advising Milestones and develop an awareness and plan for achieving University Outcomes.

Blended Redesign Rationale and Justification:

This class utilizes a blended format. The primary online self-paced asynchronous instructional environment will be at a pace, place, and time convenient for the learner. The learner and advisor will agree and sign a learning contract to determine a schedule of weekly or bi-weekly ePortfolio conferences that will take place throughout the semester. During the one-on-one or small group visit, the students and advisor will meet by appointment in the advisor’s office. Students will use their ePortfolios to pre-engage and do their homework and begin some goal setting, reflecting, and academic planning before the advising session and ePortfolio conference. This will allow students to come in pre-engaged and prepared to make the face-to-face session more efficient, effective, and focused. The goals of this delivery environment are twofold: to have the students leave the advising session much more engaged and to allow advisors to follow up on goals, plans, and progress in the ePortfolio. Typically, a one-credit course meets for one hour over 14 weeks. The table below justifies and accounts for all the contact time substituted for traditional face-to-face class times and starting halfway through the semester. Here are the design goals and challenges that a blended redesign attempts to overcome:

- To reduce instructor-centered lecturing and increase inquiry and discourse.
- To decrease the time sitting passively in lectures and devote more time to active engagement in writing and reflection.
- To reduce synchronous class time and increase sustained, asynchronous communications to design more engaging and meaningful learning experiences.
- To increase communication challenges, online peer to peer collaboration/review, and opportunities to engage professor/advisor for individual help.
- To create a sustained community of inquiry that extends beyond the limited classroom opportunities and spans across informal and formal learning experiences and co/a/extra-curricular experiences.
- To gain cost and convenience efficiencies (e.g., print, distribution, instructors, classroom space).
- To promote more meaningful problem solving and authentic learning activities that relate to students’ own academic development.
• To create a course structure using an ePortfolio system that enables students to make deeper connections between the course materials and more meaningful engagement with peers inside and outside of the classroom.

<table>
<thead>
<tr>
<th>Component</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synchronous F2F Weekly Workshops (Classes)</td>
<td>3 x 2 hr. = 6 hrs.</td>
</tr>
<tr>
<td>Asynchronous Online Weekly Tutorials, Discussions, and Reflective Journals</td>
<td>6 x 1 hr. = 6 hrs.</td>
</tr>
<tr>
<td>Asynchronous F2F Individual Advisor ePortfolio Conferences</td>
<td>3 x 1 hr. = 3 hrs.</td>
</tr>
</tbody>
</table>
Appendix B
Sample ePortfolio Assignment for an Upper-Level Course

Assignment:

You will create your own ePortfolio website in which you organize, showcase, process, and share your work as a _____ major. The assignment will be broken down into three main parts: the site itself, weekly journal posts, and two reflections.

One of the most powerful aspects of ePortfolios is their dual function: they offer a way to process your learning and a space to showcase it. In other words, you have the opportunity to explain and to show what you do and how you do it. The very process of having to articulate and imagine one's purpose is itself a richly productive experience. Plus, they're fun to make. Dangerously, time-vortexingly fun.

Due:

Part 1: Building the ePortfolio – August 28
Part 2: Weekly Journal Posts – due on _____ (students vote on weekly due date)
Part 3: Hypertext Reflection – October 25
Part 4: ePortfolio Presentation – December 6

Goals:

1. To showcase, organize, and share your achievements, goals, and development as a _____ major and a ______ University/College student.
2. To practice thinking through writing and develop analytic thought, compile evidence, make connections, and track your own ideas regarding a particular topic or text in weekly journals.
3. To actively synthesize what you learn throughout the semester in this course and beyond.
4. To reflect on the tangible, “realistic” value of a _____ degree and, more broadly, a liberal arts education.
5. To apply crucial twenty-first century skills such as innovation, collaboration, web design, critical thinking, and communication to your study of ______.
### Appendix C
Advisor Support Systems

<table>
<thead>
<tr>
<th>System</th>
<th>Examples</th>
<th>Advising Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content Management Systems (CMS)</td>
<td>Drupal, Google Sites</td>
<td>Individual advisors or departmental advising units can use to develop and manage websites that can make college catalogs, academic policies and rules, and advising handbooks more accessible</td>
</tr>
<tr>
<td>Advisor Tracking Systems (ATS)</td>
<td>Microsoft Access, Starfish, Gradefirst, AdvisorTrac, Simplicity</td>
<td>Advisors can use customer relationship management (CM) tools or customize databases to manage advisee caseloads, rosters, and advisor notes; advisors can also run queries and export spreadsheets to conduct data analysis and tracking</td>
</tr>
<tr>
<td>Learning Management Systems (LMS)</td>
<td>Blackboard, Sakai, Moodle</td>
<td>Advisors can use to organize and manage their student caseloads, calendars, grade book, announcements, and assignments and to administer their syllabus</td>
</tr>
<tr>
<td>Assessment Management Systems (AMS)</td>
<td>Starfish, Gradefirst</td>
<td>Advisors can use as an early warning system for student tracking of test grades and attendance</td>
</tr>
<tr>
<td>Document Management Systems (DMS)</td>
<td>OnBase</td>
<td>Enterprise-level document content management that eliminates wasteful redundant tasks and paper-based filings so that advisors can access, review, annotate, and add to a completely digital admissions file hosted in the cloud</td>
</tr>
<tr>
<td>Graduation Progress Systems (GPS)</td>
<td>Degree Audit and Review Systems, Degree Navigator, and Oracle/People Soft</td>
<td>Advisors can conduct degree audits on declared or “what if” scenarios that track academic progress towards degree completion by matching transcripts to degree-program requirements</td>
</tr>
<tr>
<td>Transfer Articulation Systems (TAS)</td>
<td>TAURUS</td>
<td>Advisors can manage advanced placement and transfer credit evaluators</td>
</tr>
<tr>
<td>Career Guidance Systems (CPS)</td>
<td>DISCOVER, SIGI PLUS, Myers-Briggs Type Indicator, Inventories</td>
<td>Advisors and students can use computer-based career exploration tools such as and self-assessment instruments</td>
</tr>
</tbody>
</table>
## Appendix D

Advisor Delivery Technologies

<table>
<thead>
<tr>
<th>Technology</th>
<th>Examples</th>
<th>Advising Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synchronous Tools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart Phones</td>
<td>Android, Blackberry, iPhone</td>
<td>Advisors can use phone calls, texting, and apps to communicate, remind and interact with students</td>
</tr>
<tr>
<td>Instant Messaging (IM)</td>
<td>AOL, Google Talk, Meebo</td>
<td>Advisors can use synchronous chat to hold online drop-in hours and assist with questions</td>
</tr>
<tr>
<td>Webinars</td>
<td>Adobe Connect, Elluminate</td>
<td>Advisors can hold web-based synchronous group advising sessions in which students can hear and view a live presentation</td>
</tr>
<tr>
<td><strong>Asynchronous Tools</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mail &amp; Listservs</td>
<td>Outlook, Gmail, Google Groups</td>
<td>Advisors can use for individual or large group asynchronous messaging</td>
</tr>
<tr>
<td>Calendaring</td>
<td>Google Calendar, Youcanbook.me</td>
<td>If advisors use web-based calendars, students can utilize online booking and appointment reminders</td>
</tr>
<tr>
<td>GPA Calculators</td>
<td>Web-based, Excel Templates</td>
<td>Probation students can use to track their current and projected grade point averages</td>
</tr>
<tr>
<td>Schedule Builder</td>
<td>Schedulizer</td>
<td>Students and advisors can use to find possible course schedule combinations</td>
</tr>
<tr>
<td>Online Survey &amp; Forms</td>
<td>Google Docs Forms, Survey Money</td>
<td>Advisors can convert paper forms and surveys into online versions to expedite administering and improve data analysis and reporting</td>
</tr>
<tr>
<td>Social Networking Sites</td>
<td>Facebook, Ning</td>
<td>Advisors can build and manage an online community of learners</td>
</tr>
<tr>
<td>Blogs &amp; Twitter</td>
<td>Blogger, Wordpress</td>
<td>Advisors can broadcast and archive timely announcements, information, and resources; students can also subscribe and comment</td>
</tr>
<tr>
<td>Wikis</td>
<td>Google Sites, Wikispaces, Wetpaint</td>
<td>Advisors can manage their own FAQs, links, and resources</td>
</tr>
<tr>
<td>Podcasts</td>
<td>iTunes University, YouTube.edu</td>
<td>Advisors can use audio or video recordings of presentations or talks that students can listen to or watch asynchronously</td>
</tr>
<tr>
<td>Screencasts &amp; Slidecasts</td>
<td>Camstudio, Slideshare</td>
<td>Advisors can make recordings of their computer screen and PowerPoint presentations with audio narration to provide guided tutorials and tours on how to register online</td>
</tr>
<tr>
<td>ePortfolios</td>
<td>Google Sites, Maharra, Digication</td>
<td>Students can use as a personal learning system to organize goals, plans, and reflections; advisors can review to get better insight into the students</td>
</tr>
</tbody>
</table>