# Institutional change and leadership associated with blended learning innovation: Two case studies

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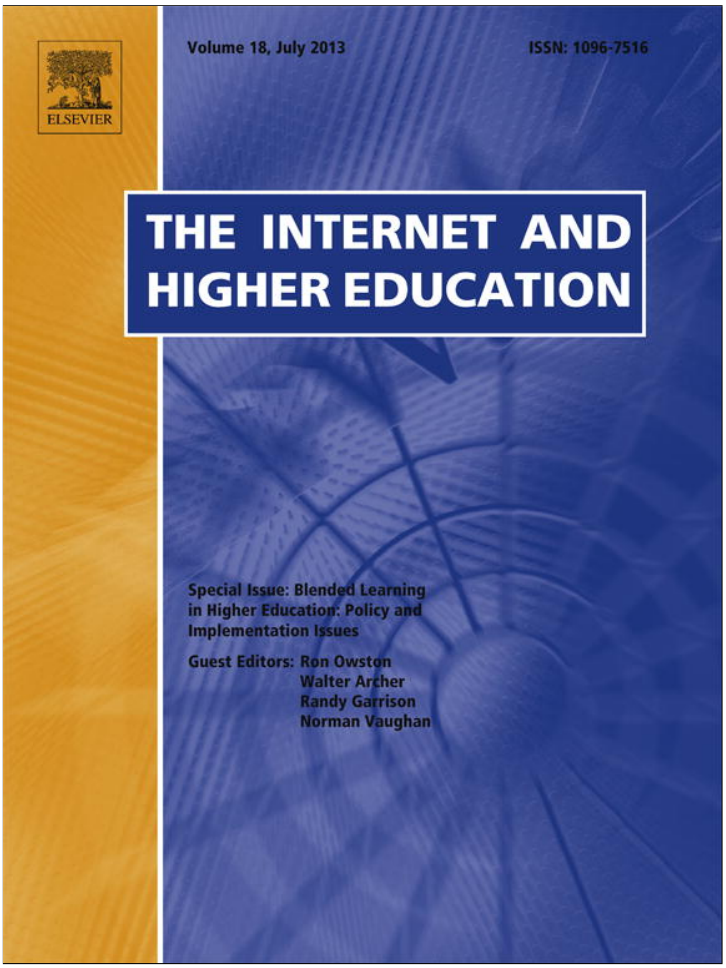

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# Institutional change and leadership associated with blended learning innovation: Two case studies

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ABSTRACT

This article documents the institutional change and leadership associated with blended learning innovation in higher education. Two case studies are provided that demonstrate how transformational institutional change related to blended teaching and learning approaches is predicated upon committed collaborative leadership that engages all levels of the institution.



## 1. Introduction

Nearly a decade ago it was argued that leaders in higher education were being challenged to position their institutions to meet the connectivity opportunities and expectations for higher quality learning experiences. At that time, blended learning approaches were being seriously considered as the means to effectively and efficiently transform higher education institutions (Garrison & Kanuka, 2004). The early research strongly supported blended learning to actively engage students in collaborative and higher learning experiences (Twigg, 2000). Moreover, the focus on engagement was consistent with the traditional values and principles of higher education. However, implementing blended learning approaches has proven to be daunting considering that higher education institutions are notorious resisters to innovation. For this reason, the adoption of transformational blended learning approaches demand clear organizational plans, strong leadership, and sustained commitment.

## 2. Blended learning defined

Before we address the organizational and leadership challenges of implementing blended learning approaches in institutions of higher education, let us take a moment to discuss what we mean by blended learning. The concise definition that guides us is that blended learning "is the organic integration of thoughtfully selected and complementary face-to-face and online approaches and technologies" (Garrison & Vaughan, 2008, p. 148). What is meant by this is that blended learning designs are informed by evidence based practice and the organic needs of the specific context. Based then on the grounded needs of the intended educational experience, the face-to-face and online means of communication are fused in a way that capitalizes on the strengths of each. Beyond this we prefer to not restrict what constitutes blended learning. The more productive innovation strategy is to be more inclusive than restrictive as to what constitutes blended learning.

## 3. Organizational change

The great challenge is to understand the nature of higher education institutions and the possibilities of change associated with blended learning. One of the great resistors to the adoption of technological change in higher education is the argument that there is not sufficient evidence for such innovation. With regard to blended learning, this is not a defensible position (Garrison & Vaughan, 2008; Picciano & Dziuban, 2007; Twigg, 2003). The fact is that blended learning has been shown to have an advantage to face-to-face learning experiences (Means, Toyama, Murphy, Bakia, & Jones, 2010). Blended learning is a legitimate teaching and learning approach that has been adopted by a vast majority of higher education institutions (Arabasz & Baker, 2003).

While blended learning is common to higher education, it has not resulted in organizational change that significantly enhances the effectiveness and efficiency of the teaching and learning transaction. In analyzing change and technology in higher education, Marshall (2011) makes the observation that there is little evidence of critical self-reflection despite the obvious affordances of information and communications technology. Institutions have relied too often on

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the early adopter, "but have failed to provide systems and environments that result in wider adoption of successful ideas" (Marshall, 2011, p. 31). Critical self-reflection must begin with using the experiences of students and faculty to frame institutional change associated with learning technologies. In this regard, the key element to institutional change is strong leadership.

## 4. Leadership

Significant pedagogical benefits of blended learning can be achieved with commitment. The reality is that blended learning approaches that capitalize on engagement and the technological means are readily apparent and accessible. The key is sustained collaborative leadership. There are, however, institutional challenges that include policy, resource, action plans, and faculty support issues. The process must begin with raising awareness of the benefits and necessity of adopting blended learning approaches. This can be initiated by bringing to campus credible experts who have provided the theoretical and practical blended learning leadership. Raising awareness can be done concurrently with drafting policy documents but must be done in an open and collaborative manner.

As important as the drafting of policy and position papers, the rubber hits the road through specific strategic action plans. Such action plans must be properly resourced, achievable, and sustainable. There must be evidence of early successes that senior leaders can use to address the inevitable resistance to change and sustain the innovation. From the perspective of the faculty member, there must be instructional development support, and incentives that include academic recognition. While many blended learning projects will rightly focus on individual course redesign and support, considerable strategic advantage can be gained by considering blended approaches to program (re)design (i.e., a combination of face-to-face and online courses).

At the core of blended learning approaches are new and emerging developments in information and communications technology. It is these technological affordances that have created the enormous potential for blended learning to address the deficiencies of large lectures that have become the norm in undergraduate higher education. Notwithstanding this fact, it is imperative for leaders to focus on the teaching and learning transaction. Moreover, it is important that technology does not become a barrier to the adoption of blended learning. Faculty must be provided ongoing technology support and be assured that they will not have to learn and manage the technology alone. Faculty must be able to focus on the educational benefits of blended learning designs that would include increased personal interaction with students.

## 5. Case study I

To help understand leadership implications of implementing blended learning designs at a strategic level, we first focus on a four year project at a Canadian higher education institution. This institutional initiative began with raising awareness within the campus community through public presentations by recognized international experts. Concurrently, an instructional development committee began to draft an institutional learning plan and blended learning position paper. This process was not rushed and in the second year a funding program was initiated based upon proven design methodology (collaborative approach, evidence based, thoughtful adoption of technology, rigorous evaluation). This was a competitive program based on clear criteria and a request for proposals. The emphasis was on enhancing and extending engagement in the teaching and learning transaction. An average of 13 projects was funded over the next four years (Vaughan & Garrison, 2006).

The next challenge was to provide the instructional support that would guide instructors who had little experience with blended learning approaches and the technology that made it possible. In order to facilitate this process an inquiry through blended learning (ITBL) approach was adopted (Vaughan, 2010). This approach consisted of four phases that were adapted from Garrison, Anderson, and Archer's (2001) Practical Inquiry model (see Fig. 1).

### 5.1. Triggering event

Garrison et al. (2001) describe a triggering event as a "state of dissonance or feeling of unease resulting from an experience" (p. 21). Discussions with instructors indicated that the triggering event for participation in this blended learning program was the motivation to redesign an existing course to improve student learning and instructor satisfaction. An initial project meeting was held with each instructor and their teaching assistants as well as representatives from the institution's teaching and learning centre, library, and information technology department. The purpose of this meeting was to clarify the project goals, timelines, roles, and responsibilities for those involved in supporting the redesign process. This meeting also helped to identify the professional development support needs and requirements of the project team members. The three questions that were used to stimulate the discussion were:

1. What is your definition of blended learning and how will this concept be operationalized in your course redesign project?
2. What will be the advantages (for both students and professors) of your course redesign?
3. What do you perceive will be some of the challenges you will encounter with your project?

### 5.2. Exploration

The second phase of the Practical Inquiry model is exploration, characterized by "searching for clarification and attempting to orient one's attention" (Garrison et al., 2001, p. 21). The exploration phase of this blended learning program consisted of a series of integrated face-to-face and online experiential learning activities that allowed the instructors to become immersed in a blended learning environment from a student's perspective. This process took place over an extended period of time, a minimum of six months, and the activities were developed based on the feedback from the initial project meetings and in collaboration with the faculty participants in the program. These program activities were designed to provide participants with experience and expertise in the areas of curriculum design, teaching strategies, and educational technology integration (see Fig. 2).

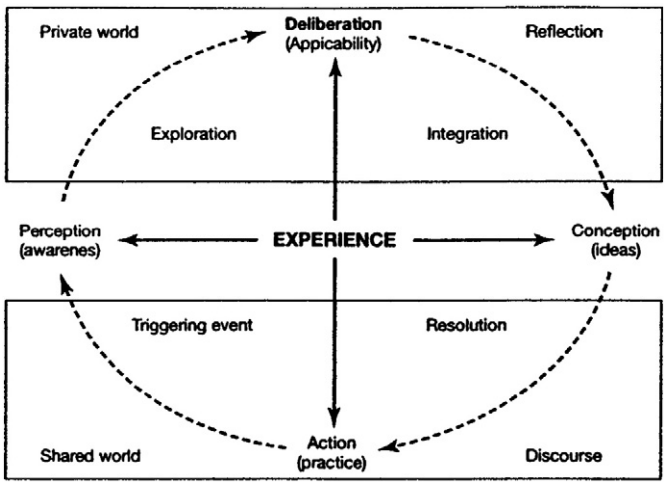


**Fig. 1.** Practical Inquiry model.

### 5.3. Integration

The third phase was integration, which involved "reflecting upon how the new information and knowledge discovered could be integrated into a coherent idea or concept" (Garrison et al., 2001, p. 22). A common challenge for instructors involved in this blended learning program was the transition from the exploration to the integration phase. Many faculty members were comfortable sharing, discussing, and debating course redesign concepts but often a greater effort was required to transfer these new ideas into practice. One strategy used in this program involved monthly lunch meetings where instructors were required to regularly present project artifacts, such as their course outline or an assessment activity, to the rest of the community. This forced the instructors to make redesign decisions and to create course-related resources. This "show and tell" process also allowed them to get valuable feedback from their peers about the artifact. In addition, opportunities were provided to pilot portions of the projects with students who could provide insightful comments about the usability and educational value of a learning activity or resource.

### 5.4. Application/resolution

The resolution of the dilemma or problem is the fourth phase of the Practical Inquiry model. Garrison and Anderson (2003) suggest that the results from this phase often "raise further questions and issues, triggering new cycles of inquiry, and, thereby, encouraging continuous learning" (p. 60). The application and resolution phase of this blended learning program involved the implementation and evaluation of the course redesign project. This is the phase that is often overlooked in professional development programs. In many programs, instructors receive support for the design and development of their projects but the implementation stage takes place after the program has been completed (Murray, 2002). Thus, instructors are left on their own to struggle through the initial implementation of their course (re)design and, in most cases, little or no evaluation is conducted to determine the effectiveness of the project from either a student or instructor perspective.

To overcome these deficiencies, blended learning program support was maintained throughout this phase and the participants intentionally engaged in the process of the scholarship of teaching and learning (SoTL) (Hutchings, Huber, & Ciccone, 2011). In order to facilitate this process, a discussion about the SoTL approach was conducted in one of the early face-to-face monthly luncheon meetings. These conversations involved other instructors who had prior experience with SoTL projects and thus could demonstrate their study processes and results. Instructors were encouraged to engage in the SoTL process from the outset of their course (re)design projects. By receiving institutional ethics approval at the beginning of the course (re)design process, project teams were able to collect data in the form of surveys, interviews, and focus groups with students, instructors, and teaching assistants who had been involved in past iterations of the course. Several projects were also able to obtain data regarding student grades and withdrawal/drop rates for comparison with the traditional sections. The collection and analysis of this data allowed the project team to make informed course design decisions, such as the proper selection and integration of face-to-face and online learning activities.

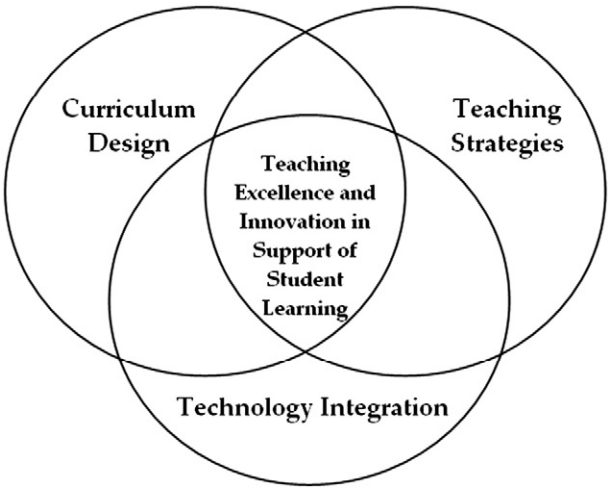


**Fig. 2.** Course redesign outcomes for faculty participants.

Early evaluation findings revealed that faculty most liked the increased access and flexibility as well as the variety of approaches. The single dislike, notwithstanding the considerable design support they received, was the increased workload on the front end. None of these findings were unexpected. What is apparent is that significant course (re)design is an enormous challenge and it is unrealistic to ask most faculty members to participate in these activities without release time and/or resources such as a teaching assistant.

On the other hand, students reported that the most significant positive outcome was the quantity and quality of interaction with both fellow students and the instructor. This was satisfying for both students and faculty since it reflected the core goal of the blended learning initiative. Negative results pointed to unclear expectations for students and heavy workload for faculty members. Both of these concerns were likely related to the fact that this was a very different approach to what they were used to (i.e., passive lecture). Students were now expected to take greater responsibility for their learning and engage in reflective discourse. Moving forward, the challenge was to provide clear expectations and direction.

A year after the four year initiative was discontinued, a survey was conducted with the instructors of each of the 51 blended learning projects (across all faculties). The findings of the survey indicated that 95% of the faculty found the program useful; 89% of faculty changed their course design (63% substantially); 89% of faculty thought that student learning was enhanced; and 89% thought the course redesign had a long-term impact on the success of the course. These findings confirm the consistent results of other blended learning design initiatives.

Finally, this project would not have been possible without strong institutional and collaborative leadership. At the same time, this highly successful blended learning initiative abruptly ended with changes in the senior leadership responsible for teaching and learning. New leadership did not have the same commitment to blended learning and a great opportunity was lost just as the initiative was reaching a tipping-point in terms of institutional transformation. The main insight here and realization is the challenge to sustain leadership and commitment in an institution of higher education where leadership changes relatively frequently. This is essential with the inherent focus on research and the reluctance of faculty to move away from the lecture. To be fair, faculty members are not sufficiently recognized and rewarded for adopting more engaged approaches to teaching and learning nor are they provided sufficient professional development support to incentivize them to significantly transform their teaching. The bottom line is that significant change is dependent upon collaborative leadership who can provide a clear vision, specific action plans, teaching recognition, and the resources to make this happen.

## 6. Case study II

The second case study describes a blended learning initiative that has taken place over a ten year period at another Canadian higher education institution. This program was originally championed by the institution's Teaching, Learning, and Technology Roundtable (TLTR — http://www.tltgroup.org/tltr.htm). The TLTR was chaired by the Academic Vice President and was composed of students, faculty members,

and representatives from the teaching and learning centre, library, information technology department, bookstore, and the registrar's office. This group had observed that faculty members were beginning to use the institution's learning management system to support a number of online learning activities. Based on this trend, the TLTR developed an institutional definition for blended delivery:

> Blended delivery courses combine the best features of classroom-based teaching and learning with the best features of online learning in order to enhance the educational experience and give students added scheduling flexibility. A key feature of blended delivery courses is a reduction in scheduled classroom or lab time, usually by 25 to 50%.

Funding was then secured from the Office of the Academic Vice President to help the teaching and learning centre support ten faculty members a year in the redesign of one of their courses for blended delivery. Each of the faculty members was supported on an individual basis by an instructional designer. The evaluation feedback received from students and faculty members after implementation of the redesigned courses was mixed. Students indicated that these blended courses provided them with more flexibility but they expected that less class time would equate to less work and were frustrated to discover the opposite. Faculty members commented that the blended courses provided them with multiple opportunities to increase communication with the students but they encountered a number of technical challenges with the learning management system. In addition, a major concern that the TLTR had with this approach to course redesign was the lack of sustainability. The faculty members involved in the program only received an initial funding grant (usually in the form of a course release) and very few continued offering their redesigned course in a blended format once they finished the grant program citing concerns over workload and lack of ongoing support.

Based on these outcomes the blended learning initiative was substantially revised. The first key element was to strategically focus on redesigning high enrollment first year courses for blended learning rather than on just selecting a random set of courses based on faculty interest. The second component was to employ a faculty learning community rather than an individual faculty member approach to the redesign process. And, the third element was to clearly link the program to the institution's academic plan, which focuses on student success and engagement in undergraduate programs of studies.

Through discussions with students, faculty members, administration, and the institution's office for institutional analysis and planning, seven courses were identified for redesign. These were all first year high enrollment courses and represented all six Faculties in the institution (Arts, Business, Communications, General Education Science, Health & Community Studies, Science). Garrison, Anderson, and Archer's (2000) Community of Inquiry (CoI) framework was utilized by the teaching and learning centre to support the faculty members involved in redesigning the seven courses (Vaughan, 2004). When this framework was applied to a faculty learning community the focus of the cognitive presence became an inquiry process into one's teaching practice. The ability of the community to support and sustain this inquiry forms the social presence. And, the opportunities for blended learning are encapsulated within teaching presence. The following figure and table illustrate how the CoI framework was applied to this faculty learning community (see Fig. 3 and Table 1).

In order to evaluate levels of student engagement, the institution annually conducts the National Survey of Student Engagement (NSSE) for both the first year and graduating year students. The NSSE defines student engagement as the amount of time and effort that students put into their academic studies that lead to experiences and outcomes that constitute student success, and the ways the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities. Five clusters of effective educational practice have been identified based on a meta-analysis of the literature related to student engagement in higher education. These benchmarks are (NSSE, 2011):

1. Active and collaborative learning
2. Student interactions with faculty members
3. Level of academic challenge
4. Enriching educational experiences and
5. Supportive campus environment.

The first three benchmarks were used to evaluate student perceptions of engagement in the high enrollment courses redesigned for blended learning using the Classroom Survey of Student Engagement (CLASSE — source). These perceptions of engagement were then compared to the students' final grades in the blended courses. To probe the association between grades and these three benchmarks of engagement, one-way ANOVA was conducted to test for differences in final grade by scale score quartile. As shown in Fig. 4, differences in final grade were statistically significant for the Academic & Collaborative Learning Benchmark score quartile. A 10% differential in mean final grade is noted between students in quartile 1 and students in quartile 4. Effect size (Cohen's d) was moderate in magnitude. No causal relationship is implied but it is interesting to note that those students who perceived a higher level of active and collaborative learning in the redesigned courses were also those who were the most successful (Vaughan, Zimmer, & Villamar, 2011).

In order to sustain these seven redesigned courses, each of the six Faculties has taken over responsibility for maintaining these courses by working in partnership with the institution's teaching and learning centre, information technology department, and the library.

Similar to Case I, this blended learning program would not have been possible, or most importantly sustained, without collaborative and distributed institutional leadership. Other key themes include directly linking the blended learning initiative to the institution's vision and mission, taking a community approach to faculty development, and including an experiential learning component for faculty members involved in the redesign process.

## 7. Conclusion

Blended learning (re)design initiatives have enormous potential to address a number of teaching and learning challenges facing higher educational institutions. There is a growing recognition that institutions need to engage students in more active, inquiry based

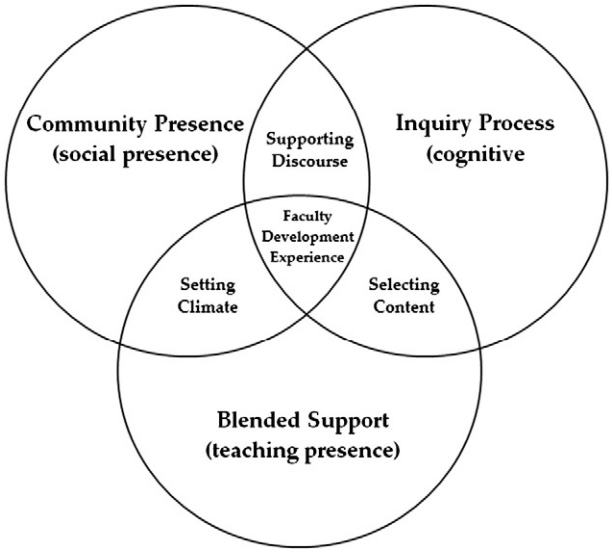


**Fig. 3.** Community of inquiry framework applied to a faculty learning community (modified from Garrison et al., 2000).

**Table 1**
Community of inquiry framework applied to a faculty learning community (modified from Garrison et al., 2000).

| Sphere | Description | Category/phase | Indicators |
|---|---|---|---|
| Inquiry process (cognitive presence) | The extent to which faculty are able to construct and confirm meaning through sustained reflection, discourse, and application within a critical community of inquiry. | 1. Triggering event | 1. Inciting curiosity and defining key questions and/or issues for investigation |
| | | 2. Exploration | 2. Exchanging and exploring perspectives and information resources with faculty colleagues |
| | | 3. Integration | 3. Connecting ideas through individual project construction |
| | | 4. Resolution/application | 4. Applying new ideas directly within one's teaching practice |
| Community (social presence) | The ability of faculty in a community of inquiry to project themselves socially and emotionally as 'real' people (i.e., their full personality), through the medium of communication being used. Faculty learn best from each other. | 1. Establishing trust and respect | 1. Expressing emotions |
| | | 2. Open communication | 2. Risk-free expression |
| | | 3. Group cohesion | 3. Fostering collaboration |
| Blended model (teaching presence) | The design, facilitation and direction of the inquiry and community processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes for faculty within an environment which carefully integrates face to face and online sessions and activities. | 1. Organization & design of the faculty development program | 1. Setting curriculum and methods |
| | | 2. Facilitating discourse within the community | 2. Stimulating and sustaining the sharing of personal meaning and insights |
| | | 3. Providing direct instruction for faculty participants | 3. Modeling and focusing discussion, activities and project construction |

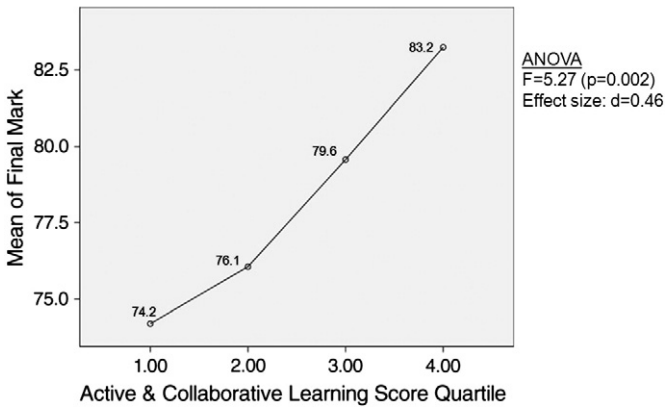


**Fig. 4.** Final course grades by Active and Collaborative Learning (ACL) benchmark score quartile.

educational experiences. This is becoming more evident as undergraduate class sizes increase along with student dissatisfaction with their learning experiences. In the final analysis, transformational institutional change related to blended teaching and learning approaches is predicated upon committed collaborative leadership that engages all levels of the institution. It has been noted that innovative institutions are driven by thoughtfulness and creativity to realize potential (Collis, 2001). That is, leaders collaboratively create strategic direction and have the courage and commitment to implement and sustain specific action plans. Blended learning innovation demands nothing less.

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