

# Learning Proficiency of Visionary Leadership for Blended Learning: A case study in Taiwan

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## Abstract

The purpose of this study was to determine how the relationship between visionary leadership and blended learning affects and enhances traditional and technological learning proficiency in Taiwanese colleges. The respondents comprised 261 participants, and the response rate was 66.1%. The results show that visionary leadership exerts a statistically significant effect on traditional learning proficiency. Furthermore, there is no difference between two cases of public and private colleges' visionary leadership and blended learning for traditional and technological learning proficiency.

**Keywords:** visionary leadership, blended learning, traditional learning proficiency, technological learning proficiency, Taiwan

## Introduction

Entrepreneurship education is an important stage in changing individuals from thinkers to doers, especially when college students have visionary leadership training. This training can increase the intention to start a business and help individuals respond to psychological stress. Visionary leadership can be observed in numerous facets of society, government, and business as well as in social change movements, community groups, and religious organizations (Kirkpatrick, 2011; Venus, Stam & Knippenberg, 2019). Furthermore, visionary leadership contributes to the development, communication, and implementation of a vision for the technological education of all students (International Society for Technology Education, 2011). Visionary leadership is considered an aspect of leadership and involves a future-oriented, long-term commitment to affect organizations and institutions, including universities (Strange & Mumford, 2002; Esen, Bellibas & Gumus, 2020).

Technologies have been used in higher education for decades. Universities have adapted traditional teaching methods and currently offer a mix of face-to-face and online learning possibilities (Ossiannilsson, 2018). Blended learning is becoming a popular method in higher education that involves challenges with regard to the online component from the perspective of students, teachers and educational institutions (Sahni, 2019; Rasheed, R. A., Kamsin, A. & Abdullah, N. A., 2020). Blended learning also increases and enhances learning and extends reach, flexibility, participation, motivation, and cost-effectiveness (Hanover Research, 2011; Michael, Kenneth, & Steven, 2008). Most school leaders believe that technologies provide their schools with various benefits. Technologies play a major role in classrooms and can be integrated with traditional learning methods to change higher education institutions. In addition, many school leaders consider technologies to be a tool for improving productivity and efficiency (Consortium for School Networking, 2012).

The blended approach is a learning application that integrates technologies and traditional classroom teaching. It is a method of classroom teaching and learning that enhances traditional teaching methodologies, including face-to-face activities in a regular classroom (Saeheng, 2017). Learning proficiency for traditional learning may involve written, oral, and practical proficiency. Technology learning proficiency includes grid tests, investigations, essays, observations, reports, portfolios, and projects (Letitia, 2012).

The significant element in blended learning is a suitable balance of traditional teaching methods and techniques for learning proficiency. Therefore, the purpose of this study is to determine how the relationship between visionary leadership and blended learning affects and enhances traditional and technological learning proficiency in public and private colleges in Taiwan. Because blended learning is becoming a trend in higher education in Taiwan, this paper discusses how visionary leadership influences blended learning in public and private colleges.

## Literature Review

### Visionary leadership

Nanus (1992) formally proposed the term "visionary leadership" and emphasized that of all leadership functions, vision should have the most profound impact on leaders. Visionary leaders are responsible for (1) committing to a vision; (2) empowering employees to act; (3) getting the organization into a position to achieve its greatest potential; (4) listening and watching for feedback; and (5) establishing the organization's direction. Senge et al. (1994) emphasized that a conceptual theory of visionary leadership is involved in creating a shared vision and postulated that human behavior in organizations is shaped by a vision for an improved future. Leaders should create visions that are imaginative, focused, feasible, desirable, flexible, and communicable (Chadron State College, 2012).

Kirkpatrick (2011) identified eight visionary leadership models: (1) adapting; (2) developing the organization; (3) empowerment; (4) image building; (5) intellectual stimulation; (6) risk-taking; (7) role modeling; and (8) support. Manning and Robertson (2002) described five facets of the visionary model of leadership: (1) communicating a compelling vision; (2) interpersonal issues: reciprocal communication, orientation toward people, participative style, and high visibility; (3) kaleidoscopic thinking, based on a focus on the surrounding environment, the source of the vision; (4) macro issues: networking, teamwork, and promotion of a culture of excellence; and (5) personal traits, including positive self-regard, persistence, perseverance, and consistency.

Researchers have identified the skills required for technological leadership (Davies, 2010). A wide consensus is that visionary leadership is a key vehicle for leaders to set visions and build toward the future to motivate followers to support organizational change

and higher education research (Center for Creative Leadership, 2016; Ossiannilsson, 2018; Venus, Stam & Knippenberg, 2019; Esen, Bellibas & Gumus, 2020). These authors found that leaders who communicate visions of change can address this resistance by assuring followers that the essence of the organizational identity will remain unchanged. The visionary leadership model is depicted as three interlocking circles, each representing an interrelated area of the curriculum: essential studies, specialty studies, and professional studies (Chadron State College, 2012).

However, schools have over-relied on transformational models of teaching leadership that stressed the role of charismatic individuals in establishing compelling visions to which all organizational actors were expected to subscribe. Such approaches paid insufficient attention to the dynamics of power, the influence of context, and the significance of followers' dissent and resistance (Collinson & Tourish, 2015).

### Blended learning

Blended learning is defined as a formal education program in which a student learns through the online delivery of content and instruction that the student can control in terms of the time, place, path, and supervised brick-and-mortar location away from home. People perform well when they have a mix of methods and modalities of learning. "Learning theories isn't like religion", and people do not learn through a single method (Carman, 2005). Blended learning can be broadly defined as the continuum between traditional face-to-face teaching and pure online distance courses, but a more complex definition must also include the concept of integrating the strengths of synchronous and asynchronous learning activities in a thoughtful design (Innosight Institute, 2012; Joanna, 2012; Mozelius & Hettiarachchi, 2017).

Blended learning is described as a way to meet challenges, tailor learning needs and development and integrate technological and innovative online learning with participation and interaction in traditional learning (Thorne, 2003; Rasheed, Kamsin & Abdullah, 2020). The framework for institutional blended learning adoption has three stages: (1) awareness/exploration, (2) adoption/early implementation, and (3) mature implementation/growth (Porter & Graham, 2016). In this respect, blended learning encourages students to be active and deeper learners and mitigates the disadvantages of poorly designed online programs. Many studies have shown that the development of blended learning models can increase access and flexibility for learners, thereby increasing the level of active learning and improving learning outcomes (Win & Wynn, 2015; Nortvig, Petersen & Balle, 2018; Tubagus, Muslim & Suriani, 2019).

However, blended learning has advantages and disadvantages for visionary leadership in higher education. Comprehensive blended learning requires the intensive use of resources, such as time, trainers, and money, which may not benefit organizations with limited resources. Requiring expertise for blended learning systems is unlikely to be appropriate for learners who are unfamiliar with instructional technologies and who lack internet skills (Michael, Kenneth & Steven, 2008). Furthermore, blended learning involves fewer social interactions, feedback, opportunities for explanation and clarification during courses, and humanistic qualities, decreases communication skills (Shafqat, Atta & Andrea, 2008; Hen, 2012; Boelens, Wever & Voet, 2017), and may result in low pass rates and poor learning outcomes (Henrie, Halverson, & Graham, 2015; Mozelius & Hettiarachchi, 2017). There are many foreseen and unforeseen challenges involving sufficient infrastructure, technological support, pedagogical support, interactions with students, administration, and the course itself (Merrills, Cooper & Bird, 2015; Porter & Graham, 2016; Halverson & Graham, 2019; Ibrahim & Nat, 2019).

### Traditional and technological learning proficiency

Traditional learning established a prevailing type of educational process in higher education. In the last two decades, the information age changed traditional educational approaches (Lukman & Krajnc, 2012). Technologies enable students to become more active and independent in organizing their learning processes. Academic subjects in numerous domains are blended, and technological learning has become prevalent throughout curricula (Moeller & Reitzes, 2011). Traditional learning is simple, convenient, and improves communication skills, and learning goals are identified. However, traditional learning is limited by the instructor's professionalism. Teachers translation of belief into practice is hampered by a lack of proficiency and opportunity (Deneen, et al., 2019). Technological learning overcomes the limitations of space, and multimedia learning increases interaction (Chen, 2012). Blended learning is a combination of traditional and technological teaching methods (Saeheng, 2017). Consequently, blended learning could be used as an effective way to deliver good-quality instruction because it offers educators and students a technology-based approach to enhance students' visionary leadership and learning proficiency.

### Method

#### Research questions and hypotheses

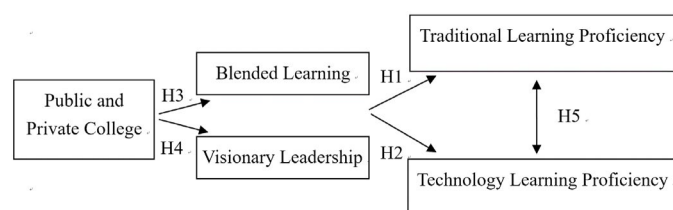
Merrills, Cooper and Bird (2015) identified four learning components to cultivate visionary leadership. These components are creativity, computer and technological skills, reflective teaching, and critical thinking. This is why blended learning is so important and can cultivate visionary leadership. The Center for Creative Leadership (2016), Klempin and Karp (2018) and Ossiannilsson (2018) have noted that the style and focus of leadership must transform to provide a variety of customizable blended learning options that combine formal and informal learning to maximize impact and to prepare learners for a dynamic world that is socially connected by digital technology, especially for technology-mediated reform. Visionary leadership can succeed in digital transformation when learners take ownership of their learning.

Some studies have focused only on the change of visionary leadership for higher education leaders (Klempin & Karp, 2018) and the leadership pedagogy of teachers (Collinson & Tourish, 2015) or technology staff leaders, such as technical education administrators (Fleck, Threeton & Ewing, 2019) and librarians (Wine, 2016). Other studies focus on the institutional drivers and barriers of blended learning adoption (Win & Wynn, 2015; Porter & Graham, 2016, Ibrahim & Nat, 2019). With regard to the leadership of students, most studies have evaluated students' engagement in technology-mediated or online learning (Ashbaugh, 2013; Henrie, Halverson & Graham, 2015).

Two research questions guide this study:

- (1) Do students engage in integrated blended learning and visionary leadership to improve learning proficiency, whether traditional or technological?
- (2) Is there a difference between public and private colleges' visionary leadership and blended learning for traditional and technological learning proficiency?

This study developed a hypothesized model of colleges, visionary leadership, blended learning, technology learning proficiency, and traditional learning proficiency (**Figure 1**). The hypotheses are as follows.



**Figure 1.** The proposed research model.

H1: Visionary leadership and blended learning exert a statistically significant effect on traditional learning proficiency.

H2: Visionary leadership and blended learning exert a statistically significant effect on technological learning proficiency.

H3: In these two cases, public colleges provide a greater explanation for the relationship between visionary leadership and blended learning for traditional learning proficiency than private colleges do.

H4: In these two cases, public colleges provide a greater explanation for the relationship between visionary leadership and blended learning for technological learning proficiency than private colleges do.

H5: Visionary leadership and blended learning exert a statistically significant effect on technological and traditional learning proficiency.

## Measurement

A nonexperimental, quantitative research design was used to explore the relationships among visionary leadership, blended learning, technological learning proficiency, and traditional learning proficiency. All 31 questionnaire items in this study utilized a five-point Likert-type scale with anchors of “strongly disagree” (1) and “strongly agree” (5) and were tested and found to have acceptable reliability.

## Sampling

According to the Taiwan Ministry of Education Department of Statistics (2020), over 100,000 students have taken the national university entrance exam, which represents approximately 66.6% of university students. The study population comprised 261 participants, and the response rate was 66.1%. The sample consisted of students enrolled in the National Taichung University of Education and the private Toko University in Taiwan.

## Instruments

The visionary leadership dimensions were developed by Cinar and Kaban (2012). Blended education was measured using the Blended Learning Toolkit developed by Cavanagh (2011). Technological learning proficiency was measured using the Technology Proficiency Survey (TPS) developed by Cummings, Kalkman, Densch, Underwood, Boelcke, and Conway (2003). Traditional learning proficiency was measured using the lecture teaching method developed by Carpenter (2006). Statistical testing was conducted using SPSS version 22.0.

## Results

### Reliability and construct validity analysis

The Cronbach’s alpha values for internal consistency among all variables ( $\alpha = 0.914$ ), indicating acceptable reliability. All of the values are higher than 0.70, indicating that internal consistency is satisfactory. The results of KMO and Bartlett’s test of sphericity. The values of KMO for visionary leadership, blended learning, technological learning proficiency, and traditional learning proficiency are 0.854, 0.850, 0.900, and 0.853, respectively.

### Two-way analysis of variance: H1 and H2

As shown in Table 1, a two-way analysis of variance (ANOVA) indicates statistical significance ( $p = .000$ ), supporting H1 regarding

visionary leadership, blended learning, and traditional learning proficiency. Visionary leadership and blended learning exert a statistically significant effect on traditional learning proficiency.

As shown in Table 2, a two-way ANOVA indicates no statistical significance ( $p = .419$ ), rejecting H2. Visionary leadership and blended learning do not exert a statistically significant effect on technological learning proficiency.

### Multiple regression analysis: H3 and H4

As shown in Table3, the multiple regression analysis indicates that the Adjusted R squared value of the model accounts for 14.5% of the variance in public colleges and 25.1% in private colleges for visionary leadership, blended learning, and traditional learning proficiency, statistical significance ( $p > .001$ ) rejecting H3. In these two cases, public colleges do not provide a greater explanation for the relationship between visionary leadership and blended learning for traditional learning proficiency than private colleges do.

As shown in Table 4, the multiple regression analysis indicates that the Adjusted R squared value of the model accounts for 10.7% of the variance in public colleges and 22.3% in private colleges for visionary leadership, blended learning, and technological learning proficiency, statistical significance ( $p > .001$ ) rejecting H4. In these two cases, public colleges do not provide a greater explanation for the relationship between visionary leadership and blended learning for technology learning proficiency than private colleges do.

### Two-way multivariate analysis of variance: H5

The two-way multivariate analysis indicates statistical significance ( $p = .000$ ), as shown in **Table 5**. Therefore, H5 is supported for visionary leadership, blended learning, and technological and traditional learning proficiency. Visionary leadership and blended learning exert a

**Table 1.** Two-Way ANOVA of Visionary Leadership, Blended Learning, and Traditional Learning Proficiency

Source	Type III Sum of Squares	df	Mean Square	F	P
Corrected Model	44.538(b)	13	3.426	8.384	.000
Intercept	317.913	1	317.913	777.995	.000
VisionaryLeadership(V)	6.526	3	2.175	5.323	.001
BlendedLearning(B)	3.146	4	.787	1.925	.107
V*B	12.944	6	2.157	5.279	.000
Error	100.523	246	.409		
Total	3558.000	260			
Corrected Total	145.062	259			

a Computed using alpha = .05

b R Squared = .307 (Adjusted R Squared = .270)

**Table 2.** Two-Way ANOVA for Visionary Leadership, Blended Learning, and Technology Learning Proficiency

Source	Type III Sum of Squares	df	Mean Square	F	P
Corrected Model	32.398(b)	13	2.492	6.236	.000
Intercept	405.615	1	405.615	1014.929	.000
VisionaryLeadership(V)	2.160	3	.720	1.802	.147
BlendedLearning(B)	10.451	4	2.613	6.538	.000
V*B	2.424	6	.404	1.011	.419
Error	98.713	247	.400		
Total	4784.000	261			
Corrected Total	131.111	260			

a Computed using alpha = .05

b R Squared = .247 (Adjusted R Squared = .207)



**Table 3.** Multiple Regression analysis of Public and Private College of Visionary Leadership, Blended Learning for Traditional Learning Proficiency

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
Public	.397(a)	.158	.145		.682
Private	.513(a)	.263	.251		.657

**Table 4.** Multiple Regression Analyses of Public and Private College of Visionary Leadership, Blended Learning for Technology Learning Proficiency

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Public	.347(a)	.121	.107	.591
Private	.485(a)	.235	.223	.664

**Table 5.** Two-way MANOVA analysis of Visionary Leadership, Blended Learning, Technology, and Traditional Learning Proficiency

Variable Parameter	df	SSCP	Multivariate Test	F Value Technology Proficiency	F Value Traditional Proficiency
Visionary Leadership(V)	3	(1.873 3.286) 3.286 6.526	3.366a		
Blended Learning(B)	4	(11.591 5.246) 5.246 3.146	4.488a		
V*B	6	(3.091 1.338) 1.338 12.944	3.233	1.315	5.279
Error	246	(96.332 .564) .564 100.523			

statistically significant effect on technological and traditional learning proficiency.

## Discussion and Conclusion

The findings of past studies showing the strong relationship of blended learning with learners' characteristics and proficiency (Sahni, 2019). If instructors promptly guide learners in conducting additional explorations by using instructional design, adequate guidance, and direct teaching, learners can gain enhanced critical thinking skills (Letitia, 2012). As Steele and White (2019) noted, advising programs could align students' programmatic goals and focus on implementing practices to achieve them. Fleck, Threeton, and Ewing (2019) found that learning is an interactive and social activity. Instead of selecting a pedagogical model such as constructivism, constructionism, connectivism or problem-based learning that is appropriate for all blended learning implementations, the choice of critical factors should involve the selection of instructional design and teacher activity (Mozelius & Hettiarachchi, 2017). Students prefer more active learning approaches, such as personal devices, social media, and online tools, than traditional approaches. However, there are multiple stakeholders in blended learning. Therefore, we should consider many perspectives, including university, learner, teacher, and global perspectives. Win and Wynn (2015) found that only 25% of students would like to have more blended courses. It might be concluded that most students are not comfortable with online activities, and they still prefer traditional classes.

However, blended courses provide more flexibility and convenience for online courses while retaining the benefits of the face-to-face classroom experience (Cavanagh, 2011). Promoting social interaction in blended learning is thus an important issue, and face-to-face activities are often implemented to provide students with organizational information and to clarify expectations (Boelens, Wever & Voet, 2017). Visionary leadership still needs to articulate goals and objectives, share new ideas about the organization's future, and train exciting speakers. Moreover, traditional learning is simple and convenient; however, it is necessary to improve communication skills

and learning goals. For this reason, college students prefer visionary leadership and blended learning to traditional learning proficiency. As suggested by Collinson and Tourish (2015), we strongly recommend that students be encouraged to participate in dialogue through blended learning, especially for traditional learning proficiency. It is essential to integrate digital tools, such as technology-mediated advising, into the classroom to increase student engagement and outcomes and facilitate professional learning. However, successful integration requires structural, process, and attitudinal changes. It also requires resources such as infrastructure, support, incentives, and continuous professional development and training for all staff and learners (Ossiannilsson, 2018; Klempin & Karp, 2018).

Visionary leadership and blended learning are closely associated with technological and traditional learning proficiency. These results show that the relationship between visionary leadership and blended learning for technology and traditional learning proficiency is not stronger in Taiwanese public college students than in private college students. As Afridi and Chaudhry (2019) showed that there were no significant differences of opinions among the respondents on basis of public and private sector for overall teaching activities. The reason of the same opinion by both sector universities may be due to the leveled playing field in computer bases technologies. Since 2005, the Taiwan Ministry of Education Department (2020) has launched a series of projects to enhance the teaching quality and promoting students' learning effectiveness of higher education. Therefore, both public and private teachers have sufficient opportunity to apply funding for introducing education instruments and the use of media and technology. Therefore, visionary leadership and blended learning does not particularly influence public colleges in these two cases.

The study population comprised 261 participants, and the response rate was 66.1%. The participants were students from two colleges in Taiwan. The results indicate that college students prefer visionary leadership and blended learning to traditional learning proficiency. In addition, visionary leadership and blended learning exert a statistically significant effect on technological and traditional learning proficiency. However, visionary leadership and blended learning do not exert a statistically significant effect on technological learning proficiency. Moreover, in these two cases, there is no difference between public and private colleges' visionary leadership and blended learning for traditional and technological learning proficiency.

The findings of the study are crucial not only to students and researchers but also to the Taiwanese government and educational institutes that may benefit from the results regarding the relationship between visionary leadership and blended learning and technological and traditional learning proficiency. Higher education worldwide is currently meeting digital teaching and blended learning challenges, especially given the influence of COVID-19. Future research could teachers' roles and perspectives with regard to blended learning and visionary leadership implementation in higher education.

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