

# **Blended Learning:** Institutional Frameworks for Adoption and Implementation

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# About the Authors



## **Anida Duarte, DBA**

- Co-author of a provisional patent that uses break-through real estate technology benefiting military personnel.
- Graduate of the inaugural Doctor of Business Administration cohort at the University of the Incarnate Word.
- Published research on *Real Estate Agent's Procuring Cause Law* (right to commission), completed her dissertation study titled *Blended Learning Institutional Frameworks for Adoption and Implementation*, and is co-authoring an in-depth study on the charitable contributions of *HIV/AIDS Global Funding*.
- Has earned her Six Sigma Green Belt Certification and Product Management Professional (PMP) designation.



## **Annette E. Craven, PhD, CPA**

- Leadership expertise both academically and in practice for more than 30 years and across multiple industries.
- PhD in Higher Education Administration and Human Communications
- Has mentored academic institutions in North America, South America, Europe, Mongolia, and Africa on governance, strategic planning, leadership.
- First consecutive term CEO of full-time faculty at University of the Incarnate Word.
- President of the Accreditation Council for Business Schools & Programs (2010-2011), she developed, managed, and published three Annual Editions to promote scholarship in member institutions.
- In 2013, deployed the fully blended Doctor of Business Administration program at University of the Incarnate Word.
- Currently consults with institutions like the International Technology University and Ecole des Ponts to improve quality in Doctor of Business Administration programs.

# Overview

Introduction  
Literature Review  
Study Design & Approach  
Results



# Evolution of Blended Learning

## Wave One

- 1990 intro www = online
- Modem lines
- TV, radio, course packs & asynchronous learning

## Wave Two

- Cable models/DSL
- Course enhancement
- Blackboard, Desire2Learn, & Moodle

## Wave Three

- MOOC
- 90% dropout rate
- 7 million online learners

## Wave Four

- BL technologies/MOOCs merge
- Gaming & multiuser virtual environments

# Purpose of the Study & Research Questions

The purpose of the study was to describe the current blended learning environment in accredited US business schools and to determine the maturity of the blending learning frameworks in those schools using the blended learning adoption framework matrix developed by Graham et al. (2013).

1. What is the status of blended learning in US accredited business programs?
2. What is the level of strategic maturity of blended learning frameworks in US accredited business programs?
3. What is the level of structural maturity of blended learning frameworks in US accredited business programs?
4. What is the level of support maturity of blended learning frameworks in US accredited business programs?

# Blended Learning Adoption Framework (Graham, et al. 2013)

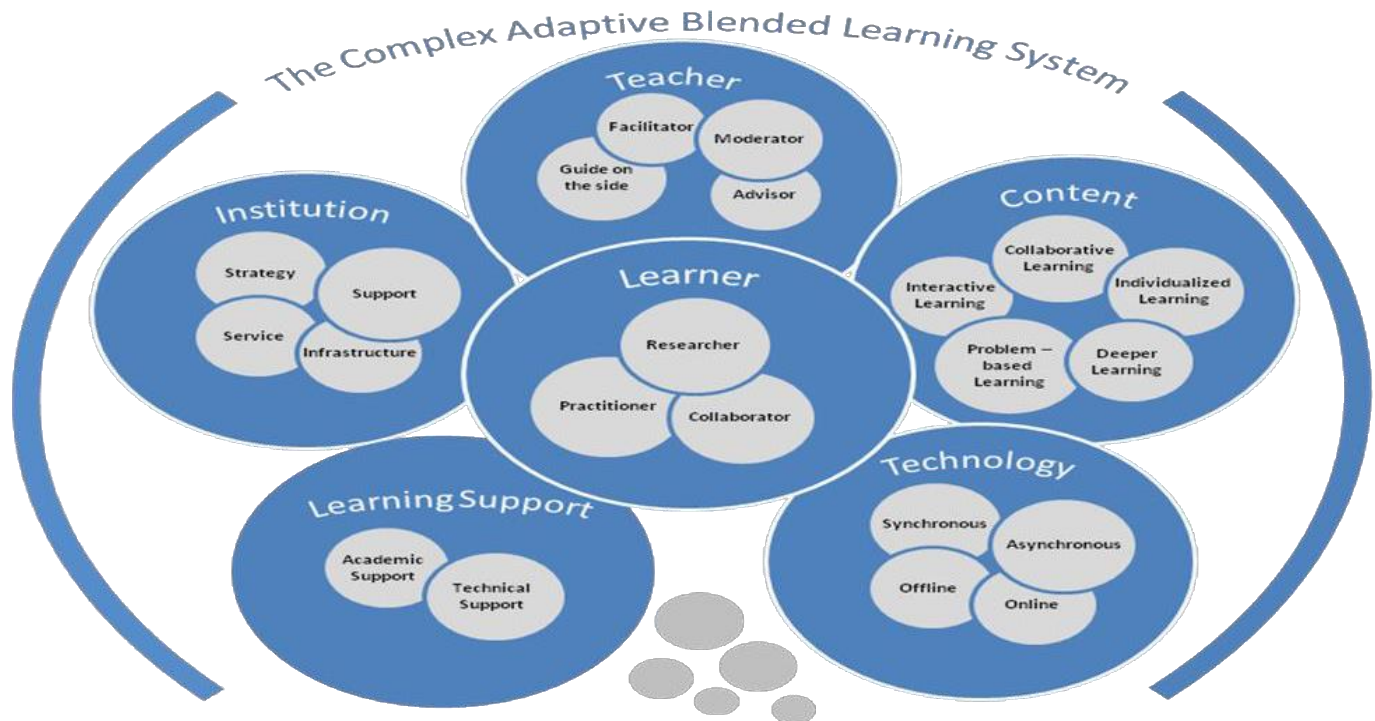
Table 2

Matrix representing the categories and stages in the BL adoption framework used to organize the findings of this study.

| Category         | Stage 1—Awareness/Exploration                                              | Stage 2—Adoption/Early implementation                                                   | Stage 3—Mature implementation/growth                                                      |
|------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>Strategy</b>  |                                                                            |                                                                                         |                                                                                           |
| Purpose          | Individual faculty/administrators informally identify specific BL benefits | Administrators identify purposes to motivate institutional adoption of BL               | Administrative refinement of purposes for continued promotion and funding of BL           |
| Advocacy         | Individual faculty and administrators informally advocate                  | BL formally approved and advocated by university administrators                         | Formal BL advocacy by university administrators and departments/colleges                  |
| Implementation   | Individual faculty members implementing BL                                 | Administrators target implementation in high impact areas and among willing faculty     | Departments/colleges strategically facilitate wide-spread faculty implementation          |
| Definition       | No uniform definition of BL proposed                                       | Initial definition of BL formally proposed                                              | Refined definition of BL formally adopted                                                 |
| Policy           | No uniform BL policy in place                                              | Tentative policies adopted and communicated to stakeholders, policies revised as needed | Robust policies in place with little need for revision, high level of community awareness |
| <b>Structure</b> |                                                                            |                                                                                         |                                                                                           |
| Governance       | No official approval or implementation system                              | Emerging structures primarily to regulate and approve BL courses                        | Robust structures involving academic unit leaders for strategic decision making           |
| Models           | No institutional models established                                        | Identifying and exploring BL Models                                                     | General BL models encouraged not enforced                                                 |
| Scheduling       | No designation of BL courses as such in course registration/catalog system | Efforts to designate BL courses in registration/catalog system                          | BL designations or modality metadata available in registration/catalog system             |
| Evaluation       | No formal evaluations in place addressing BL learning outcomes             | Limited institutional evaluations addressing BL learning outcomes                       | Evaluation data addressing BL learning outcomes systematically reviewed                   |
| <b>Support</b>   |                                                                            |                                                                                         |                                                                                           |
| Technical        | Primary focus on traditional classroom technological support               | Increased focus on BL/online technological support for faculty and students             | Well established technological support to address BL/online needs of all stakeholders     |
| Pedagogical      | No course development process in place                                     | Experimentation and building of a formal course development process                     | Robust course development process established and systematically promoted                 |
| Incentives       | No identified faculty incentive structure for implementation               | Exploration of faculty incentive structure for faculty training and course development  | Well-established faculty incentive structure for systematic training and implementation   |

# Conceptual Frameworks

- ✓ Blended Learning Conceptualization (Picciano, 2006)
- ✓ The Multimodal Model (Picciano, 2009)
- ✓ Time-based Blending (Norberg et al., 2011)
- ✓ **Complex Adaptive Blended Learning Systems (Wang et al., 2015)**







# Existing & Related Research

- ✦ Synchronous vs. asynchronous approaches
  - Park et al., 2007; Kennegwe et al., 2013
- ✦ Collaboration concerns
  - Stubbs et al., 2006; Ginns et al., 2009; Jaggars et al., 2013; Guzer et al., 2014
- ✦ Design & model concerns
  - Means et al., 2010; Owens, 2012; Stubbs et al., 2006; McGee & Reis, 2012
- ✦ Quality concerns
  - Bath 2012; Jaggars et al., 2013; Kleen et al., 2010

Seventy-five  
learning  
teaching  
studies  
levels  
competencies  
experience  
readiness  
online  
blended

# Quality in Higher Education

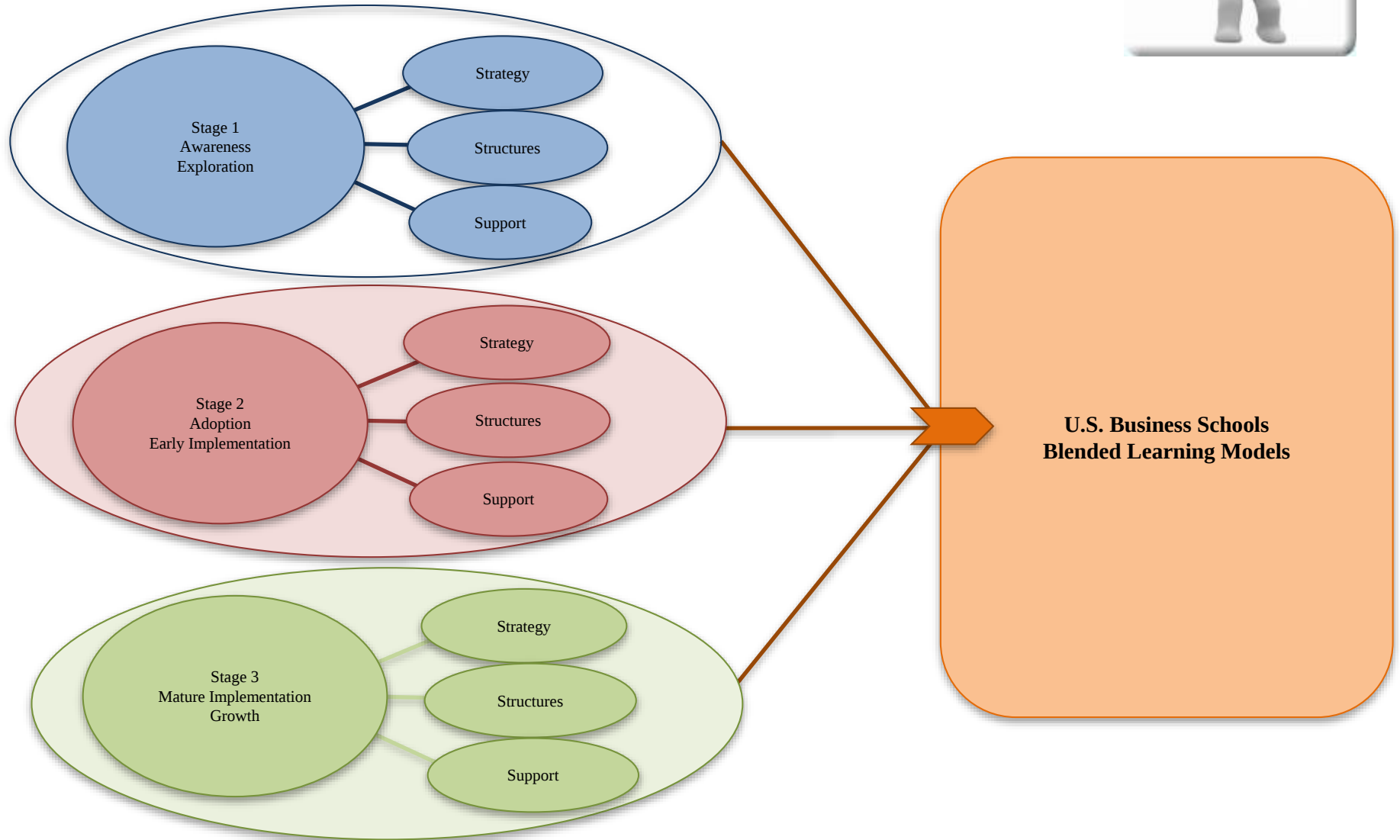


# Study Design & Approach

- Descriptive Study
- Quantitative Approach
- Valid Survey Instrument does not exist
- BLAF Matrix adapted (Graham et al., 2013)



# Data Collection Instrument



# Data Collection Techniques



- AACSB & ACBSP Business Accredited Schools
- Presidents of AACSB & ACBSP
- 814 Schools
- Contacted Deans & Associate Deans
- SurveyMonkey

814



# Results

- Response Rates & Demographics
- Research Questions Answered
- Instrument Reliability

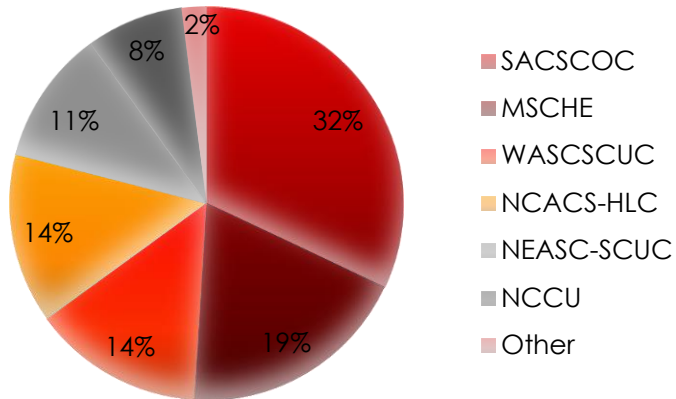


## *Response Rates*

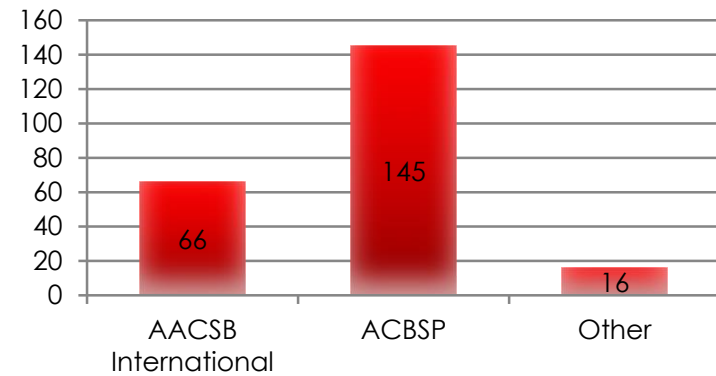
| Description              | <u>n</u> | %    |
|--------------------------|----------|------|
| Total Invitations        | 814      | 100% |
| Consented to Participate | 379      | 47%  |
| Declined to Participate  | 21       | 3%   |
| Non-deliverable          | 27       | 3%   |
| Opted Out                | 19       | 2%   |
| Non-response             | 368      | 45%  |

# Data Distribution

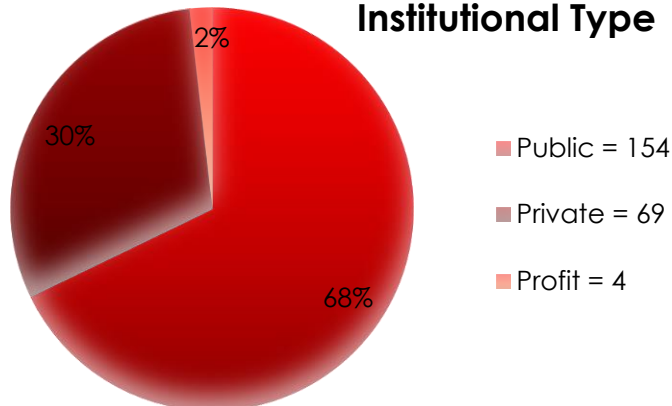
## Regional Accreditation



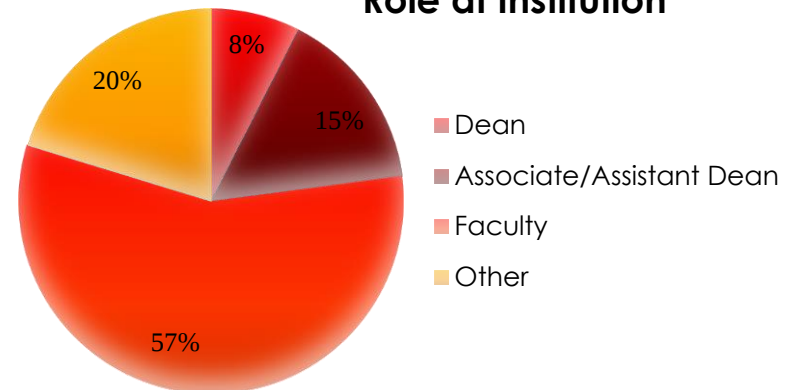
## Business Accreditation



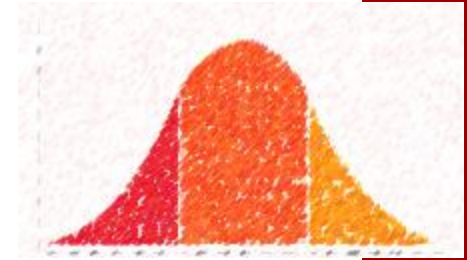
## Institutional Type



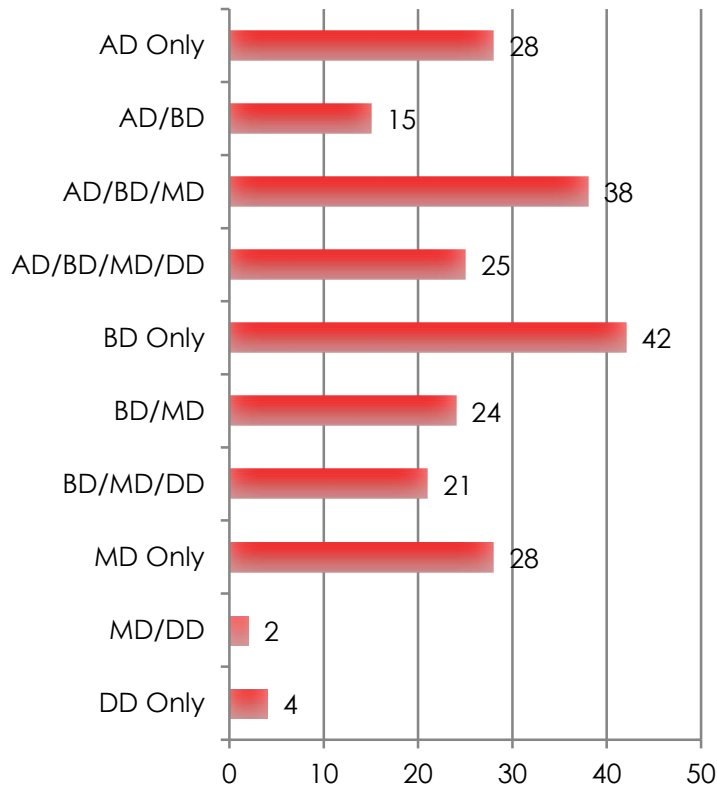
## Role at Institution



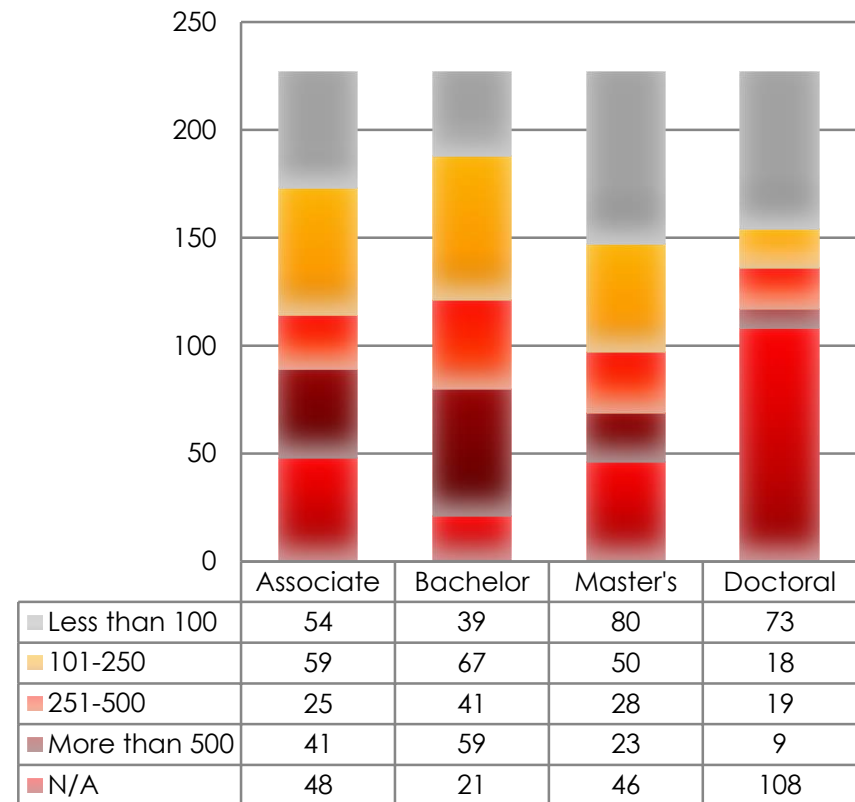
# Data Distribution Cont.



## Business Degrees Offered



## 2015-2016 Student Enrollment



# Six Categories Evaluated

| AD only                          | BD only            | MD only                 | DD only                             | AD/BD/MD/DD        | All other combos  |
|----------------------------------|--------------------|-------------------------|-------------------------------------|--------------------|-------------------|
| Individual courses               | Entire BL programs | Strategic plan          | Entire BL programs & strategic plan | Individual courses | Strategic plan    |
| In 2 <sup>nd</sup> academic year | > 2 academic years | Fully implemented plans | < 1 academic year                   | < 1 academic year  | < 1 academic year |

Disciplines w/highest BL options

Marketing, Finance, & Accounting



Disciplines w/fewest BL options

Management, Data Analytics, & MIS

# Level of strategic maturity of blended learning frameworks in U.S. business accredited programs – Mean score ranged from 2.51 to 3.15; Neither agree nor disagree

| Blended Learning Adoption Framework |                                                                              |                                                                                         |                                                                                           |
|-------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Category                            | Stage 1<br>Awareness/Exploration                                             | Stage 2<br>Adoption/Early<br>implementation                                             | Stage 3<br>Mature<br>implementation/growth                                                |
| Strategy Purpose                    | Individual faculty & administrators informally identify specific BL benefits | Administrators identify purposes to motivate institutional adoption of BL               | Administrative refinement of purposes for continued promotion/funding of BL               |
| Advocacy                            | Individual faculty and administrators informally advocate                    | BL formally approved/advocated by university administrators                             | Formal BL advocacy by university admin/depts/colleges                                     |
| Implementation                      | Individual faculty members implementing BL                                   | Admins target implementation in high impact areas & among willing faculty               | Dept/colleges strategically facilitate widespread faculty implementation                  |
| Definition                          | No uniform definition of BL proposed                                         | Initial definition of BL formally proposed                                              | Refined definition of BL formally adopted                                                 |
| Policy                              | No uniform BL policy in place                                                | Tentative policies adopted and communicated to stakeholders, policies revised as needed | Robust policies in place with little need for revision, high level of community awareness |

**Level of structural maturity of blended learning frameworks in US accredited business programs – Mean score ranged from 2.56 to 3.32; Neither agree nor disagree; slight trend toward disagree**

### **Blended Learning Adoption Framework**

| <u>Category</u>             | <u>Stage 1</u><br><u>Awareness/Exploration</u>                             | <u>Stage 2</u><br><u>Adoption/Early</u><br><u>implementation</u>  | <u>Stage 3</u><br><u>Mature</u><br><u>implementation/growth</u>                 |
|-----------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Structure Governance</b> | No official approval or implementation system                              | Emerging structures primarily to regulate and approve BL courses  | Robust structures involving academic unit leaders for strategic decision making |
| <b>Models</b>               | No institutional models established                                        | Identifying and exploring BL Models                               | General BL models encouraged not enforced                                       |
| <b>Scheduling</b>           | No designation of BL courses as such in course registration/catalog system | Efforts to designate BL courses in registration/catalog system    | BL designations or modality metadata available in registration/catalog system   |
| <b>Evaluation</b>           | No formal evaluations in place addressing BL learning outcomes             | Limited institutional evaluations addressing BL learning outcomes | Evaluation data addressing BL learning outcomes systematically reviewed         |



**Level of support maturity of blended learning frameworks in US accredited business programs – Mean score ranged from 2.56 to 3.71; Neither agree nor disagree tending toward disagree**

#### **Blended Learning Adoption Framework**

| <b><u>Category</u></b>                     | <b><u>Stage 1</u><br/><u>Awareness/Exploration</u></b>       | <b><u>Stage 2</u><br/><u>Adoption/Early</u><br/><u>implementation</u></b>              | <b><u>Stage 3</u><br/><u>Mature</u><br/><u>implementation/growth</u></b>                |
|--------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <b><u>Support</u><br/><u>Technical</u></b> | Primary focus on traditional classroom technological support | Increased focus on BL online technological support for faculty and students            | Well-established technological support to address BL/online needs of all stakeholders   |
| <b><u>Pedagogical</u></b>                  | No course development process in place                       | Experimentation and building of a formal course development process                    | Robust course development process established and systematically promoted               |
| <b><u>Incentives</u></b>                   | No identified faculty incentive structure for implementation | Exploration of faculty incentive structure for faculty training and course development | Well-established faculty incentive structure for systematic training and implementation |



# Institutional Policy & Performance Standards

## Policies

| Aspects of BL          | Highest Mean Scores    |                        |                        |                       |                                 |                                          |
|------------------------|------------------------|------------------------|------------------------|-----------------------|---------------------------------|------------------------------------------|
|                        | AD<br>( <i>n</i> = 28) | BD<br>( <i>n</i> = 42) | MD<br>( <i>n</i> = 28) | DD<br>( <i>n</i> = 4) | AD/BD/MD/DD<br>( <i>n</i> = 25) | All other<br>combos<br>( <i>n</i> = 100) |
| Professor Readiness    | 2.46                   | 2.49                   | 2.36                   | 2.75*                 | 2.16                            | 2.50                                     |
| Professor Preparedness | 2.68*                  | 2.50                   | 2.18                   | 2.75*                 | 2.28                            | 2.40                                     |
| Curricular Content     | 2.59*                  | 2.48                   | 2.43                   | 2.50                  | 2.00                            | 2.41                                     |
| Use of Technology      | 2.68*                  | 2.57*                  | 2.37                   | 2.50                  | 1.92                            | 2.42                                     |
| Learner Support        | 2.93*                  | 2.74*                  | 2.59*                  | 2.75*                 | 1.92                            | 2.45                                     |
| % of Time f2f Required | 3.00*                  | 2.76*                  | 2.64*                  | 3.00*                 | 2.24                            | 2.60*                                    |
| BL Definition          | 2.82*                  | 2.59*                  | 2.61*                  | 2.25                  | 2.12                            | 2.52*                                    |
| Technology Support     | 2.68*                  | 2.62*                  | 2.32                   | 2.75*                 | 1.84                            | 2.50                                     |
| Pedagogical Support    | 2.74*                  | 2.80**                 | 2.07                   | 3.00*                 | 2.20                            | 2.89*                                    |

\*Mean score closest to *somewhat* response; \*\*Mean score closest to *not at all* response

## Standards

| Aspects of BL          | Highest Mean Scores    |                        |                        |                       |                                 |                                          |
|------------------------|------------------------|------------------------|------------------------|-----------------------|---------------------------------|------------------------------------------|
|                        | AD<br>( <i>n</i> = 28) | BD<br>( <i>n</i> = 42) | MD<br>( <i>n</i> = 28) | DD<br>( <i>n</i> = 4) | AD/BD/MD/DD<br>( <i>n</i> = 25) | All other<br>combos<br>( <i>n</i> = 100) |
| Professor Readiness    | 2.68*                  | 2.40                   | 2.32                   | 3.00*                 | 2.20                            | 2.52*                                    |
| Professor Preparedness | 2.74*                  | 2.40                   | 2.33                   | 2.75*                 | 2.28                            | 2.50                                     |
| Curricular Content     | 2.68*                  | 2.44                   | 2.46                   | 2.75*                 | 2.32                            | 2.43                                     |
| Use of Technology      | 2.93*                  | 2.69*                  | 2.32                   | 2.75*                 | 2.33                            | 2.51*                                    |
| Learner Support        | 2.82*                  | 2.71*                  | 2.25                   | 2.75*                 | 2.38                            | 2.58*                                    |
| % of Time f2f Required | 2.82*                  | 2.71*                  | 2.39                   | 3.00*                 | 2.56*                           | 2.56*                                    |
| BL Definition          | 2.85*                  | 2.48                   | 2.48                   | 2.50                  | 2.36                            | 2.57*                                    |
| Technology Support     | 2.89*                  | 2.69*                  | 2.43                   | 2.75*                 | 2.24                            | 2.54*                                    |
| Pedagogical Support    | 3.00*                  | 2.73*                  | 2.29                   | 2.75*                 | 1.76                            | 2.89*                                    |

\*Mean score closest to *somewhat* response; \*\*Mean score closest to *not at all* response

**All mean scores ranged around Neither Agree Nor Disagree**

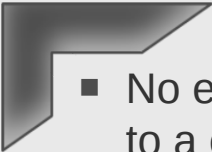
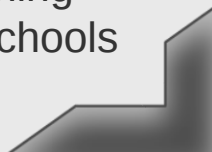
# Discussion

1. Majority public & ACBSP accredited
2. BL in all six regional accreditation geographic areas
3. BL cross all enrollment ranges from less than 100 to more than 500
4. BL in all core business disciplines
5. Assumptions cannot be made that entire landscape represented
6. BD/MD highest level of maturity
7. Options widespread with limited indication of maturity
8. Information not properly disseminated
9. BL standardization of policies & practices in infancy stages



*"Business professionals are fact users and integrators who need the guidance of professors to help understand how to interpret facts in a timely manner," (Bennis & O'Toole, 2005, para. 7*

# Conclusions & Limitations

- 
- No evidence to support adherence to a common framework for BL adoption & implementation
  - Across all business disciplines
  - Individual courses and/or entire programs
  - Elements of strategic planning (recognition by business schools per student demand)
- 

- 
- Valid Survey Instrument
  - Limited BL adoption/implementation research
  - BLAF qualitative study
  - Survey respondents
  - Lack of AACSB/ACBSP support
- 



# Recommendations

- Current practitioners (faculty, administrators, adjunct, etc.) should consider adopting a universal and consistent framework for BL
- Current policy makers (USDE, presidents, deans, assistant deans, etc.), should consider adopting a consistent framework
- Retesting instrument based on Cronbach's Alpha
- Reworking instrument 'best describe' vs. 'attitudinal'
- Leverage support from AACSB/ACBSP, QM, OLC, & CHEA
- Focus on BD programs only or specific disciplines

Questions?



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