

# Research Note: On Tracking Faith-Related Student Learning Outcomes in Accredited Christian Business Schools

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**ABSTRACT:** This research note focuses on whether or not accredited Christian business schools formally articulate goals for and track faith-related student learning outcomes (SLOs), and it discusses some of the difficulty in doing so. Results of a small survey suggest that perceived importance of faith-related SLOs is associated with significantly greater likelihood of the business school having formally articulated such SLOs. At the same time, only half of the survey sample's business schools reported using faith-related SLOs.

**KEYWORDS:** business student learning outcomes, business school accreditation, Christian business education

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## INTRODUCTION

American universities and colleges, at both the overall institutional level and among their major academic units (e.g., business colleges, schools, and departments), increasingly make formal efforts to articulate and to measure goals for students' learning. They do likewise with respect to aspects of academic unit operations that presumably contribute to student learning. Accreditation standards drive much of this activity, but governmental pressure for evidence of results and the institutions' own interests in improvement also promote it (Fornaciari & Arbaugh, 2017; Kuh, Jankowski, Ikenberry, & Kinzie, 2014). In addition to student learning outcomes (SLOs) related to academic disciplinary content, business schools at Christian institutions may be interested in faith-related outcomes for business students. This research note focuses on whether or not accredited Christian business schools formally articulate goals for and track faith-related SLOs, and it discusses some of the difficulty in doing so.

## FAITH-RELATED STUDENT LEARNING OUTCOMES

Both academic discipline-related SLOs and faith-related SLOs matter at Christian business schools because a basic premise of business education in such schools is integration of biblical precepts into academic disciplinary subject matter (Roller, 2013), relying on assurance in 2 Timothy 3:16 as to Scripture's utility for teaching and for contributing to a complete and comprehensive college education that equips graduates for good service in God's kingdom. Consciously integrating Christian faith and learning is the thing that most clearly distinguishes Christian colleges and universities from other institutions (Burton & Nwosu, 2003; Grigg, 2010; Roller, 2013). Nonetheless, and although explicit SLO statements are now normative in U.S. higher education (Kuh et al., 2014), some faith-based institutions' business schools are hesitant to articulate and to assess faith-related SLOs and related operational outcomes.

This may seem surprising to some because the faith component of business education is a feature that faith-based business schools advertise as value-added and character-building (at least with respect to business ethics;

Hannema, LeMay, Opsata, & Whiting, 2011) to prospective employers of those business schools' graduates. The savviest of prospective students may also value demonstrable faith-integration outcomes when making college choices (Wrenn & Cafferky, 2015), so some may argue that it behooves business schools at faith-based institutions to specify desired outcomes regarding faith integration and to assess accordingly. We expect that the more that accredited Christian business schools' administrators and faculty perceive the importance of having and tracking faith-related SLOs, the more likely those schools are to have at least one faith-related SLO included in their set of formal SLOs they assess.

Christian business schools that do formally articulate faith-related SLOs may struggle with measuring these outcomes in direct ways that show the strongest evidence of attainment. Assessing learning can be challenging enough regarding basic, academic disciplinary content mastery, even though widely used, standardized tests exist for this purpose (Fornaciari & Arbaugh, 2017). No such standardized, widely recognized tests exist for evidence of faith integration in business students' learning. The essence of faith as "conviction of things not seen" (Hebrews 11:1) renders it dauntingly subjective (albeit a response to what we regard as an objective revelation of God's will and nature in the Bible) in the context of typical SLO usage, which emphasizes relatively objective assessment of learning. We discuss below some of the implications of attempting to make explicit and to assess faith-related SLOs, but first we report on a small survey aimed at exploring whether the perceived importance of faith-related SLOs is associated with greater likelihood of the business school having formally articulated such SLOs (i.e., whether actual practice matches sentiment regarding faith-related SLOs).

## METHOD

### Sample

The sample was 28 business schools (i.e., units designated as schools, colleges, or departments) that are accredited by the International Assembly for Collegiate Business Education (IACBE). We sent the e-mail invitation to 71 business schools at private, nonprofit, faith-related institutions, so the response rate was 39% after the initial invitation followed by a reminder invitation sent a week later. The officials of record who serve as points of contact for accreditation matters (mainly deans, chairpersons, and program directors) responded to an online survey related to faith-related learning objectives and operations objectives that business schools

use in accreditation and institutional effectiveness efforts. All 28 respondents were in institutions whose mission statement expressly includes a faith reference. Of the 28 responding business schools, 54% had mission statements that expressly include a reference to faith; half had at least one faith-related SLO in their official business program-level SLO set; and 36% had at least one faith-related outcome objective for their school operations that support SLOs. These business schools ranged from 46 to 3,000 students in size (median = 260 students). For one-tailed, correlational testing, our small sample ( $n = 28$ ) at  $\alpha = .05$  and power of .8 permitted us to detect only a fairly large effect size of approximately  $r = .46$  and bigger (Cohen, 1988).

### Variable Measures

All IACBE-accredited business schools formally designate SLOs (called "ISLOs" for "intended student learning outcomes" in IACBE usage), so the question for our study's focal outcome was whether or not our survey respondents use at least one SLO that is expressly faith-related. Thus, our dependent variable (DV) was a binary measure (0 = no, 1 = yes) in answer to the survey item "Do the business program-level ISLOs include at least one outcome related to faith?" Our independent variable (IV) was a four-item scalar measure designed to reflect *perceived importance of faith-related SLOs*. We used a five-point Likert response scale (1 = strongly disagree, 5 = strongly agree), and the measure's four items were the following:

- It is important for faith-based business schools to track at least one ISLO related to faith.
- Omitting a faith-related ISLO from accreditation measures contradicts a faith-based business school's essential purpose.
- Business schools at faith-based institutions should articulate a faith-related ISLO.
- Tracking at least one ISLO related to faith is as important as tracking ISLOs for business knowledge.

This scalar measure's Cronbach's  $\alpha$  reliability was .96 in our study.

### Procedures and Analyses

Using SPSS 13.0 software, we dummy-coded the IV (again, 0 = no, 1 = yes) and computed the DV as the total of the four scale items' scores. We then computed the point-biserial correlation between the IV and DV. Additionally, to test our hypothesis while accounting for the alternative hypothesis of school size relating to use of faith-based SLOs, we ran a binary logistic regression that controlled for school size while testing for the effect of perceived importance of using faith-based SLOs.

## RESULTS

As expected, the perceived importance of faith-related SLOs ( $M = 13$ ,  $SD = 5.61$ ) was significantly correlated with having and tracking at least one faith-related SLO,  $r_{pb} = .71$ ,  $p < .001$  (one-tailed). We noted that school size was marginally correlated with the DV ( $r_{pb} = .36$ ,  $p = .06$ ) and were concerned that larger schools may simply have more resources to throw at accreditation matters (including tracking a variety of SLOs), such that school size's effect may be an alternative, more pertinent correlate with having and tracking at least one faith-related SLO. To test for this possibility, we calculated a binary logistic regression model with both our perceived importance IV and school size in the equation. The overall model was significant,  $\chi^2(2) = 21.12$ ,  $p < .001$ ;  $-2LL = 17.69$ ; Nagelkerke  $R^2 = .71$ ; 93% of cases correctly predicted. The school size effect was non-significant,  $B = .01$ ,  $SE B = .01$ ; Wald  $\chi^2(1) = 2.02$ , *ns*. Consistent with our expectation, the perceived importance IV's effect was significant,  $B = .39$ ,  $SE B = .15$ ; Wald  $\chi^2(1) = 6.34$ ,  $p < .05$ ;  $\text{Exp}(B) = 1.47$ , 95% CI for  $\text{Exp}(B)$  [1.09, 1.99]. As perceived importance of faith-related SLOs increased, the log odds of having a faith-related SLO also increased significantly, holding constant school size.

## DISCUSSION

Our results show that, at least for the sample of business schools studied, the perceived importance of faith-related SLOs is associated with significantly greater likelihood of the business school having formally articulated such SLOs. On the other hand, only half of the sampled business schools had at least one faith-related SLO in their official business program-level SLO set. This may suggest that whereas the notion of faith-related learning outcomes and associated goals is commendable, Christian business schools may be somewhat less enthused, on average, about actually formulating, tracking, and using associated measures.

When Christian business schools do not formally articulate and use faith-related SLOs, it may be a reflection of such schools being taxed by the "accreditocracy" that demands formalized, quantifiable target outcomes for accreditation purposes (Julian & Ofori-Dankwa, 2006; cf. Fornaciari & Arbaugh, 2017), a requirement that is hard enough to meet in basic academic content learning and all the more so when faith-related learning outcomes may not be as readily observable and quantifiable. That is, not having faith-related SLOs is much less likely a reflection on the business school's commitment to biblical integration in learning and far more likely a rational choice reflecting mea-

surement tractability and resource realities. Certainly, not having and tracking faith-related SLOs does not necessarily signify that a Christian business school is not integrating faith with disciplinary education, although some observers may suggest that overtly measuring faith-related SLOs focuses attention and better ensures that the operations and processes needed to achieve such outcomes will happen (Kuh et al., 2014).

Our survey response rate of 39% was in line with typical organizational survey response rates that average around 36% (Baruch & Holtom, 2008), but the small sample size is clearly a limitation to generalizability, especially if any response bias was in force. Our study's results are only suggestive and perhaps useful for stimulating initial discussion on the topic, and a bigger sample drawn from a broader body of Christian business schools would serve to further our understanding. A broader sample would include unaccredited Christian business schools, and we must acknowledge that unaccredited business schools may not have as much felt need to articulate SLOs of any kind. Thus, the correlation between perceived importance of faith-related SLOs and actually having the SLOs may weaken with a bigger sample that includes unaccredited schools. Also, a bigger sample would be needed to detect any correlation smaller than the .46 that our sample size permitted, but our sample size did afford adequate statistical power given the large effect size we observed.

What may make the prospect of establishing and using faith-related SLOs more palatable to Christian business schools? Arguably, faith-related SLOs are best specified as analyzing and evaluating ethical implications of business decisions and business function practices using an explicitly biblical framework (McMahon, Locke, & Roller, 2015). Whereas the degree and nature of the business student's faith may be impossible to assess directly, professors certainly can assess whether or not the student can articulate an ethical analysis in biblical terms. The manifest connection between biblical precepts and business ethics *can* be observed in students' writing and speaking in related academic assignments. Note this would show understanding of the biblical connection but would not measure actual faith in God or acceptance of biblical precepts, as is often erroneously specified or dubiously claimed in faith-related SLO statements.

Some faith integration efforts may be best treated as business schools' *operational* outcomes since students' learning of faith, taken literally as belief in the unseen (Hebrews 11:1), may be impossible to measure, and since seemingly faithful behaviors used as proxy measures may stem from motivations and worldviews other than Christian faith and

biblical understanding (Cosgrove, 2006). To the extent the Christian business school's operations are under the faculty and administration's control, however, measures of goals for operational features and processes (e.g., curriculum content, instructor training, teaching and testing techniques, design and delivery of co-curricular experiences, etc.) can be useful. That is, students' acknowledgment of teaching's faith content and exposure to biblical material and precepts can at least be used as evidence of the faculty's operational execution of faith integration efforts.

Finally, we should acknowledge that whether or not meaningful learning (i.e., deep learning versus surface learning) occurs depends not on the mere statement of SLOs, but on teaching and rigor designed to achieve SLOs. In Biglan's (1973) terms, business disciplines are soft/applied/non-life, and it is their applied nature in particular that sometimes militates against deeper approaches in academic assignments (Laird, Shoup, Kuh, & Schwarz, 2008). In the most applied cases (introductory accounting, finance, business information systems, and business statistics courses, in particular), faith-integration writing and speaking assignments that require integrating, synthesizing, and reflecting on faith's role in the discipline or topic may provide the deepest learning that ever occurs in those courses. Thus, to the extent explicit SLO-related efforts spawn at least some student work along these lines in those business courses where faith integration is more difficult, the courses provide learning opportunities that extend beyond merely surface levels of memorization and rote application of computational techniques.

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