FLOURISHING SCHOOLS

Research on Christian School Culture and Community

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EXECUTIVE SUMMARY

How do Christian schools flourish? What elements of school culture contribute to flourishing, and do some elements matter more than others? Is there a roadmap to school flourishing that can be validated by empirical research in Christian schools? In 2018, ACSI Research sought to answer these questions through rigorous research on Christian school cultures, by using a new research tool—the Flourishing School Culture Instrument (FSCI).

Questions for the FSCI were formed based on catalogued findings from an extensive review of relevant prior research and literature, as well as findings from a meta-analysis of leading Christian schools’ expected student outcomes (ESOs), which fell into six major domains (spiritual, academic, community, excellence, impact, and servanthood). In total, the FSCI tested 1,445 discrete variables across seven different survey groups: students; parents; alumni; teachers; leaders/administrators; support staff; and board members. Between Fall 2018 and Spring 2019, over 15,000 survey responses were collected from these groups, representing 65 Christian schools of diverse size and geographic location, thereby making the FSCI the largest study of flourishing in Christian schools to date.

Data analysis for the instrument accomplished three goals. First, reliability and validity were tested for FSCI items to produce a final subset of the original pre-validated questions, resulting in a psychometrically sound instrument. Second, the statistical power behind the FSCI construction and analysis, particularly linkages to outcomes, enables the instrument to be a predictive (versus correlative) measure. And finally, the validated constructs identified through FSCI data analysis were mapped onto the first ever research-based model of Christian school flourishing—the Flourishing School Culture Model (FSCM).

The FSCM clusters the validated constructs for all seven survey groups into five domains of flourishing: Purpose; Relationships; Learning Orientation; Expertise and Resources; and Well-Being. These domains provide a compelling and comprehensive picture of the areas in which Christian schools can focus their efforts and resources in order to promote a flourishing school culture and community.

Analysis of connections between these domains and specific flourishing outcomes supported many of the school improvement practices typically undertaken in Christian schools (e.g., improving staff qualifications through hiring practices, promoting student well-being, responding well to students’ learning needs, providing ample classroom resources, and ensuring teachers develop caring relationships with students). Some findings, however, suggested schools pursue other culture-shaping efforts to promote flourishing—such as leaders’ engaging the larger community, ensuring teachers are oriented toward best practice, and promoting teachers’ engagement of students in deeper learning—with unexpected yet strong linkages to outcomes like spiritual formation and reduced teacher turnover.

Forthcoming school-level reports and future FSCI administrations will strengthen both the usefulness of findings for schools and the data set that informs the predictive nature of the FSCI. In the meantime, this national report unpacks FSCI findings and the FSCM model for Christian educators which, when taken together, provide measurable signposts on a roadmap toward flourishing Christian schools.
I. BACKGROUND

How do Christian schools flourish? What elements of school culture contribute to flourishing, and do some elements matter more than others? Is there a roadmap to school flourishing that can be validated by empirical research in Christian schools? The answers to these questions matter for Christian schools to improve and grow—in teaching and learning, spiritual formation and discipleship, engaging and serving the community, and modeling leadership and best educational practice.

Working with school leaders in 2015, ACSI developed the Formative-to-Flourishing Continuum, which proved helpful to schools as a self-reflective tool by encouraging them to ask thoughtful questions about their culture and improvement trajectory. In 2018, emerging from this initial work, ACSI Research set out on the next step in understanding school flourishing by exploring these questions systematically through rigorous research on Christian school culture, using a new research tool—the Flourishing School Culture Instrument (FSCI).

Thanks to a generous two-year grant from a private foundation, ACSI Research staff developed and launched the FSCI in Fall 2018. The FSCI was constructed as an exploratory instrument to develop a predictive model of school flourishing. The FSCI tested a range of outcomes for students, teachers, leaders, staff, and the school as an organization. The FCSI also drew upon a diverse set of inputs (i.e. educators’ and leaders’ practices, school programs and policies, and cultural elements) to determine which were predictive of these outcomes.

Between Fall 2018 and early Spring 2019, over 15,000 completed responses were collected, representing 280 24-hour days of response time, from 65 diverse school communities. Analysis of FSCI data was compelling not only in terms of the data’s strength, but also in terms of groundbreaking results that yielded a predictive measure and model of Christian school flourishing. This report begins with a discussion of the conceptual framework for this research.

Framing “Flourishing”

Schools today exist in an era of heightened accountability for educational outcomes, measured predominantly via standardized testing. Because of their faith foundation, Christian schools count academic achievement as a paramount aim, but not an exclusive one. In such an era, and particularly for Christian schools, “flourishing” offers a more expansive view of the purposes and processes of education.

Throughout scripture the concept of flourishing is used to describe a state of being—one that always results from God’s work with and upon communities of faith. The psalmist invokes the blessing in the Old Testament, “May the Lord cause you to flourish, both you and your children” (Psalm 115:14). This blessing echoes in the words of Jesus when He told disciples, “I have come that they may have life, and have it to the full” (John 10:10b). It also manifests in Jesus’ promise that, “If you remain in me and I in you, you will bear much fruit” (John 15:5b). Inherent in these scriptures is a picture of how through Christ, communities of faith can flourish—to the benefit of both adults and children alike. As communities of faith, Christian schools and all their members can likewise flourish.

While flourishing holds promise in terms of describing a desired condition and outcome of Christian education, the development of an assessment to measure flourishing requires examining what is known empirically about flourishing in the school context.

As Christian schools are underrepresented in academic research writ large (Swaner 2016), a review of what is known about flourishing begins with
the broader literature. The concept of “flourishing” entered the academic literature through the field of positive psychology. Corey Keyes’ (2007) seminal work on flourishing begins with the premise that, “Put simply, the absence of mental illness is not the presence of mental health” (95); rather, a flourishing-based understanding of mental health involves “the presence of something positive” (98). Moreover, mental health is not a zero-sum game, as individuals’ well-being can fall anywhere on a continuum between flourishing and languishing. Multiple psychometrically validated instruments have been developed and employed for both research purposes and to assess individuals’ position on this continuum.

Moving beyond psychology, the concept of flourishing has been expanded to apply to organizational contexts over time. The question of workplace flourishing has focused primarily on employees’ experiences—i.e. the types of environments, leadership behaviors, and other contextual factors that contribute to employee well-being. Flourishing as an organizational concept has not yet migrated fully to research on schools, though research on school improvement and school culture may be said to approximate it.

Research in Christian school settings is necessary in order to understand flourishing in that context. The FSCI was designed to inform a working model of school flourishing, based on the relationship between inputs and outcomes, the statistical strengths of those relationships, and the resulting profiles of schools and the different ways they may flourish. While the instrument is statistically predictive, it is not prescriptive. Rather, the results provide a rich picture of flourishing within Christian schools, while identifying the elements of culture that are most strongly related to flourishing.

School Cultures and Communities

The vast majority of academic research on schools examines a narrow set of outcomes for a single group (such as student achievement as measured by standardized test scores, or gains in teacher knowledge resulting from participation in professional development). However, examining the question of how schools flourish is complicated by “the nature of the complex culture of schools” (Clift and Waxman 1985, 2, emphasis added).

Schools are not simplistic collections of discrete programs and classrooms. Rather, schools function primarily as organizational cultures, where every “decision made and action taken… impacts other elements of that organization” (Evans et al. 2012, 165). Because of this, the design of the FSCI takes into consideration the many parts that make up the “whole” of a school’s culture, and measures how those parts interact in ways that contribute to school flourishing. Furthermore, the community nature of schools—which are composed of multiple stakeholder groups—necessitates that research on flourishing consider the viewpoints and perspectives of as many of those groups as possible, rather than a small subset.

To understand the inputs and influences relative to Christian school cultures, a comprehensive literature review of over 500 academic sources—drawing upon theory and research in diverse fields, including student learning and development, faith formation, school leadership, school improvement, organizational culture, and others—yielded a rich conceptual basis for instrument development. This basis can be outlined in terms of the “who,” “what,” “where” and “when” factors that play a contributing role in Christian school cultures.

Who—Rather than surveying a single school constituency, the FSCI is a 360-degree instrument with separate surveys for each of seven populations: students; parents; alumni; teachers; leaders/administrators; support staff; and board members. The surveying of multiple school constituencies that compose the school community not only allows for assessment of outcomes across different populations, but also enables exploration of relationships between these groups, how these relationships influence outcomes, and how they contribute in positive ways to flourishing school cultures.
What—The experience of education involves multiple inputs, including: curricula and teaching resources; pedagogical methods; the master calendar and schedule; incentives and rewards (i.e. grading); co-curriculars like music, the arts, and athletics; integration of technology; and for Christian schools, Bible instruction, the spiritual disciplines like prayer and worship, and spiritual formation programs and activities. Owing to this large number of inputs, the FSCI tested a total of 1,445 discrete variables across the seven surveys to determine how these variables related to participants’ experiences and to outcomes, as well as understand how they contribute to a flourishing school culture.

Where and When—Christian schools today operate in specific historical, political, social, economic, and geographic contexts. Despite their foundation on timeless principles of historical faith, schools in the U.S. and beyond are not impervious to influences arising from these contexts. These include market challenges brought about by a proliferation of school options and the changing faith profile of parents; educational challenges arising from rapid technological innovation, increasing student learning needs, and diversification of schools; and social challenges, like shifts in family structure, changes in values and behavior norms, and rising secularism (Barna Group and Association of Christian Schools International 2017; Swaner and Mecham 2017; others). Certainly these influences shape the experiences of students and other school constituents, which in turn shape school culture—from teaching methods to school policies to desired student outcomes, and most everything in between.

Christian Education Outcomes

While the literature thus provided the context for the who, what, where and when of Christian education, a dearth of research on Christian schools themselves means the literature does little to inform an understanding of why Christians school—in other words, what are the aims of a Christian education? What do Christian schools hope to accomplish?

Toward what kinds of outcomes are Christian schools and educators working?

The academic literature is not very informative in answering these questions, and not just because research on Christian schools is lacking. This is because, as Hargreaves asserts, “the outcomes that specify the effective school have been progressively narrowed and in many studies are reduced to test results of academic knowledge. These are important measures of schooling, but not the only outcome that matters... an excessive or exclusive focus on the cognitive is impoverished” (488).

Certainly, Christian schools are concerned with academic outcomes, but they are also concerned with the development of the whole student—as one who is made in God’s image, created to do His good works (Ephesians 2:10), and called to grow as His disciple. This necessitates a focus on holistic learning that includes students’ spiritual, ethical, emotional, and physical development, to name but a few. Failure to examine student outcomes in multiple domains would result in failure to capture the fullest picture of flourishing in the Christian school context.

The Cardus Education Survey (CES), which reports the outcomes of North American Christian and non-religious independent school sectors and compares them to that of public sector graduates, has led the way in broadening the understanding of Christian education’s impact in multiple domains. Since 2011, the CES has analyzed alumni data and mapped positive outcomes in the areas of educational attainment and employment, citizenship and community-mindedness, and religious formation (Pennings et al. 2014). This research was informative for the development of a conceptual basis for the FSCI.

The FSCI development went a step further to additionally examine what Christian schools espouse as their educative goals. In other words, the development of a predictive model of Christian school flourishing must be informed by the stated aims of Christian schools—which is necessary for gauging
whether and how schools are achieving those aims.
Thus, as part of the FSCI development process, ACSI Research sought to understand the “why” of Christian schools by conducting a meta-analysis of the expected student outcomes (ESOs) of 63 leading schools. [Purposive sampling was used to select schools that were nationally recognized by ACSI and other organizations as leading schools]. Where available, ESOs were obtained through schools’ websites; if these outcomes were not publicly available, the schools were contacted directly to obtain them. The meta-analysis showed that schools’ expected student outcomes fell into six major domains: spiritual; academic; community; excellence; impact; and servanthood. Table 1 provides a snapshot of the ESOs in each domain, as well as the total number of schools that listed an ESO in that domain.
This meta-analysis of ESOs provided insight into what Christian schools say is their why—the outcomes they care about, and toward which they are educating. The findings from the meta-analysis were factored into the development of the FSCI, alongside the conceptual basis derived from the literature review, to provide a robust background for instrument development.

<table>
<thead>
<tr>
<th>SPIRITUAL</th>
<th>ACADEMIC</th>
<th>COMMUNITY</th>
<th>EXCELLENCE</th>
<th>IMPACT</th>
<th>SERVANNOHD</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Spiritual Formation</td>
<td>✓ Reading</td>
<td>✓ Relationships</td>
<td>✓ Body as temple of Holy Spirit</td>
<td>✓ Impact the world for Christ</td>
<td>✓ Serve Christ</td>
</tr>
<tr>
<td>✓ Relationship with Jesus</td>
<td>✓ Writing</td>
<td>✓ Partnerships</td>
<td>✓ Responsibility</td>
<td>✓ Change the world through the</td>
<td>✓ Serve Others</td>
</tr>
<tr>
<td>✓ Christian Worldview</td>
<td>✓ Speaking</td>
<td>✓ Families</td>
<td>✓ Skill Development</td>
<td>Holy Spirit</td>
<td>✓ Humility</td>
</tr>
<tr>
<td>✓ Empowered by Holy Spirit</td>
<td>✓ Math</td>
<td>✓ Friendships</td>
<td>✓ Integrity</td>
<td>✓ Use gifts to influence the</td>
<td>✓ Good stewardship of time,</td>
</tr>
<tr>
<td>✓ Visible fruit of the Spirit</td>
<td>✓ Science</td>
<td>✓ Social/Civic</td>
<td>✓ Dignity in work</td>
<td>world</td>
<td>talent, and treasure</td>
</tr>
<tr>
<td></td>
<td>✓ History</td>
<td></td>
<td>✓ Mark of Christian life</td>
<td>✓ Leadership</td>
<td>✓ Willingness to work hard</td>
</tr>
<tr>
<td></td>
<td>✓ Wisdom</td>
<td></td>
<td></td>
<td>✓ Great Commission</td>
<td>✓ Outreach activities</td>
</tr>
<tr>
<td></td>
<td>✓ Critical Thinking</td>
<td></td>
<td></td>
<td></td>
<td>✓ Serve family and community</td>
</tr>
<tr>
<td></td>
<td>✓ Problem-Solving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Lifelong Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

63 schools | 63 schools | 54 schools | 52 schools | 41 schools | 31 schools |

Table 1. Meta-Analysis of Christian Schools’ Expected Student Outcomes (ESOs)
The FSCI was constructed as an exploratory instrument to develop a predictive model of Christian school flourishing. A key assumption of the researchers was that the “complexity of the research methodology should roughly match the complexity of the phenomenon under investigation” (Swaner 2016, 213). Thus, because of the complexity of inputs within the school ecosystem, instrument development was both extensive and rigorous.

As discussed, pre-instrument development included both a comprehensive review of the literature (theory and research in diverse fields, including student learning and development, faith formation, school leadership, school improvement, organizational learning, and others) as well as a meta-analysis of the expected student outcomes (ESOs) of 63 leading schools. From this research, an exploratory instrument testing 1,445 variables across seven surveys (students; parents; alumni; teachers; leaders/administrators; support staff; and board members) was developed, using best practice in survey and assessment construction and supported by consultation with external assessment design experts.

**Sampling and Administration**

The FSCI fielded between Fall 2018 and early Spring 2019. Purposive sampling was used to invite a diverse group of ACSI member schools (in terms of size, geography, and other factors) to participate. The final sample consisted of 65 schools, of which 90% were accredited. Each school was provided with unique electronic links to surveys for each of the seven participant groups, as well as a link to a metrics assessment that gathered demographic and other background information for the school. Sample invitation emails to each group were also provided, as well as a suggested timeline for sending email invitations and reminders for groups.

Only students in sixth through 12th grade participated in the student survey, with schools typically administering the survey during the school day (e.g., during a free period in a computer lab). Additionally, data on student achievement for 41 of the 65 schools in the sample was obtained from the ACSI Student Assessment Program. Of that number, TerraNova data was obtained for 40 schools and Iowa Assessment data was obtained for 1 school.

In total, 15,189 completed responses were received, with distribution across groups as indicated in Table 2.
<table>
<thead>
<tr>
<th>Group</th>
<th># of Responses</th>
<th>% Male</th>
<th>% Female</th>
<th>% of Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>7,381</td>
<td>Data not collected</td>
<td>Data not collected</td>
<td>Data not collected</td>
</tr>
<tr>
<td>Parents</td>
<td>4,291</td>
<td>28%</td>
<td>72%</td>
<td>19%</td>
</tr>
<tr>
<td>Alumni</td>
<td>1,340</td>
<td>41%</td>
<td>59%</td>
<td>14%</td>
</tr>
<tr>
<td>Teachers</td>
<td>1,322</td>
<td>23%</td>
<td>77%</td>
<td>11%</td>
</tr>
<tr>
<td>Leaders/Administrators (School Head Subset)</td>
<td>226 (65)</td>
<td>41% (63%)</td>
<td>59% (37%)</td>
<td>6% (4%)</td>
</tr>
<tr>
<td>Support Staff</td>
<td>413</td>
<td>9%</td>
<td>91%</td>
<td>12%</td>
</tr>
<tr>
<td>Board Members</td>
<td>216</td>
<td>63%</td>
<td>37%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table 2. Response Numbers and Demographics of FSCI Survey Groups

In addition to descriptive statistics regarding survey respondents, information was collected regarding school size (measured by total student enrollment) as well as geographic location (by ACSI region). Statistics for both are shown in Figure 1 and Figure 2, respectively.

Both in terms of enrollment size and geographic density by ACSI region, the sample was generally proportional to the overall ACSI membership. This provides confidence that the sample is representative of ACSI’s membership for these metrics.

Data Analysis

In order to develop a measure of school culture, questions for a pre-validated assessment were formed based on catalogued findings from an extensive review of relevant prior research and literature. The

Figure 1. Distribution by School Size (Enrollment)

Figure 2. Distribution of Schools by ACSI Region
SPSS statistical package was used to evaluate the pre-validated assessment, analyzing respondent data from participating schools for the purposes of construct analysis, predictive modeling, and establishing the psychometric properties of the finalized instrument.

**Construct Analysis**

The data was approached without a preconceived theoretical framework to be validated. Instead, the data was allowed to speak for itself. The constructs being identified are often referred to as latent constructs, which means simply that they are concepts that cannot be measured directly. The valid approach to measuring latent constructs is to evaluate a range of prompts that group together naturally, addressing an underlying idea from more than one frame. When factor analysis reveals that a set of measurements is factoring together, there is reason to explore whether a hidden or latent construct has been repeatably identified.

As these latent constructs are identified, it is important that the prompts belonging to any construct group primarily with that construct. If a prompt is shared in its natural grouping with any other of the latent constructs in a prospective model, it is key that the primary strength of affinity is with the reliant latent construct, rather than any other construct in the model. The final model was determined once all of these criteria exceeded established best practice benchmarks.

In terms of specific analysis procedures, the number of constructs for each assessment was determined by striving to maximize total variance explained by the fewest number of components. Factor analysis using the Principal Component Analysis method of extraction was used to confirm the aggregation of the question items in their dimension components. The optimal number of constructs was determined by calculating eigenvalues for the data set and specifically exploring where eigenvalues dropped below 1. The final number of constructs accepted for each assessment explains between 64.9 – 69.5% of overall variance. Principal Component Analysis using Varimax with Kaiser Normalization rotation method yielded a structure where all individual question items yielded primary loadings over .5, and not a single item yielded cross-loading above .3.

**Predictive Modeling**

In terms of linkages between these constructs and outcomes, the initial predictions detectable were identified using structural equation modeling (SEM) and logistic regression techniques. These techniques enable the model to be used to predict changes in desired outcomes if or when changes are made related to underlying latent constructs. The outcomes initially revealed by the model should not be confused with correlation relationships, which have no power to predict future outcomes. One outcome included in this predictive analysis was student performance on standardized testing, though additional outcomes related to student retention, durability of student faith, and more were included in this robust outcomes exploration phase. In the end, various constructs across the model were found to have strong and specific predictive value for one or more meaningful flourishing outcomes. These are discussed in the final section of this report.

The end result of data analysis was twofold. First, by excluding all items except those bearing statistical significance, the number of items per survey was reduced significantly. The resulting surveys are not only shorter and more administration-friendly, but also composed exclusively of questions that will yield data predictive of flourishing outcomes. The finalized Flourishing School Culture Instrument (FSCI) is no longer exploratory in nature, but now a **predictive measure** of school flourishing. Data from the FSCI will be used to generate school-level reports that provide insight into schools’ strengths, as well as areas schools can target via improvement initiatives and processes. Data from future administrations will also enable schools to track year-over-year progress, as well as further strengthen the predictive nature of the instrument as the sample and resulting data set broadens.
Second, a **predictive model** of school flourishing was developed from the final number of validated constructs for each group. These constructs were mapped onto the first ever research-based model of Christian school flourishing, the Flourishing School Culture Model (FSCM). The model is presented in the next section of this report.

**Psychometric Properties**

SPSS analysis was used to test the quantitative structural evidence for reliability and validity behind each question set. In the first round of analysis, evidence of divergent validity was used to immediately cut from the pre-validated assessment any question that highly correlated, either positively or negatively, with school size, respondent ethnicity, or overall school population diversity. This was done to avoid including a pseudo-psychometric concept inadvertently measuring a merely demographic factor.

Cronbach’s alpha was then used to measure the overall reliability of each question set. Each assessment reached Cronbach’s alpha level of between .788 to .882, with the exception of the board assessment (.544). As .700 is the preferred threshold for this measure, and .500 or above is acceptable, confidence in the reliability of these assessments is unusually high. Validity analysis (KMO – Kaiser-Meyer-Olkin Measure of Sampling Adequacy) was conducted for the scaled outcome measures from each assessment. Each assessment reached a KMO of between .725 and .879, which again are exceptionally high scores (.500 is acceptable for this type of assessment), indicating that the strength of the relationships among variables was high. Statistics for both reliability and validity along with the final number of items and validated constructs are provided in Table 3.

<table>
<thead>
<tr>
<th>Question Set</th>
<th>Number of Items</th>
<th>Reliability: Cronbach’s Alpha (.500 or above acceptable; .700 or above desired)</th>
<th>Validity: KMO (.500 or above desired)</th>
<th>Final Number of Validated Constructs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>18</td>
<td>.788</td>
<td>.841</td>
<td>6</td>
</tr>
<tr>
<td>Parents</td>
<td>11</td>
<td>.806</td>
<td>.856</td>
<td>3</td>
</tr>
<tr>
<td>Alumni</td>
<td>12</td>
<td>.866</td>
<td>.879</td>
<td>4</td>
</tr>
<tr>
<td>Teachers</td>
<td>36</td>
<td>.882</td>
<td>.863</td>
<td>12</td>
</tr>
<tr>
<td>Leaders/Administrators</td>
<td>28</td>
<td>.870</td>
<td>.839</td>
<td>8</td>
</tr>
<tr>
<td>Support Staff</td>
<td>18</td>
<td>.794</td>
<td>.802</td>
<td>6</td>
</tr>
<tr>
<td>Board Members</td>
<td>15</td>
<td>.544</td>
<td>.724</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3. Psychometric Properties of FSCI Surveys by Group
Analysis of the FSCI identified 44 validated constructs related to flourishing across the seven groups of participants (see earlier Table 3). Once identified, these constructs were compared to the major categories of flourishing identified in the literature review. This comparison was conducted to help identify larger domains into which the constructs might be grouped. The result of this was a model with five major domains of flourishing in Christian schools: Purpose; Relationships; Learning Orientation; Expertise and Resources; and Well-Being (see Figure 3 below). A definitional overview will be provided for these domains, followed by a listing of specific constructs that comprise each domain.
**Defining Purpose.** John Hull (2003) identifies “Christian perspective as the defining concept in Christian education” (206), or that which fundamentally makes Christian education distinctive from other forms of schooling. As Hull goes on to explain, “Christian perspective must reshape and redirect the curriculum, pedagogical theory, student evaluation, educational goals, and school structure” (207). It follows that Christian perspective provides the telos, or purposeful aim, of Christian education. Many of the distinctives of Christian education—meaning what is unique to Christian schools’ missions, values, and expected outcomes, as opposed to other sectors of education—fall within this domain.

FSCI data analysis identified constructs related to **Purpose** for all seven survey groups (students; parents; alumni; teachers; leaders/administrators; support staff; and board members). Most constructs were formulated in the positive (with the exception of Questioning), below.

**PURPOSE CONSTRUCTS**

**Responsibility** – Leaders, teachers, and support staff feel a sense of shared ownership for school mission, success, and improvement.

**Holistic Teaching** – Teaching involves helping students develop spiritually and emotionally (teaching the heart and soul, as well as the mind).

**Integrated Worldview** – Christian worldview changes how we educate; there is no such thing as a secular sphere.

**God’s Story** – Students believe they are a part of God’s bigger plan and can be used by him to “make a difference.”

**Questioning** – Students have doubts about their faith, lack time to pray or study the Bible, and feel that most Christians are too judgmental.

**Partnership** – Parents feel they are a part of the school’s mission, and that their child’s spiritual development requires their partnering with and being involved at the school.

**Spiritual Formation** – Alumni report that their Christian faith is stronger thanks to attending a Christian school, and they believe people can change with God’s help.
Defining Relationships. Education is a relational enterprise by nature. Loe (2016) cites a multitude of studies that “support the assertion that the quality of relationships in schools matter; it has enormous implications” (9) for classroom environments, student performance, the well-being of students into adulthood, parent-teacher cooperation, and the efficacy and job satisfaction of teachers and leaders (Louis et al. 2010; Leithwood et al. 2004; Marzano, Waters, and McNulty 2005; Waters and Marzano 2006). For Christian schools in particular, relationships are important because of the incarnational nature of Christian faith, expressed through community and in discipleship (John 1:14, 1 Corinthians 12:12-27, Ephesians 4:16).

Like Purpose, constructs related to Relationship were identified for all seven survey groups (students; parents; alumni; teachers; leaders/administrators; support staff; and board members). Most constructs were formulated in the positive (with the exception of Insular Culture), below.

### RELATIONSHIP CONSTRUCTS

**Supportive Leadership** – Principals are trusted, teachers feel that leaders “have our backs,” and leaders empower teachers and staff to make decisions.

**Leadership Interdependence** – Diverse backgrounds, transparency about one’s weaknesses, and relying on others to offset those weaknesses is key.

**Parent Relationships** – Teachers “get to know” parents, and frequent and systemic communication facilitates positive relationships.

**Community Engagement** – The school engages with the surrounding community and regularly taps into community resources, including networking and resource-sharing with other schools.

**Mentoring Students** – Staff point out talent in each student, help students see how they fit in God’s bigger plan, and are aware of students’ struggles at school or home.

**Insular Culture** – The school shields students from the world’s brokenness, the school is independent from the surrounding community, and/or the student body lacks diversity.

**Christlike Teachers** – Teachers show Christlike love, kindness, and care to students. Students are cared about individually, including their spiritual development.

**Prosocial Orientation** – Students not only enjoy helping others, but also are known by others (e.g., peers) for showing love and care.

**Caring Environment** – From the perspective of school graduates, teachers were kind, students felt included in class, and students were protected from bullying.
Defining Learning Orientation. Schools are of course known as sites of learning for students. But if school cultures are to flourish, schools and educators must also engage in learning. In considering schools as organizations, Senge et al. (2012) assert that “schools can be made sustainably vital and creative, not by fiat or command or by regulation or forced rankings, but by adopting a learning orientation” (5, emphasis added). Much the same can be said for teachers, as ISM (2012) found a growth-oriented faculty culture—marked by teachers’ views of vocation as including career-long professional growth at the core—to be correlated with private schools’ abilities to sustain excellence in their student programs. And the success of professional development programs does not depend solely on the quality of those programs, but rather is linked with teachers’ orientation toward professional learning (including motivation, openness to new experiences, level of interest in PD, and sense of self-efficacy; cf. Gegenfurtner et al. 2009; McDonald 2012; Christesen and Turner 2014; Dixon et al. 2014).

FSCI data analysis identified constructs related to Learning Orientation for five of the seven survey groups (alumni; teachers; leaders/administrators; support staff; and board members), as follows.

LEARNING ORIENTATION CONSTRUCTS

Feedback – Feedback on teaching practice and classroom management is given regularly to facilitate adjustments in real-time.

Collaboration – Learning from and with other teachers drives and inspires better teaching.

Systems Thinking – When planning for change, the potential impact on the school, the classroom, students, and the overall system are considered.

Data-Driven Improvement – Data is used to gauge school results and effectiveness, determine goal attainment, and address problems the school faces.

Professional Development – PD is provided on-site and is subject- and role-specific.

Outcomes Focus – A strong belief is held that process doesn’t matter if it isn’t producing results, and change is distracting if it doesn’t lead to increases in student achievement.

Culture of Improvement – Guided by school leadership and focused on the future, the school is continually improving/makes necessary changes to improve.

Individualized Instruction – Students are helped to figure out how they learn best and to identify their natural strengths.
**Defining Expertise & Resources.** While a sense of purpose is essential for Christian school educators, their ability to fulfill that purpose is necessarily dependent upon their expertise as educators. For example, a secondary math teacher, no matter how passionate for the subject, cannot be successful without the expertise needed to teach secondary math. Likewise, a school leader who is committed to good stewardship but who lacks expertise in managing school finances will encounter difficulty in leading a school effectively. Along these lines, Hamilton et al. (2007) found through research that, unsurprisingly, barriers to school improvement included a lack of qualified principals and teachers. Conversely, effective classrooms featuring effective instruction have been consistently correlated with greater student achievement (Marzano 2003, 2007). Beyond qualified educators, the literature review conducted for the FSCI identified four broad categories that are correlated with school improvement outcomes: student learning environment; organizational policies and practices; school resources; and school management.

FSCI data analysis identified constructs related to Expertise & Resources for five of the seven survey groups (parents; teachers; leaders/administrators; support staff; and board members), below.

### EXPERTISE & RESOURCES CONSTRUCTS

**Best Practice Orientation** – Keeping up with best practices in teaching is prioritized and resources for doing so can be identified.

**Engaged Learning** – Students engage in activities that nurture critical thinking, evaluating information, and problem solving.

**Classroom Management** – The classroom is orderly, and teachers are organized and consistent with discipline.

**Responsiveness to Special Needs** – Teaching staff works together to serve students with special needs, aided by processes for identifying and responding to those needs.

**Qualified Staff** – New teacher hires are credentialed (educationally and licensed/certified) and have classroom experience.

**Resources** – Materials and resources for teaching, including technology, are sufficient, and the school building is in good physical condition.

**Resource Planning** – A strategic financial plan and master facilities plan is in place, and financial planning is a strength of the board.

**Resource Constraints** – The school has financial resources to operate effectively; or a belief is held that the school could be more effective if not for fiscal constraints, and the school lacks the resources needed to make changes in the school.
Defining Well-Being. As a helping profession, education can be an extremely demanding field that requires a great deal intellectually, emotionally, and physically of educators. Kipps-Vaughn (2013) explains that nearly a quarter of teachers frequently experience high levels of stress, which can impact the classroom learning environment through “absenteeism, turnover and early retirement, which negatively affect the school climate and lead to poor student outcomes, both academically and behaviorally” (44). Teacher stress ultimately affects student outcomes; Herman, Hickmon-Rosa, and Reinke (2017) found through their research that teachers with a profile of high stress, high burnout, and low coping were associated with the weakest student outcomes. Despite these issues, schools have done little to address the root causes of “stress and the caregiver’s burden” (Miller 2019, 23) affecting educators. For both Christian school teachers and leaders, the construct of Stress was identified through FSCI analysis as significant to these groups’ flourishing.

Conversely, student wellness has been an increasing focus of schools and educators for some time. Research on student health and well-being has helped to inform this focus, by showing that related constructs, such as resilience, are “critical to [student] learning” (Blackburn 2018, 47).

WELL-BEING CONSTRUCTS

Stress – Constant feelings of stress and being overwhelmed accompany a lack of time to prepare for instruction (for teachers), or to focus on physical health (for leaders).

Healthy Living – Students are happy with their physical health, including sufficient exercise and a healthy diet.

Resilience – Students handle stress effectively and respond well to/bounce back from difficult situations.
IV. DISCUSSION

The concept of “flourishing” offers a robust and expansive view of the purposes and processes of education. This is particularly well-suited to Christian schools, whose holistic expected student outcomes encompass learning and growth in the areas of spirituality, academics, community-mindedness, excellence, impact, and servanthood. The FSCI was developed as an exploratory instrument to identify and validate a roadmap to school flourishing for Christian schools.

The FSCI is unique because of its unprecedented size, scope, and statistical power. In terms of size, over 15,000 survey responses were collected and analyzed for the instrument, making it the largest study of flourishing for Christian schools. In terms of scope, because the FSCI was constructed around the idea that schools are cultures—rather than simply collections of siloed programs or constituents—a 360-degree design was used to survey seven different groups (students; parents; alumni; teachers; leaders/administrators; support staff; and board members), and data analysis explored relationships between these groups, versus examining their responses in isolation. And finally, the statistical power behind the FSCI allowed for the development of a finalized, predictive measure—along with a predictive model (the FSCM)—of flourishing in Christian schools. By focusing culture-building efforts on the domains and constructs that are linked predictively with flourishing, schools and educators can focus limited resources and energy on those areas that truly make a difference for flourishing.

Improving Outcomes

Certainly, the FSCI and FSCM can be used in school planning and evaluation efforts as schools work to nurture flourishing cultures. As such, they can be important tools for leaders and educators who seek to intentionally and proactively engage in efforts to shape school culture. By focusing culture-building efforts on the domains and constructs that are linked predictively with flourishing, schools and educators can invest limited resources and energy on those areas that truly make a difference for flourishing.

However, the FSCI and FSCM can also be used to inform efforts to improve specific outcomes. This is because data analysis identified a number of significantly strong statistical relationships between specific outcomes and inputs of a flourishing culture. In other words, if schools are seeking to improve a specific outcome, they can work to improve the input(s) that have a predictive relationship with that outcome. This helps schools to know where to invest limited resources in strategic efforts, in order to have the greatest probability of achieving the goal of school improvement. These relationships, which point to places where schools can focus outcomes-oriented improvement efforts, are presented in Table 4 and followed by a discussion of implications.
Table 4. Predictive Relationships Between Inputs and Outcomes of a Flourishing Culture

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Input</th>
<th>Measurement</th>
<th>Statistical Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic (Students)</td>
<td><strong>Expertise &amp; Resources:</strong> Rigorous hiring standards</td>
<td>Higher student math scores</td>
<td>4.8x more likely</td>
</tr>
<tr>
<td></td>
<td><strong>Expertise &amp; Resources:</strong> Board reports that the school has adequate resources</td>
<td>Higher overall test scores</td>
<td>2.4x more likely</td>
</tr>
<tr>
<td></td>
<td><strong>Expertise &amp; Resources:</strong> School is responsive to special needs of students</td>
<td>Students have higher reading scores</td>
<td>1.6x more likely</td>
</tr>
<tr>
<td></td>
<td><strong>Well-Being:</strong> Students report being physically healthy</td>
<td>Higher overall test scores</td>
<td>1.3x more likely</td>
</tr>
<tr>
<td>Spiritual (Students &amp; Alumni)</td>
<td><strong>Relationships:</strong> Leaders/administrators engage the surrounding community</td>
<td>Alumni more likely to report they’re currently walking with God</td>
<td>2.4x more likely</td>
</tr>
<tr>
<td></td>
<td><strong>Expertise &amp; Resources:</strong> Teachers oriented toward best practice</td>
<td>Alumni more likely to report they’re currently walking with God</td>
<td>1.8x more likely</td>
</tr>
<tr>
<td></td>
<td><strong>Expertise &amp; Resources:</strong> School is responsive to special needs of students</td>
<td>Alumni more likely to report they’re currently walking with God</td>
<td>1.5x more likely</td>
</tr>
<tr>
<td></td>
<td><strong>Relationships:</strong> Students confirm their teachers care about them</td>
<td>Alumni more likely to report they’re currently walking with God</td>
<td>1.3x more likely</td>
</tr>
<tr>
<td>Staff Turnover (Teachers)</td>
<td><strong>Expertise &amp; Resources:</strong> Teachers report not having the classroom resources they need</td>
<td>Staff turnover rates</td>
<td>Significantly higher</td>
</tr>
<tr>
<td></td>
<td><strong>Purpose:</strong> Teachers report helping students engage in their learning (develop critical thinking and problem solving)</td>
<td>Staff turnover rates</td>
<td>Significantly lower</td>
</tr>
</tbody>
</table>

Some of the findings presented in Table 4 are likely not surprising to school leaders. For example, hiring better-qualified teachers contributes to higher math scores, and adequate school resources and students’ physical well-being impact overall test scores. Additionally, responsiveness to students’ learning needs leads to higher reading scores. Teachers who report not having the classroom resources they need exhibit higher turnover rates. And alumni who feel their teachers cared about them are more likely to report they’re currently walking with God.

All of these relationships are fairly well-established in educators’ sense of best practice, and indeed in many ways, these efforts represent the “bread and butter” of most Christian schools’ improvement efforts. Schools that wish to improve outcomes in these areas should continue to elevate their hiring practices, promote student well-being, respond well to students’ learning needs, provide ample classroom resources, and ensure teachers develop caring relationships with students.

From these findings, however, also emerge a few insights that are probably less well-considered. Three out of four such insights deal with schools having a lasting impact on students’ spiritual formation. Specifically, alumni had a greater likelihood of continuing to walk with God if:
1) their school leaders and administrators engaged the surrounding community;
2) the school addressed the learning needs of students well; and
3) their teachers were oriented toward best practice. **None of these three inputs (community engagement, meeting learning needs, and teachers’ best-practice orientation) would be traditionally thought of as levers to improve spiritual outcomes of Christian school students—but FSCI research shows otherwise.**
It is possible that these inputs have a significant positive effect on school culture, which in turn provides alumni with positive experiences that bolster their spiritual formation. It is also possible that these inputs demonstrate biblical principles in action for students. In other words, alumni whose schools and educators engage in the community (e.g., through efforts like service-learning), care well for those who are struggling, and who strive for excellence in all they do, may have witnessed powerful examples of Christ-likeness and inspiration for “living out” the Gospel in their own lives. Future work with the FSCI data will explore these possibilities further, through a next level of analysis that considers the relationship between constructs. This work, which will be shared in future reports, will provide greater insight into the underlying reasons for the predictive linkages between these inputs and better spiritual outcomes.

The fourth insight relates to teacher turnover. At schools where teachers reporting being able to help students engage in their learning—specifically, to develop critical thinking and problem solving—the faculty turnover rate was significantly lower. Engaging students in deeper learning is not typically considered as a way to reduce the “churn rate” (Miller 2019, 22) of teachers in Christian schools. And yet, FSCI data shows that teachers are more likely to stay at a school if they are able to help students learn at deeper levels. These findings suggest the importance of developing an instructional culture that encourages and enables this level of teaching and learning. Again, future work with the FSCI data will explore underlying relationships between constructs further, to provide greater insight into this finding.

Future Considerations

Ongoing analysis of FSCI data is expected to uncover additional relationships between inputs and outcomes on the FSCM, as well as provide additional insight on the relationships between constructs, as just discussed. Future reports on these findings will be released throughout the 2019-2020 academic year.
REFERENCES


