

MANAGING SUSTAINABILITY IN SCHOOL DISTRICTS:

A PROFILE OF SUSTAINABILITY STAFF
IN THE K-12 SECTOR

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The Center for Green Schools at the U.S. Green Building Council

**THE CENTER
FOR GREEN SCHOOLS**



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EXECUTIVE SUMMARY

Since 2011, the Center for Green Schools (Center) at the U.S. Green Building Council (USGBC®) has been the sole national convener of approximately 90 school district professionals who currently serve as the sustainability change-makers in school districts. The green schools movement is growing, and with it the growth of new roles within school districts. The importance of having a sustainability-focused staff member is beginning to be recognized by educational leaders who look to sustainability as a means of revitalizing their districts. Not much is known about this profession, however, and particularly about how a sustainability role functions within a school district.

This report is the latest step in ongoing research being conducted by the Center to gain a better understanding of sustainability professionals in the workplace and how these individuals impact the sustainability performance of their organizations. The research focuses on the elementary and secondary education (K-12) sector, building a more detailed profile of what a sustainability-focused staff member does in a school district, how he or she fits within the district, and how the staff member is demonstrating the impact that his or her performance has on the district's triple-bottom line. The Center defines green schools in terms of the three pillars of the Department of Education's Green Ribbon Schools Award: reduced environmental impact, enhanced human health, and increased environmental literacy. The phrases 'sustainable schools,' 'green schools,' and 'sustainability in schools' are used interchangeably in this report.

Organizational barriers and superiors' lack of familiarity with a sustainability professional's role and sustainability in general has a greater impact on the success of sustainability initiatives.

Research within this report is based on a survey of 35 school district sustainability staff and interviews with 17. The sustainability staff surveyed represent school districts of all sizes from across the country. An analysis of the data gathered reveals that, among this group of 35 professionals, job characteristics (i.e. job title, area of focus, and time dedicated to sustainability) and self-assessed effectiveness were not impacted by the number of schools in the school district. Further analysis finds that organizational barriers and superiors' lack of familiarity with a sustainability professional's role and sustainability in general has a greater impact on the success of sustainability initiatives.

Approximately 75 percent of staff surveyed report that their positions are located within the facilities or operations departments of their districts. Interviews with the professionals revealed that being siloed in the facilities department is challenging. However, this placement also has presented a new opportunity for the facilities and operations departments to evolve into more cross-cutting arms of school districts. These staff members are using their limited resources not only to promote sustainability but also to transform facilities departments into efficient and innovative units that can relate to all other departments of the district and provide additional educational value for students.

The sustainability position in school districts is multi-dimensional and still evolving. The community of professionals currently in sustainability roles have the capacity to function as engineers, communicators, and leaders. Given ideal circumstances (and, in many cases, less than ideal), this position has the potential to truly transform the way a school district operates.

BACKGROUND AND BASIS FOR ANALYSIS

In recent years, a new position has been emerging across various sectors: the sustainability manager. Studies observing sustainability professionals in corporations and institutions of higher education have seen the growth of this profession and increased participation in sustainability-related professional organizations (Walton and Urbanski 2012; Weinreb Group 2011). The sustainability role can serve several functions: leader, communicator, engineer, data analyst, strategist, and educator (Willard et. al. 2010). The degree to which the staff member takes on a particular sustainability-related function varies based on organizational goals and values and, to some extent, the values of the staff member and his or her supervisor.

Sustainability bridges the boundaries between the natural world and a functioning society. As such, sustainability professionals work to connect these two within the context of their organizations. When sustainability professionals are hired, this connection is often ill-defined within their respective organizations, which has made defining the role equally unclear and difficult (Willard et. al. 2010). Research that examines sustainability in organizations both examines how organizations are meeting their goals and investigates how human capital is being incorporated into strategy in order to improve sustainability performance.

With the “Managing Sustainability” series of research publications, the Center aims to expand current knowledge of the sustainability profession. The research contained herein further illuminates the particular role of sustainability staff in K-12 school districts. In addition to creating a profile of who these professionals are and what their positions entail, this report analyzes what sustainability professionals have accomplished and their perceived capabilities within their organizations. This initial analysis provides a better understanding of what additional sustainability staff could accomplish in school districts around the country. The report is a continuation of the ongoing research that the Center is conducting with the goal of both understanding how a sustainability-focused staff member fits within an organization and determining how this designated professional contributes to sustainability performance.

BACKGROUND RESEARCH: MANAGING ORGANIZATIONAL SUSTAINABILITY

The 2013 report produced by the Center, titled “Managing Organizational Sustainability,” discusses typical elements of organizational sustainability in corporations and institutions of higher education (Ruedig and Baldwin Metzger 2013). Authors Julia Ruedig and Anisa Baldwin Metzger provide a thorough review of current research exploring how dedicated sustainability staff contribute to the sustainability performance of their organizations.

Through a literature review and interviews with 12 sustainability professionals in corporate, non-profit, and educational institutions, the authors offer the following conclusions:

- Interdepartmental cooperation is essential to achieving sustainability goals, with sustainability staff often operating as cross-departmental connectors.
- The most common metrics used to measure sustainability performance include financial performance metrics, environmental sustainability performance metrics, and stakeholder engagement metrics.
- Developing a straightforward method of measuring the performance of sustainability staff across multiple organizations and sectors remains extremely difficult because of the strong link between an individual organization’s core business practices and the sustainability metrics it strives to capture.

The following research builds on the frameworks and findings discussed in “Managing Organizational Sustainability” to examine sustainability professionals in the K-12 sector. The analysis in the previous report provides an in-depth look at the profession and establishes the foundation necessary to better understand how to evaluate the performance of sustainability staff.

STUDY GOALS AND METHODOLOGY

When organizations seek to develop and implement a sustainability strategy, their approach is either to make sustainability an additional duty of an existing position or to create an entirely new functioning role. When they pursue the latter path, organizational leaders must decide where to place this individual, what the individual's goals should be, and how his or her position should be evaluated. Very little research has been conducted regarding evaluating the performance of sustainability professionals.

In existing research, in-depth profiles of sustainability staff have focused primarily on the corporate sector, higher education sectors, or a combination of many sectors. The Center has chosen to analyze an additional sector where sustainability staff are a recent and growing addition: K-12 school districts. Sustainability professionals within this sector face similar organizational obstacles as their counterparts in other sectors; however, they also face unique challenges. These unique challenges involve navigating complex organizational structures and the strongly-held, sometimes conflicting, values and mandates that come with working in K-12 education.

RESEARCH GOALS

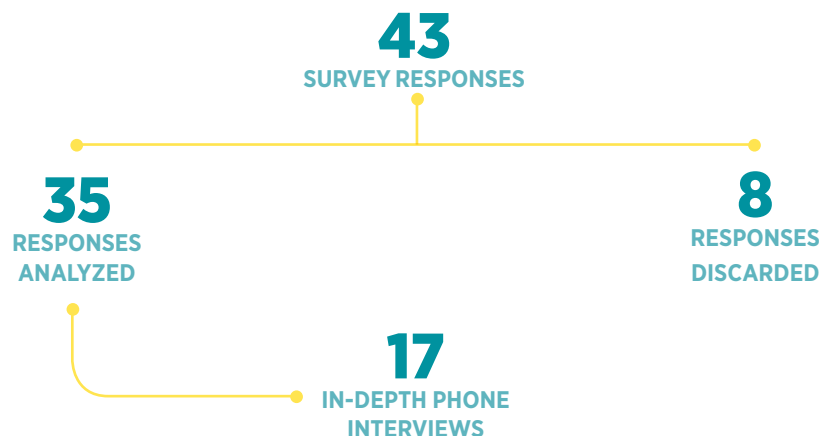
The research goals of this study are to:

- Develop a profile of a typical K-12 sustainability professional
- Determine how this role is similar to sustainability positions in other sectors
- Understand what motivates school leaders to hire these professionals
- Investigate how school districts are setting expectations for professionals in this role and evaluating their performance

METHODOLOGY

Two phases of research addressed the stated research goals: an online survey questionnaire and a series of phone interviews. Of the 43 responses received from the online survey, eight responses did not fit the criteria of being non-faculty school system staff and had to be discarded. Thus, the final sample size for the online survey questionnaire is 35 responses. Unless otherwise noted, this is the sample size used for analysis throughout this paper. Additionally, research included 17 in-depth phone interviews to allow survey questionnaire participants to further explain their responses and discuss related topics. These two samples form the basis for the analyses presented in this report. For a more detailed description of the study methodology and survey design, refer to Appendix A.

FIGURE 1: Survey responses and analysis categories



RESULTS

The following results come from the analysis of the 35 valid survey responses, which are referred to as “respondents.” “Interviewees” refer to the 17 individuals who participated in more in-depth interviews in addition to responding to the survey. Analysis examines trends related to survey respondents’ answers. The more limited in-depth interviews conducted after the survey supplement analysis with anecdotal evidence.

WHO ARE SCHOOL DISTRICT SUSTAINABILITY STAFF?

Respondent Profile

As can be seen in Figure 2, of the 35 respondents, 54 percent have master’s degrees or higher. While this indicates that postgraduate education is valuable in the field of sustainability professionals, it is not a requirement for these positions. Most of the degrees held by the respondents are in the fields of environmental science, sustainability, or business. For a list of reported degrees, refer to Appendix B.

The sustainability professionals surveyed report a range of sustainability-related work experience. The survey asked respondents to report on their relevant sustainability work experience prior to their current experience. This experience varies from less than one year in the field to over five years, as can be seen in Figure 3. No significant relationships were found between the years of experience of the respondents and the reported capabilities and challenges discussed in the following sections.

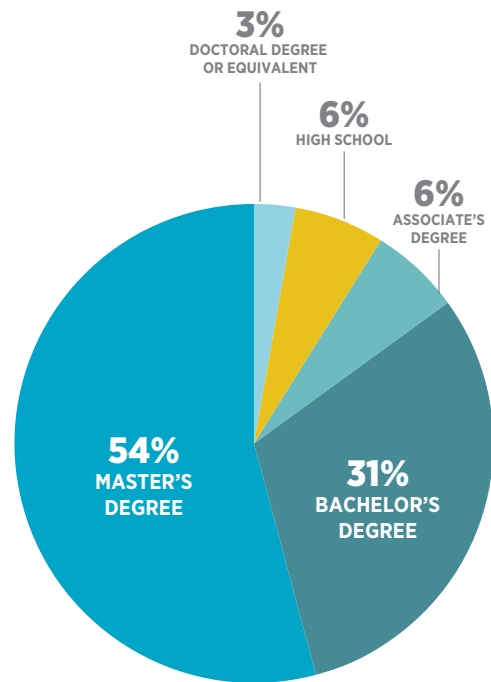


FIGURE 2: Academic background of the respondents

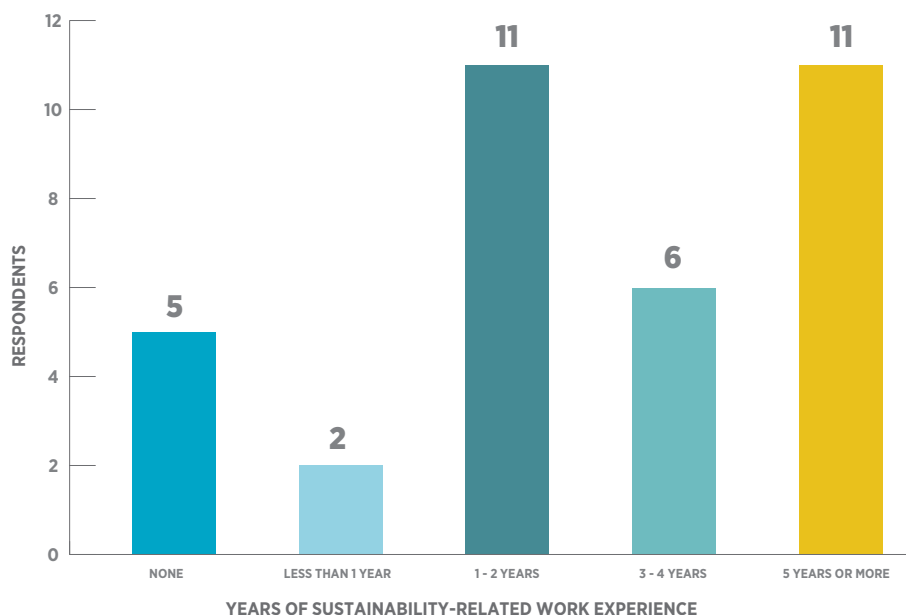


FIGURE 3: Years of sustainability-related work experience prior to current position

District Profile

All but one of the respondents are employed in school districts where traditional public schools make up at least 75 percent of their district. The final respondent reports being from a district comprised of 50 percent charter schools and 50 percent public schools. In total, 34 districts from 20 different states are represented in the 35 survey responses. Survey responses are from professionals in school districts of all sizes. The smallest is comprised of just five schools, and the largest has over 1,000. Despite this range, the size of the school district does not appear to have a significant influence on the responses given by the professionals in this study.

Job Title

Job titles can be important in determining responsibilities and expectations associated with sustainability-related positions in K-12 school systems. Job titles also often indicate where the sustainability professional is placed within the administration of K-12 schools and where he or she falls in the administration's hierarchy.

Examination of job titles reported by the surveyed professionals finds that 75 percent of respondents' job titles contain words that indicate their focused role in the school district. These terms include sustainability, energy, environment, and conservation. Job titles that do not include these terms are primarily related to facilities or operations. For a list of reported job titles, refer to Appendix C.

Figure 4 illustrates the breakdown of the job titles given by respondents, categorized by theme. Forty-three percent of all respondents have the word "sustainability" in their official job title, though the functions of their roles vary. These functions are defined in job titles as coordinators, managers, directors, officers, and analysts. Those who chose "other" in response to the survey question about job title have specialized titles related to green schools, including Green Schools Coordinator, High Performance Schools Program Manager, and LEED® Program Specialist.

Hiring and Job Creation

The sustainability professional is a relatively new position in schools, which is indicated by the initial hiring dates reported by survey respondents. While the first hire among the professionals surveyed was 1999, the majority of hires have occurred in the past six years, as displayed in Figure 5. For each sustainability professional surveyed, this graph displays the reported hire date into his or her current position (not necessarily the hire date into the school district).

Respondents who report hire dates into their current position prior to 2009 are more likely to have been previously working in school district positions that were commuted into sustainability positions or were expanded to include sustainability.

Sixty-three percent of those in sustainability or environment-focused roles were newly hired or had their job title changed in the last five years. Not surprisingly, then, 75 percent of respondents state that they are the first to hold their current position in their districts (n=32). Respondents not included in this particular analysis were either hired as consultants or are unsure if they are the first to hold their position.

FIGURE 4: Job titles by theme selected by respondent

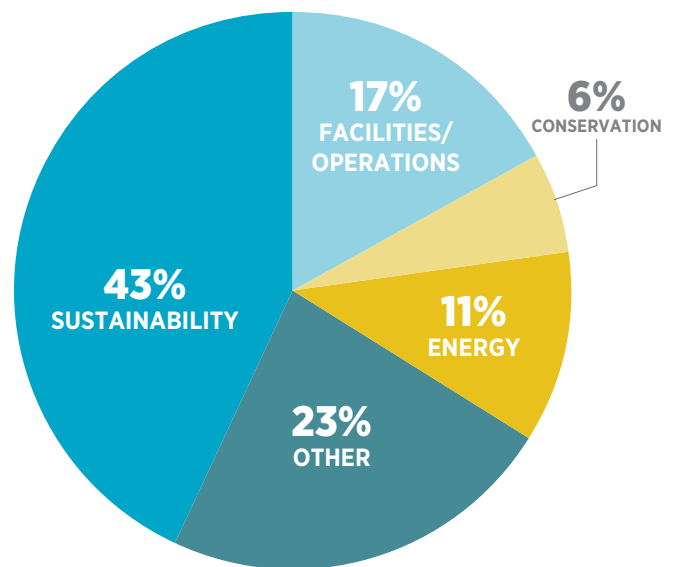


FIGURE 5: Initial hire date of respondents into their current positions

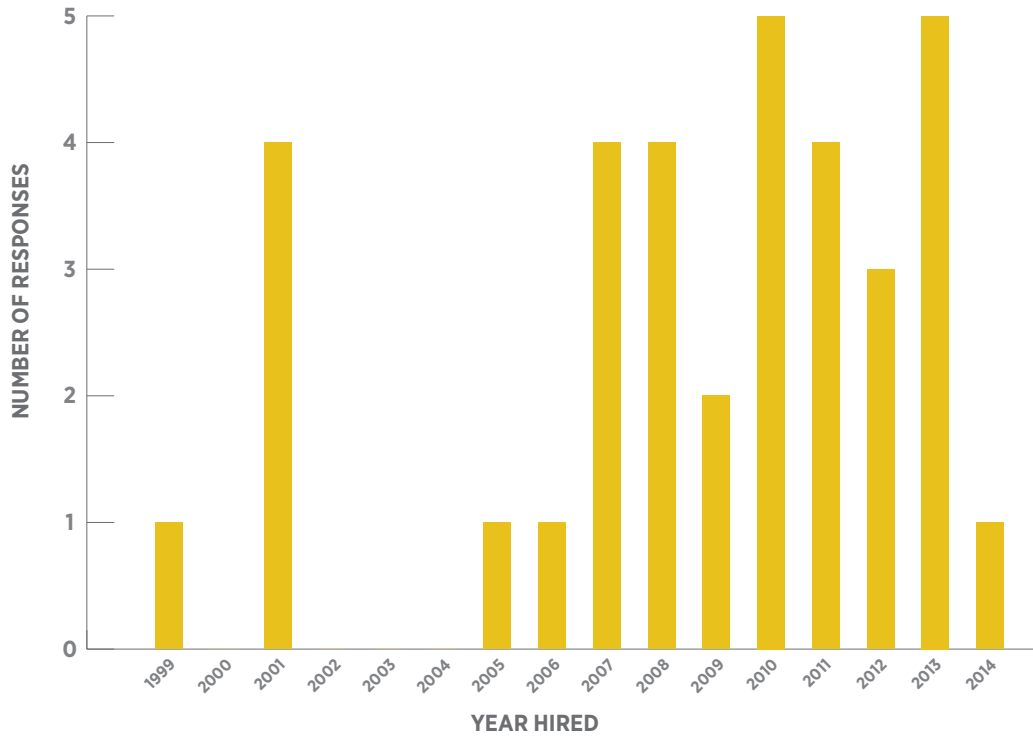
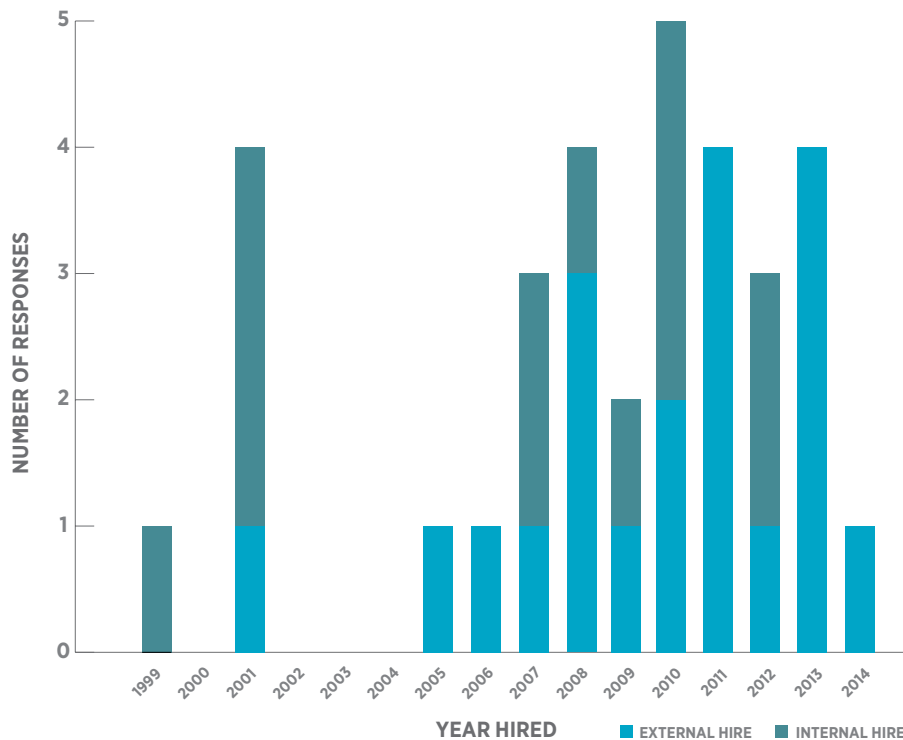
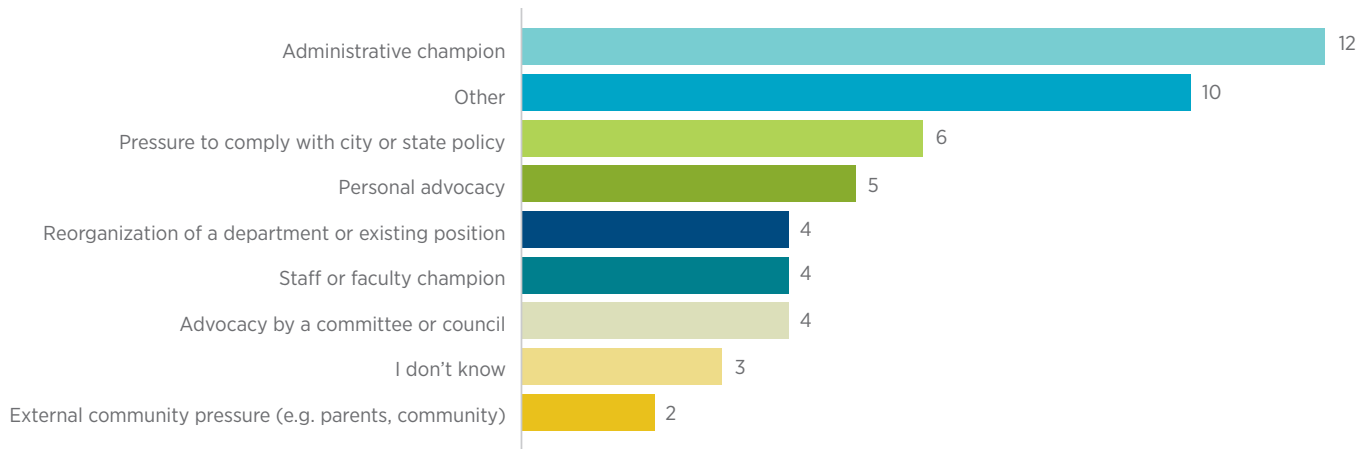


FIGURE 6: Internal vs. external hires displayed by initial hire date of respondents into their current positions (school district employees only)



As shown in Figure 6, 61 percent of the respondents, excluding the two who are consultants, were hired externally by their districts (n=33). While analysis reveals no significant difference in the responses between external and internal hires, one interviewee discussed the advantages and disadvantages of hiring sustainability staff internally. While internal hires have already made necessary connections in the district, the interviewee said, external candidates may have both the hard and soft skills that research indicates is common among successful sustainability professionals. An existing staff member in facilities, for instance, may have the technical knowledge to operate facilities but may not have the “people skills” necessary to accomplish larger-scale projects.

FIGURE 7: Motivation behind creation of sustainability professional position
(respondents could choose more than one option)



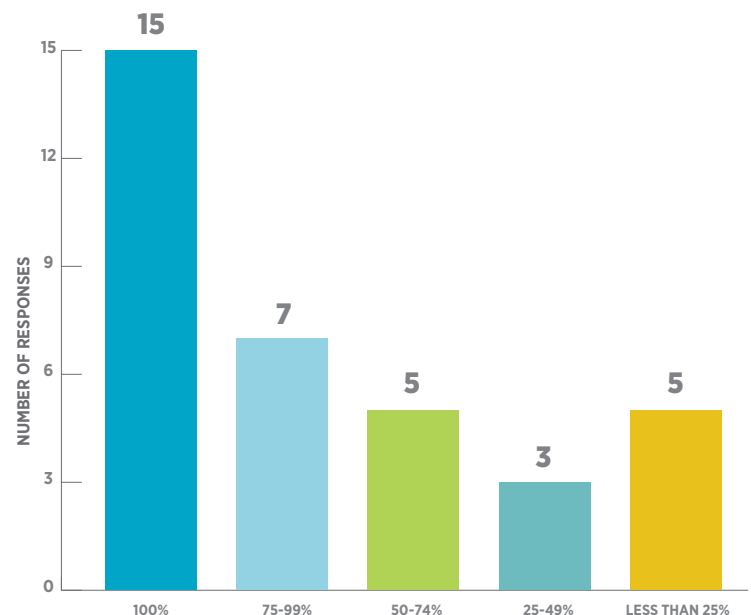
The survey asked respondents about the circumstances that brought about the creation of their position. As shown in Figure 7, their responses indicate that the strongest motivation for creating a sustainability professional position is the advocacy of administrative champions. Other strong motivations include personal advocacy and pressure to comply with city or state policy. Respondents who selected “Other” provide additional motivating factors, such as:

- School board member request
- Gradual roles and responsibilities shift
- Available grant funding
- New facility
- USGBC Green Schools Fellowship Program
- Potential reduction in operating costs

Job Characteristics

As shown in Figure 8, the majority of the sustainability professionals surveyed spend at least 75 percent of their work day doing work dedicated to sustainability, indicating that most of these individuals have relatively focused positions. Ninety-seven percent of non-consultant respondents work full-time in the school districts (n=33). Of those who report dedicating 100 percent of their time to sustainability, 10 out of 15 have the word “sustainability” in their job titles. A full list of the sustainability professionals’ job titles can be found in Appendix C.

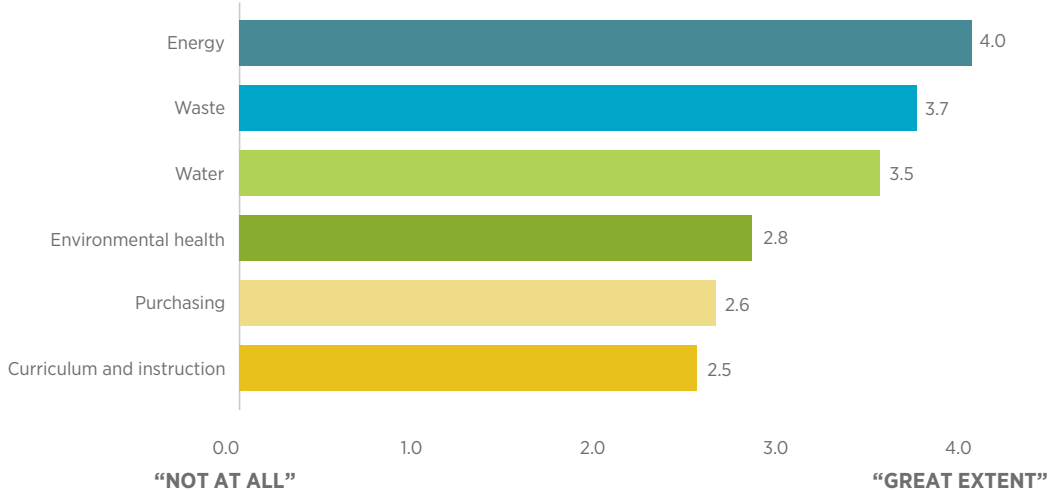
FIGURE 8: Percentage of work day dedicated to sustainability



Interviewees who have sustainability or environment-focused job titles but reported spending less than 100 percent of their day dedicated to sustainability explained that their other duties include administrative and technical tasks, such as facilities maintenance.

The survey also asked respondents to indicate the extent to which they are responsible for managing various areas of sustainability. Figure 9 shows the average responses for each of these areas. The highest ranking response is “Energy,” with the majority of respondents reporting that they are responsible “to a great extent” for its management. The lowest ranking area of responsibility is “Curriculum and Instruction,” indicating that the sustainability staff position is still one that operates largely outside of the classroom.

FIGURE 9: Average extent responsible for specific areas of K-12 sustainability



As with most job characteristics associated with sustainability professionals, different individuals have differing levels of staff support within their districts. Over half of the respondents report having support from additional sustainability-focused staff. The size and type of support staff identified by the respondents varies greatly, including full-time staff, part time staff, and temporary staff. One respondent reports that her district has 25 additional sustainability staff. During her interview, she explained that custodial and maintenance employees are unofficially considered sustainability staff because they make up a team that executes sustainability practices at each of their schools. The interviewee described this as an indication that sustainability truly is embedded in district culture.

On average, respondents who report having at least one additional staff member are less likely to identify with the challenges of overcoming structural barriers, scaling efforts district-wide, and lacking influence. Even with additional staff support, however, sustainability staff still identify “integrating sustainability into district culture” as a significant challenge.

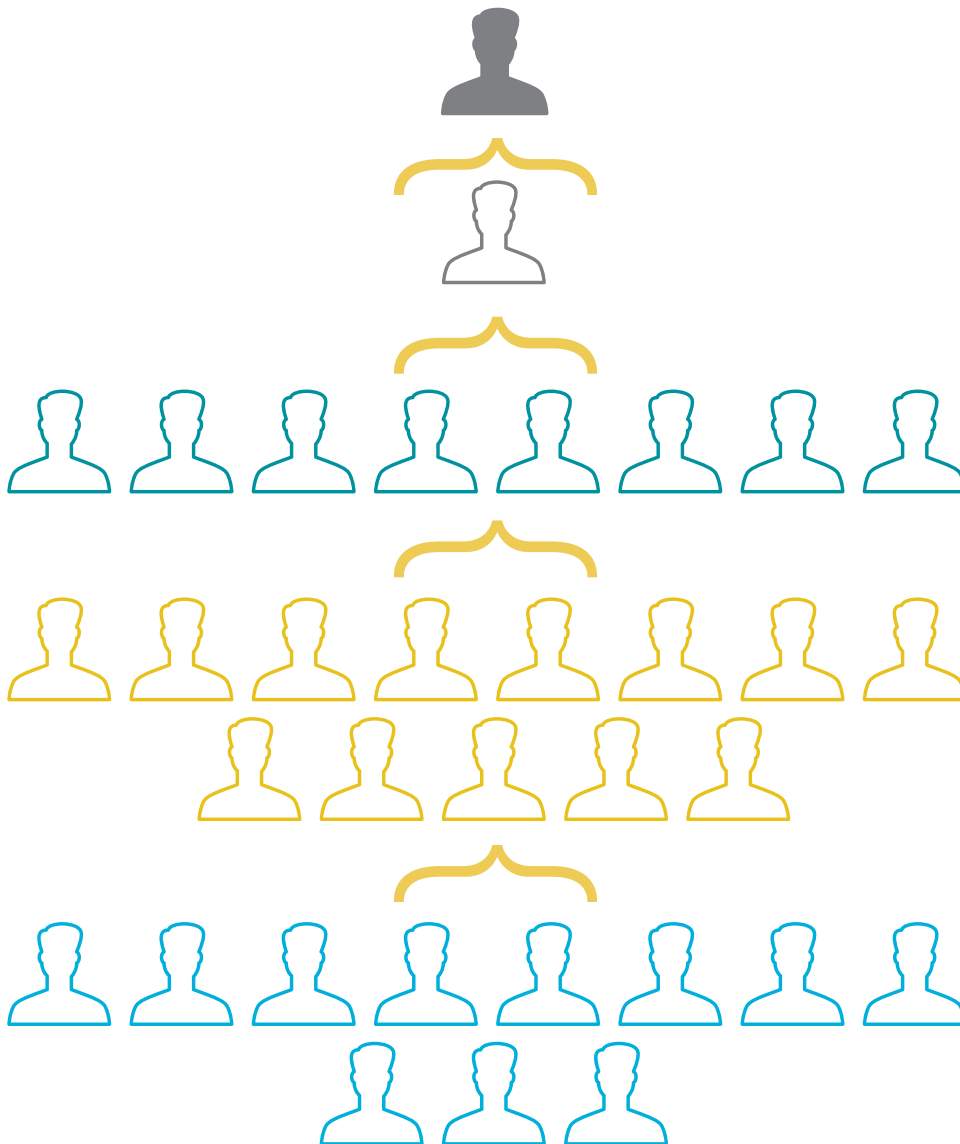
Fifty-nine percent of respondents have control of a budget, and these respondents report budgets ranging from \$4,000 to several million dollars. No relationship was found between respondents’ control over a budget and the duties identified as key aspects of their job, including implementing programs and developing partnerships with internal and external stakeholders.

Reporting

Within the administrative hierarchy of their districts, the sustainability professionals surveyed generally fall high in the structure. Seventy-five percent of positions are located within the facilities or operations department of their district. Approximately two-thirds of the respondents report directly to the director or equivalent in the facilities or operations department.

Measuring degrees of separation from the superintendent indicates that the majority of sustainability staff are placed within three degrees of separation from the superintendent, as shown in Figure 10. Only one respondent reports directly to her superintendent. Staff that are further away from their superintendent are more likely to be housed within the facilities or operations department.

FIGURE 10: Degrees of separation from superintendent (n=33)



CAPABILITIES AND CHALLENGES

The survey results highlight the responsibilities of the respondents as well as their perceived capabilities and challenges. Survey questions sought to understand what sustainability staff feel are their accomplishments and capacities in the workplace, using categories that were based both on previous research conducted on sustainability professionals and on observations made during the Center’s annual School Sustainability Leaders’ Summit.

Capabilities of the Sustainability Professional

Interviewees agreed that districts that have hired or will hire sustainability professionals often have difficulty setting expectations and goals, and district leaders struggle with understanding how this type of professional fits within their organization. Survey respondents were asked to reflect on their ability to manage organizational hierarchies, implement programs, and manage relationships—core competencies for the K-12 sustainability professional. This section illustrates respondents’ reported capabilities and their perceptions of their own job performance based on these capabilities.

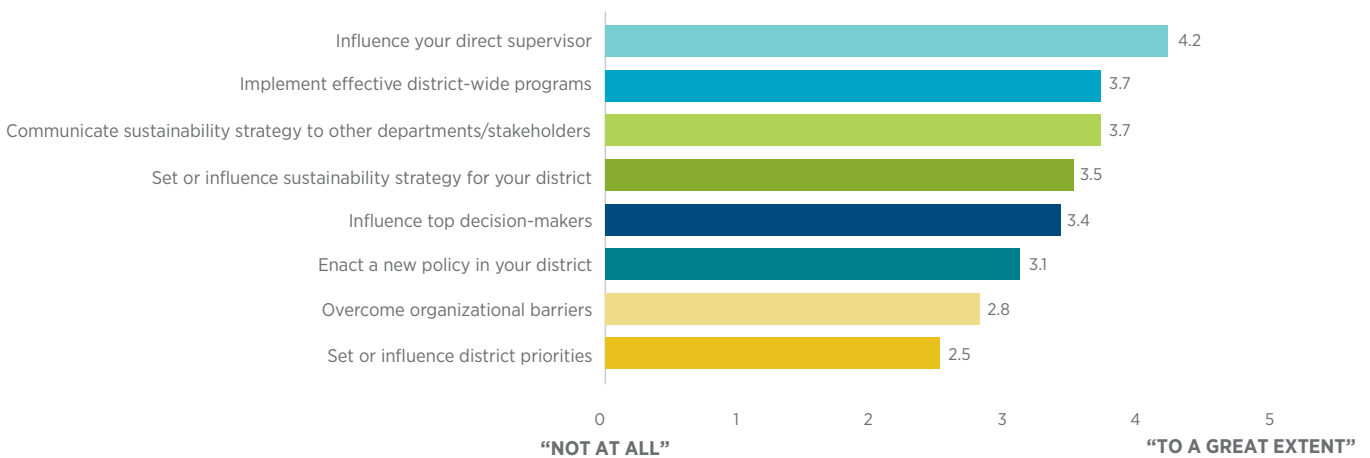
Organizational Management

Interviewees consistently indicated that organizational barriers, primarily the traditional command-and-control structure of the districts, prevent them from effectively developing policies or plans to illustrate to others that sustainability is a priority in their districts. If sustainability is not made a priority by district leadership, school administrators and staff are not likely to spend time focusing on it, given all of their other commitments. All interviewees indicated the importance of quantifying the impact of their programs in order to demonstrate the value of their work to school board members, their superintendent, their direct supervisor, and others.

As can be seen in Figure 11, respondents report having the greatest capacity to influence their direct supervisor and the least capacity to set or influence district policies. Furthermore, results indicate that the greater the degree of separation between the sustainability staff and the superintendent, the lower the respondent rates himself as capable of overcoming organizational barriers and setting or influencing district priorities.

Among interviewees, one common solution reported for overcoming organizational barriers is to work directly with individual schools; however, 10 out of the 17 interviewees reported that they do not have enough time to reach out to all of the schools in their district. This lack of capacity makes it difficult to engage with teachers and administrators, who are also time-constrained. Additionally, one professional stated that difficulties in overcoming organizational barriers prevent him from organizing sustainability initiatives from the school level up because he and others in his department are not permitted to directly contact principals and school-based stakeholders.

FIGURE 11: Average extent that respondents feel they have the capacity to:



Program Implementation

The extent to which respondents are able to implement programs is influenced by a number of factors, including support from their district leaders, personal capabilities, and organizational structure. Respondents who report that they are unable to develop a sustainability management plan are also likely to feel that they have less capacity to influence district priorities and overcome organizational barriers. Those in sustainability or environment-focused roles are more likely to indicate that they have been successful in implementing a new policy or strategy and documenting sustainability metrics.

As illustrated in Figure 12, the highest percentage of respondents indicate success at implementing a new policy or strategy. However, far fewer report success in developing a sustainability management plan or developing sustainability-related district policy. This significant difference indicates that sustainability leaders in K-12 may be encouraged to work on one-off or small projects and may have less success implementing larger-scale, more comprehensive projects and programs. The interviews seemed to confirm this trend, as 10 of the 17 interviewees stated that they do not have enough time to draft a comprehensive management plan to present to district leaders.

FIGURE 12: Percent of respondents who indicate success at:

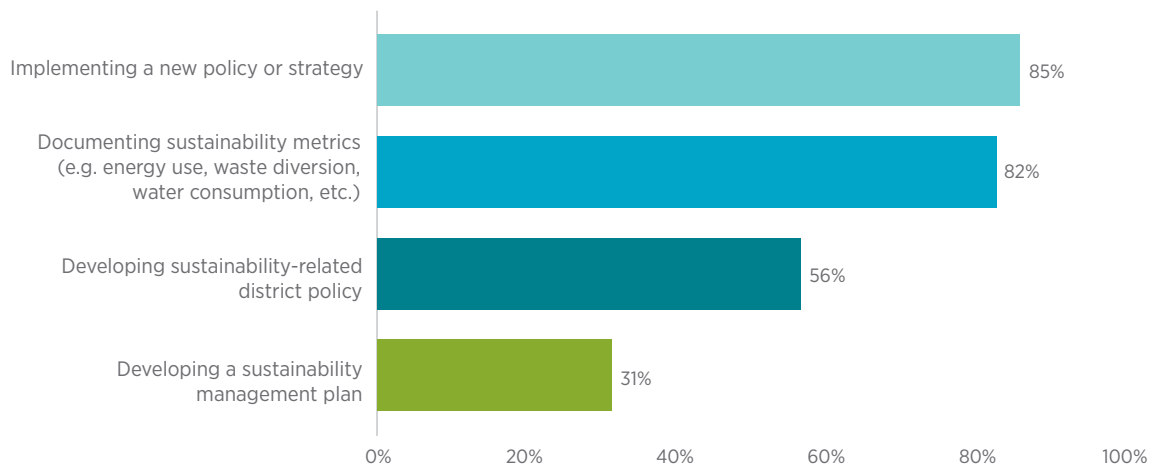
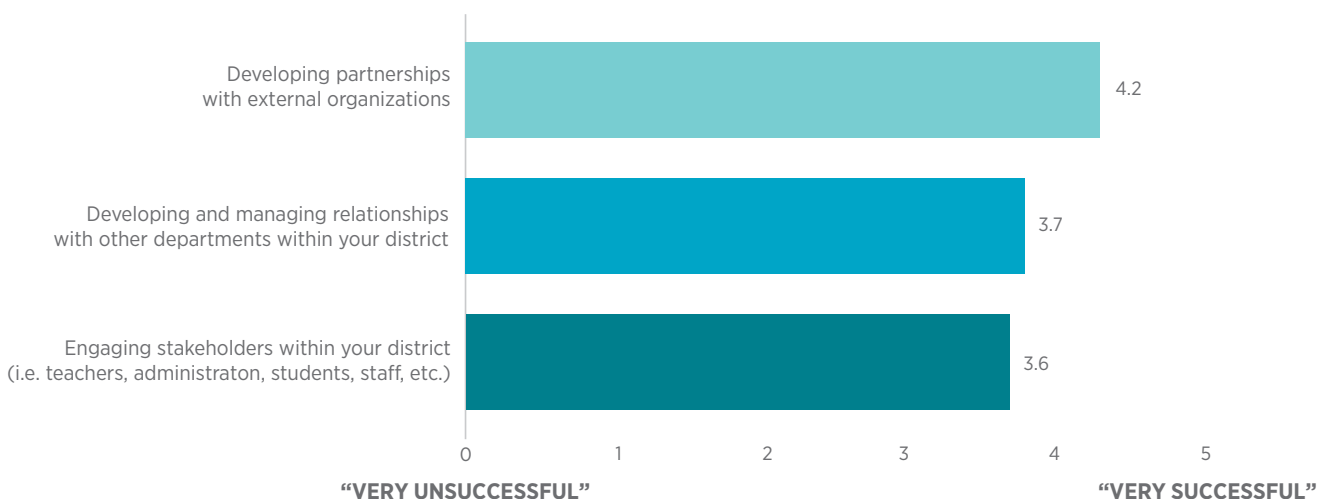


FIGURE 13: Average perceived success in:



Relationship Management

Because the role of the sustainability professional involves connecting many parts of an organization, finding efficiencies, and implementing new practices, relationship management is a core competency of the sustainability profession (Willard et. al. 2010). In the K-12 sector, sustainability professionals interact with a multitude of internal and external stakeholders in order to manage the interdisciplinary nature of sustainability.

Survey respondents were asked to rank their competencies across several general categories of relationship management. The results, in Figure 13, show that the professionals feel most successful at “developing partnerships with external organizations.” One of the interviewees mentioned that managing relationships with local government agencies and non-profits is key to the success of her district’s programs.

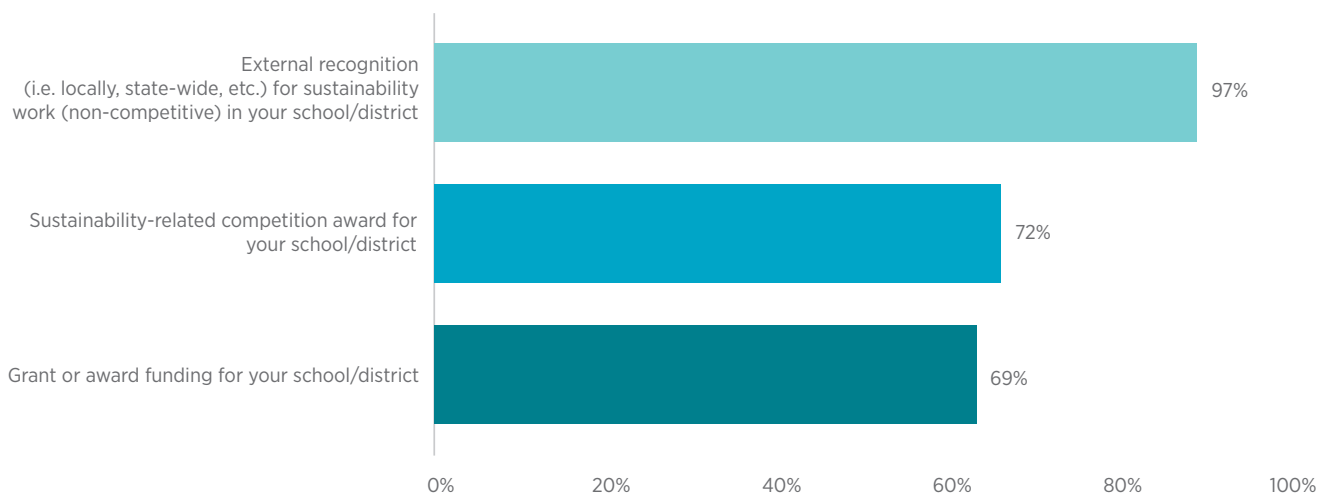
Ten of the 17 interviewees similarly mentioned that relationship-building is transforming the image of facilities and operations in their districts. For example, one interviewee noted that the facilities division in his district did not interact with students in the past; since his hire, the division has engaged with students and has become involved in educational programming because of the district’s focus on sustainability.

RECOGNITION MOTIVATES ACTION

During the School Sustainability Leaders’ Summit, attendees identified the importance of obtaining recognition (in the form of awards, media, and grants) for their districts. While it is not a core competency of their role, the ability of sustainability professionals to develop programs that gain external recognition for their districts is critical to showcasing the value of their work (Sterrett and Moore 2014).

Seven out of the 17 professionals interviewed reported that receiving some form of external recognition is important to their school district leaders and provides support for the continuation of their programs. Recognition cited was primarily external, including sustainability-related awards, grants, and award funding. Four of the professionals surveyed are currently employed in districts that have received a Green Ribbon School Award from the U.S. Department of Education.

FIGURE 14: Average perceived success in:



Challenges

Although sustainability professionals in K-12 school districts have achieved numerous successes, they face considerable challenges in the position. These challenges include lack of administrative support, lack of resources, difficulties with shifting district culture, and poor district-level leadership. In this group of respondents, integrating sustainability more deeply into district culture is the most cited challenge (Figure 15).

Survey results reveal relationships between particular reported challenges identified and job characteristics. All of the professionals interviewed indicated that part of their job involves thinking of innovative ways to create positive change in their district without using up financial resources outside of their allotted budget. Only 20 percent of respondents select “lacking financial resources” as a major challenge. However, it is also clear that access to and control of resources can help alleviate other challenges. Respondents who are in control of a budget are less likely to identify “lacking influence” and “monitoring and documenting sustainability efforts” as challenging.

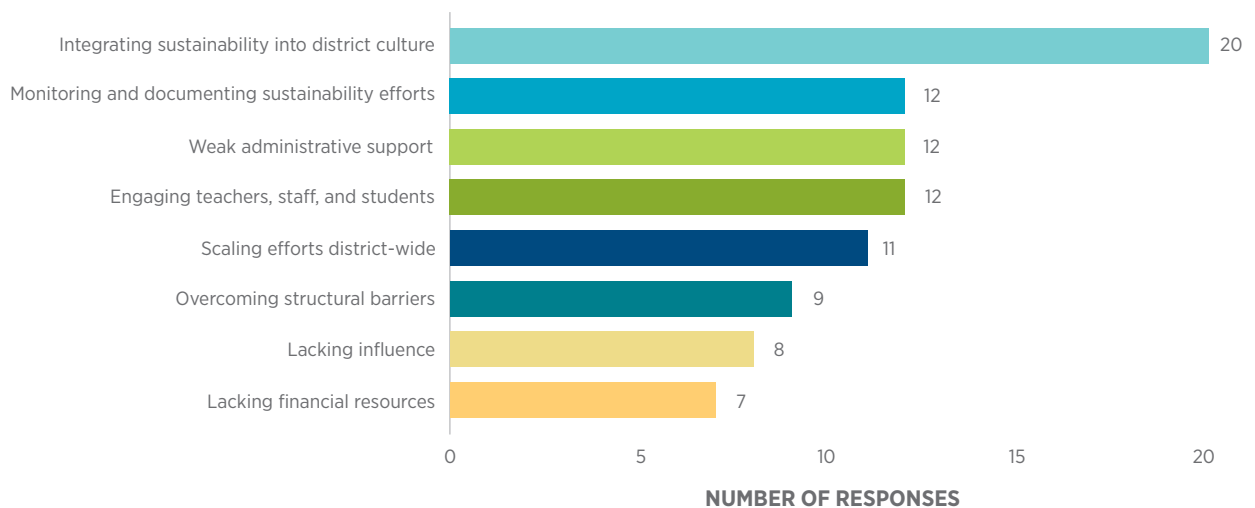
Five of the professionals interviewed explained that having control over a budget gives them some level of autonomy over the goals that they set and how these goals are met, which reduces the challenges they face on a day-to-day basis. However, regardless of budget control, 15 of the interviewees reported that they are having difficulty integrating sustainability into district culture due to lack of resources and time, resistance to change, and a lack of understanding across the district.

The survey results find that strong administrative and staff support is also influential in whether and how a sustainability professional identifies challenges in his or her position. When respondents do not identify “weak administrative support” as a challenge, they are more likely to feel that they are successful at relationship management. They also feel that they have more capacity to influence their direct supervisors and help set district-wide strategy. This relationship indicates that strong administrative support can have wide implications on the success of the sustainability position as a whole.

No matter the size of the district, sustainability staff consistently stated that a single person has difficulty reaching all administrators, teachers, and students. Interviewees highlighted that the traditional hierarchical structure in school districts often makes it difficult to communicate with other departments, school administrators, and students.

When respondents do not identify “weak administrative support” as a challenge, they are more likely to feel that they are successful at relationship management.

FIGURE 15: Challenges respondents face in their positions (respondents could choose up to three options)



INSIGHTS FROM INTERVIEWS: EXPECTATIONS, EVALUATION, AND FEEDBACK

Research interviews gave the opportunity for sustainability staff to provide insight into the methods their employers use to evaluate their performance. In some cases, these staff still find that they must actively make the case not just for their positions but for sustainability in general. The following results synthesize the themes found among the interviews with sustainability professionals, specifically related to demonstrating the value of their work.

The general consensus among the sustainability professionals interviewed is that their school districts do not know what to expect of the sustainability staff role. Six out of the 17 individuals mentioned that this confusion is likely due to a lack of understanding across the district of what sustainability is or how sustainability can be incorporated in the district. Four of the interviewees said that a lack of clear expectations stems from a lack of involvement among top leadership. All of the individuals interviewed reported that the absence of a clearly defined scope of work means that their job is constantly evolving, depending on the needs of the districts or changes in motivation among stakeholders. This flexibility means that sustainability staff can achieve multiple goals and work with a variety of internal and external stakeholders at any one time. On the other hand, the constantly shifting role can make it difficult for sustainability staff to engage stakeholders who often have no idea their position exists within the district or what their job entails.

Eight of the 17 interviewees mentioned that the only concrete expectation of their supervisors or district leaders is for them to serve as the point of contact or as the resource for all things related to sustainability. All of the interviewees discussed reporting to their supervisor (which for 14 out of 17 of the interviewees was the director or equivalent of facilities) and participating in informal evaluations. The evaluations primarily involve reporting on the progress of programs.

When asked which performance metrics their supervisors pay attention to the most, all but two of the interviewees reported that financial performance (e.g. cost savings, avoided costs, cost recovery, cost reduction, etc.) is the most important metric to their supervisors. Other important common metrics include:

- Energy use reduction
- Waste reduction
- Waste diversion
- Recycling rate
- Number of employees engaged in programs
- Number of students engaged in programs
- Number of school gardens
- Pounds of produce grown in gardens

Reporting on meaningful data is still a challenge for 14 out of the 17 individuals interviewed for a variety of reasons, including lack of time and funding as well as unreliable sources of data. This challenge appears to lessen, however, as top leadership become more interested in their programs.

Knowledge and Skillsets

Interviewees were asked to list the skills that make them effective in their role and uniquely qualified to take on sustainability in their district. Five interviewees placed their necessary skillsets into three general categories:

- Subject-matter expertise
- Communication and relationship-building skills
- Passion and motivation

All interviewees stated that the ability to work effectively and communicate with people is key. While having the technical knowledge to manage building operations is helpful, interviewees reported that this skill is not enough to see results. In order to drive change, interviewees stressed the importance of being able to manage relationships, having excellent written and oral communication skills, and serving as both a leader and a team player. Ten out of 17 interviewees stated that passion is absolutely necessary to be able to handle the challenges that are faced on a daily basis when working for a school district.

CONCLUSION

Results from this study indicate that the relative novelty and variability of the K-12 sustainability management position leads to numerous challenges, primarily relating to the lack of familiarity among district leadership and staff regarding the role of sustainability in a school district. Understanding that sustainability is more than one or two environmental projects and is instead an innovative strategy for enhancing the management of school districts is a leap that, if it occurs, may take many years.

Most importantly, the challenge of garnering visible support from top leadership makes it difficult to develop a master plan or develop policy, organizational strategies that would demonstrate to all district stakeholders that top leadership views sustainability as a priority.

Sustainability staff must overcome organizational challenges and a lack of understanding in their school districts in order to be effective and gather enough support to make the case for sustainability initiatives. Most importantly, the challenge of garnering visible support from top leadership makes it difficult to develop a master plan or develop policy, organizational strategies that would demonstrate to all district stakeholders that top leadership views sustainability as a priority. The survey did not find that district size affects results, indicating that sustainability staff from all types of districts have similar responsibilities and challenges. While staff time and capacity appear to be a limiting factor for all survey respondents, the survey and interview results indicate that there is more to the challenge of pursuing organizational sustainability in school districts than simply having enough money and time to speak to everyone.

The sustainability staff member's position within the structure of his or her district appears to be another key to working productively and accumulating successes. Previous research shows the necessity of having both commitment from the top and buy-in and understanding from the middle to drive sustainability forward. Based on the data gathered from survey respondents and interviewees, working within facilities and operations departments enables them to effectively impact the staff who manage buildings. However, when they do not have commitment from their district leaders, it becomes more difficult to expand programs that are not necessarily under the purview of facilities, such as purchasing and curriculum.

Sustainability professionals have many competencies that can add significant value to their organizations. In the case of school districts, the sustainability professional can save money, increase managerial efficiency, improve communication, and provide new and exciting learning opportunities for students. Even while working in a sector where stakeholders have limited time and resources to participate in sustainable actions and programs, sustainability staff report that they are able to use their skills and capabilities effectively. The results from surveys and interviews clearly articulate that this position needs strong administrative support to thrive, and it needs to be able to build on this support to engage internal and external stakeholders in fully integrating sustainability into district culture.

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APPENDIX A:

STUDY APPROACH AND METHODOLOGY

Study design included both an online survey questionnaire and phone interviews to address the stated research goals:

- Develop a profile of a typical K-12 sustainability professional
- Determine how this role is similar to sustainability positions in other sectors
- Understand what motivates school leaders to hire these professionals
- Investigate how school districts are setting expectations for professionals in this role and evaluating their performance

A preliminary literature review and field observations informed the study design prior to the development of the survey and interview questions. Six interviews with sustainability professionals in business, higher education, and local government also gave further insight into the complexities of the sustainability role in organizations and gave the opportunity to pilot test survey questions. Observations collected during the Center for Green Schools' (Center) School Sustainability Leaders' Summit, a three-day conference designed for sustainability-focused staff in school districts, also informed study tools.

Survey development and interview questions built on previous research conducted by consulting firms that explored the sustainability profession in a variety of sectors, including business, higher education, and government (Willard, et al. 2010; Weinreb Group 2011; Vox Global, et al. 2012). Researchers' identification of the organizational structures within which sustainability professionals in these sectors currently function was of particular interest. For instance, one study examined the degrees of separation between a Chief Sustainability Officer (CSO) and Chief Executive Officer and hypothesized that this separation may be an indication of the priority level of sustainability and of the access that the CSO may have across departments (Weinreb Group 2011). Other studies highlighted trends in capabilities and necessary skill sets for success in this profession, including relationship management, communication skills, and problem solving (Willard, et al. 2010; Vox 2012).

An annual survey of sustainability staff conducted by the Association for the Advancement of Sustainability in Higher Education formed a foundation for the development of the online survey questionnaire (Walton and Urbanski 2012). This information was used to develop questionnaire and interview questions that reflect existing perspectives on the development of the sustainability profession.

The Center disseminated the questionnaire by email to its school sustainability leader network and via online post to their "School Sustainability Leader" Yammer group. The frame population, based on the Center's records, consists of 90 school district sustainability professionals. The questionnaire reached these 90 individuals, and 43 responses were received—a 47 percent response rate. This study focused only on non-faculty staff employed by school districts; as such, eight responses were removed because they did not meet this requirement. The final sample size is 35, representing 39 percent of the Center's network at the time.

The online survey questionnaire asked participants to provide their e-mail if they were willing to participate in a 30-minute phone interview. Of the 31 individuals that offered to participate in an interview, researchers were able to complete 17 phone interviews, representing 49 percent of the study sample. The questionnaire directly informed interview questions, and these questions were modified based on interviewees' specific responses to the survey. The interviews were recorded using a smart phone and later transcribed.

Analysis of the interviews and their transcripts yielded common themes and trends among the interview responses and between interview responses and survey questionnaire responses. Beyond giving a deeper means of comparison among participants, interviews also provided fuller and more detailed information about the sustainability profession in K-12 school districts.

APPENDIX B: EXAMPLES OF REPORTED UNIVERSITY DEGREE FIELDS

Administrative Management
Architecture
Business Administration
Communications
Construction Management
Education
Energy Policy

Environmental Engineering
Environmental Management/Studies
Marine Science
Natural Resource Management
Public Administration
Urban Planning
Zoology

APPENDIX C: REPORTED JOB TITLES

Certified Facility Director/Maintenance
Coordinator, Utilities Services
Director of Buildings and Grounds
Director of Business/CFO
Director of Operations & Technology
Director of Sustainability (2 responses)
Director, Energy and Sustainability
Energy Conservation Specialist
Energy Manager (3 responses)
Environmental Services Assistant
Environmental Sustainability Manager
Environmental, Occupational, Health and Safety Officer
Green Schools Coordinator
High Performance Schools Program Manager
LEED Program Specialist
Plant Engineer

Program Manager, Environment, Energy & Sustainability
Recycling & Sustainability Coordinator
Resource Conservation Manager
Schools Conservation Coordinator
Science Specialist K-12
Senior Facilities Architect
Senior Manager, Facilities Design
Senior Sustainability Specialist
Sustainability & Purchasing Manager
Sustainability Analyst
Sustainability Coordinator
Sustainability Manager (3 responses)
Sustainability Officer
Sustainability Planner

APPENDIX D:

SCHOOL SUSTAINABILITY LEADERS SURVEY (FULL TEXT)

Thank you for choosing to participate in the Center for Green Schools' School Sustainability Leaders survey! As part of this study, we would like to gather information about your role as a sustainability professional within your school district to understand the kind of work you are doing in your district and the organizational challenges you face on the job. The survey contains 24 questions and should take 10-15 minutes to complete. The results of the survey will be reported in aggregate, thus ensuring anonymity. If you have any questions before starting the survey, please contact the Center for Green Schools.

Q1 Enter the full title of your position.

Q2 Enter the name, city and state of your school district.

Q3 How many schools are in your district?

Q4 Which of the following best describes the majority (more than 75%) of schools in your district?

- Public
- Charter
- Private
- I don't know
- Other (please describe) _____

Q5 What year were you hired for your current position?

Q6 Has your title changed during your current position?

- Yes. Please provide your previous title. _____
- No

Q7 In your current position at the district, are you employed as a consultant?

- Yes
- No

Answer if "No" is selected for "In your current position at the district, are you employed as a consultant?"

Q8 Are you the first to hold your position as a school district sustainability professional?

- Yes
- No
- I don't know

Answer if "No" is selected for "Are you the first to hold your position as a school district sustainability professional?"

Q9 If you are not the first person to hold your position, what year was this position created? If you do not know, please leave blank.

Answer if “No” is selected for “In your current position at the district, are you employed as a consultant?”

Q10 Are you an internal (your previous position was in your current district) or external (your previous position was with another organization) hire?

- Internal hire
- External hire

Answer if “Yes” is selected for “In your current position at the district, are you employed as a consultant?”

Q11 Has your district hired a sustainability-focused consultant in the past?

- Yes
- No
- I don't know

Answer if “Yes” is selected for “Has your district hired a sustainability-focused consultant in the past?”

Q12 If your district has hired a sustainability-focused consultant in the past, what year was the first consultant hired? If you do not know, please leave blank.

Q12 What primarily motivated the creation of your position?

- I don't know
- Personal advocacy
- Advocacy by a committee or council
- Administrative champion
- Staff or faculty champion
- Student champion or student organization-driven
- Pressure to comply with city or state policy
- External community pressure (e.g. parents, community group, etc.)
- Reorganization of a department or existing position
- Other. Please describe. _____

Answer if “Yes” is selected for “In your current position at the district, are you employed as a consultant?”

Q13 Enter the total number of FTE staff that you estimate your work with the district represents.

Answer if “No” is selected for “In your current position at the district, are you employed as a consultant?”

Q14 Do you work part-time or full-time?

- Part-time
- Full-time

Q15 Do you control a budget?

- Yes
- No
- N/A

Answer if “Yes” is selected for “Do you control a budget?”

Q16 What is your annual budget?

Q17 How many additional sustainability-focused staff members (non-teaching staff) are employed in your district? If none, enter 0 (zero).

Q18 To what extent are you responsible for the following areas of sustainability?

	N/A	NOT AT ALL	2	3	4	TO A GREAT EXTENT
Energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Purchasing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curriculum and Instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19 What percentage of your work day is dedicated to sustainability as defined by your district?

- 100%
- 75-99%
- 50-74%
- 25-49%
- less than 25%
- I don't know

Q20 How many degrees of separation are there between you and your district's superintendent? In other words, how many organizational or reporting layers are there between you and the superintendent? For example, if you report directly to the superintendent, then you are separated by one degree.

- 1
- 2
- 3
- 4 or more
- I don't know
- N/A

Q21 What is the position title of the person to whom you report (if different from your superintendent)?

Q22 What are the biggest challenges you face in your position? Please choose no more than three challenges.

- Engaging teachers, staff, and students
- Receive weak administrative support
- Overcoming structural barriers (silos, policies, etc.)
- Scaling efforts district-wide
- Lack of financial resources
- Monitoring and documenting sustainability efforts
- Lack of influence
- Integrating sustainability into district culture
- Other. Please describe. _____

Q23 How successful do you feel you have been at incorporating the following practices in your work?

	N/A	VERY UNSUCCESSFUL	2	3 (NEUTRAL)	4	VERY SUCCESSFUL
Developing and managing relationships with other departments within your district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engaging stakeholders within your district (i.e. teachers, administration, students, staff, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing partnerships with external organizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24 During your time in this position, have you been successful in achieving the following?

	N/A	NO	YES
Developing a sustainability management plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing sustainability-related district policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementing a new policy or strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Documenting sustainability metrics (e.g. energy use, waste diversion, water consumption, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q25 During your time in this position, have you or your district been successful in achieving the following?

	N/A	NO	YES
External recognition (i.e. locally, state-wide, etc.) for sustainability work (non-competitive) in your school/district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grant or award funding for your school/district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainability-related competition award for your school/district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26 To what extent do you feel that you can:

	N/A	NOT AT ALL	2	3	4	TO A GREAT EXTENT
Influence top decision-makers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Influence your direct supervisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enact a new policy in your district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Set or influence sustainability strategy for your district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Set or influence district priorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overcome organizational barriers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicate sustainability strategy to other departments/stakeholders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implement effective district-wide programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q27 What is the highest level of education you have completed?

- High School
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctoral degree or equivalent (EdD, PhD, JD, MD, etc.)
- N/A

Q28 Please describe your most recent degree.

Q29 How many years of relevant sustainability work experience did you have prior to your current position?

- No sustainability-related work experience
- less than 1 year
- 1-2 years
- 3-4 years
- 5 or more years

Q30 What was your job title prior to your current position?

Q31 Would you be willing to participate in a 30 minute interview? In order to get an in-depth picture of the work that you do, we will be conducting interviews with selected participants who indicate that they are willing to be interviewed for this study.

- Yes. Please enter your e-mail. _____
- No

Q32 Would you be willing to participate in the energy and waste performance data collection project associated with this survey? If you are able to participate, we will begin collecting data from you in late July about energy and waste management performance. This part of the study will involve gathering information from school facilities and collecting utility and waste management bills from the past few years. This data can be kept anonymous at the request of the district.

- Yes
- No

