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Applied Policy Project Technical Report: Solving Ambiguity in Role Responsibilities and Communication Practices

RICHMOND PUBLIC SCHOOLS OFFICE OF
FAMILY AND COMMUNITY ENGAGEMENT
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Disclaimer Statement

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Dedication

I would like to dedicate this report to my grandfather, Dave Adams. He has taught me that life isn't always easy and that a person's true colors reveal themselves in times of defeat. He is integral to my determination and motivation today. Through him, I learned to accept times of defeat, keep pushing, and look for the positives in every situation. These sentiments embody the Applied Policy process, and this is why the report in its entirety is dedicated to him.

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Executive Summary

This technical report aims to provide Richmond Public Schools' Office of Family and Community Engagement with an effective solution to combat the internal ambiguity the office encounters. This report will focus on the internal ambiguity experienced by the office in terms of role responsibility and communication practices. A set of outward and inward-facing issues contribute to the ambiguity found within the office. Outside the office, factors such as an extensive community network web, uneven state funding formulas, and a hesitant diverse community make it challenging to establish a standardized outreach system. Internally, the office struggles with unclear job roles, excessive employee autonomy that hinders teamwork, and frequent staff turnover. Both internal and external challenges directly contribute to the office's ambiguity. These factors deserve consideration as the office's primary role is to create strong relationships with community stakeholders – families, students, and community partners. To combat minimal state funding and provide avenues for these stakeholders to overcome community challenges, the office must address the ambiguity within its operations. If such ambiguity continues, the key stakeholders the office serves will lack the essential support networks that enable students to succeed academically and socially.

The client of this report is the Director of Family and Community Engagement, Charles Paige. He wants to find a solution that will strengthen internal communication within the office, encourage greater coordination between Engagement Office branches, assist managers in “planning the work,” and ultimately present office employees with a more effective method for community outreach. This report presents three alternatives based on peer-reviewed studies, academic articles, and firsthand accounts of successful organizational interventions. The first is the office’s current operating system, Salesforce Education Cloud and Slack. The office uses these systems to report student data, communicate with community partners, and coordinate projects. The systems face challenges through turnover, employee resistance, and burden on office directors. The second alternative is Permify Role-Based Access Control Database. This is a database management system that enables office directors to designate specific permissions to employees in order to group them into project teams, establish linkages between teams, and clarify office responsibilities. This alternative struggles with constantly shifting work environments, has a very steep learning curve for employees, and places a significant burden on office directors to manage the system. The final alternative is the Responsible, Accountable, Consulted, and Informed Matrix. This matrix is a project planning tool that enables office directors to identify project resources, clarify employee project responsibilities, and describe the relationships between roles on a project. Although this alternative has the potential to face employee resistance and problems with turnover, it presents the fewest hurdles relative to the other alternatives.

The evidence compiled in this report indicates that the Office of Family and Community Engagement should incorporate the Responsible, Accountable, Consulted, and Informed Matrix in their organization. Implementing this alternative will require a pilot matrix in the Office of Family and Community Engagement before the matrix is extended to the rest of the Engagement Office.

The pilot matrix of this report is constructed to outline how the office can use the matrix to plan a Parent Teacher Association onboarding meeting. The plan includes an initial planning phase, an action phase, and an execution phase. After the matrix is tested, the strengths and weaknesses of the matrix can be determined by the office and presented to the Chief Engagement Officer. From here, if prioritized by the Chief Engagement Officer, the Family and Community Engagement Director can assist other Engagement Office directors in creating matrixes and assigning roles for future projects.

In summation of this report, the Responsible, Accountable, Consulted, and Informed Matrix is the strongest alternative for several reasons. First, the matrix is the lowest-cost alternative and can be easily constructed using Google Sheets, something the office uses regularly. Second, this alternative is efficient as it clearly identifies project roles, encourages clear communicative channels, presents a formal mapping structure for onboarding new employees, and allows for early identification of project resources and responsibilities. Third, the alternative is the most administratively feasible as it gives employees a stronger voice in planning projects and fits within existing Engagement Office director responsibilities. These factors collectively demonstrate the matrix's ability to address the ambiguity in role responsibility and communication in the office. The subsequent sections of this report will illustrate in further detail the strengths of this alternative and why the matrix is the most suitable option for the Office of Family and Community Engagement.

Introduction

Time, planning, and communication are unanimously understood as important conditions for maintaining a strong school division, yet academia lacks a universal metric for measuring these factors. School divisions constantly encounter problems concerning these elements, where unclear roles and communicative ambiguity prevent divisions from effectively managing these conditions. The Richmond Public Schools (RPS) Office of Family and Community Engagement (FCE) faces these challenges regularly within their office. The FCE branch operates within the RPS Engagement Office (EO) and comprises 36 of the office's 49 employees. The alternatives in this report will be analyzed for the EO instead of the FCE because the FCE Director works closely with the entire office and the FCE comprises most of the EO. Ambiguity inhibits the FCE office's ability to coordinate work between EO branches, encourages "siloing" work, and ultimately impacts how the office communicates with its key stakeholders – families, students, and community partners. If this ambiguity continues, the students and families the FCE office serves will lack the critical school support networks necessary to overcome community barriers. The following sections of this report will outline why these challenges occur within the FCE office and identify an alternative solution to combat office ambiguity.

The analysis will follow with a discussion of my client, their role within the EO, and the environment in which the FCE office operates. The FCE office faces challenges outside of the office in the form of uneven state funding, high turnover rates, and a student body that is diverse and economically disadvantaged. Leading causes of the problem within the FCE office are role

ambiguity, middle management in loosely coupled systems, and staff turnover. Several potential solutions have been identified in literature, which include middle management empowerment, database management systems, and Responsible, Accountable, Consulted, and Informed (RACI) Matrixes. Leveraging the last two potential solutions, three alternatives were constructed to address the FCE office's ambiguity. These alternatives are Salesforce Education Cloud and Slack (the status quo), Permify Role-Based Access Control Database, and the RACI Matrix.

The final recommendation of this report suggests that the FCE office should incorporate the RACI Matrix within their office. This alternative presents the lowest cost, effectively improves the office's efficiency, and is the most administratively feasible. A final implementation plan outlines a pilot RACI Matrix that the FCE office can operate to assess the effectiveness of the alternative. The following sections of this report will demonstrate why the RACI Matrix is the most effective solution for the FCE office compared to the other alternatives.

Problem Statement

Under Richmond Public Schools (RPS) 2024 Dream4RPS Policy Initiative, Superintendent Jason Kamras pledged to create lasting relationships with the Richmond community, understanding that RPS relies on their community stakeholders (partners, volunteers, families, etc.) to overcome Virginia's uneven school funding formula, high staff turnover rates, and underserved diverse neighborhoods. The Family and Community Engagement (FCE) branch of the Engagement Office (EO) struggles to maintain these relationships because of the isolated work in their office and lack of coordination with other EO branches. The FCE and EO face a technical challenge where team members are willing to collaborate to strengthen these relationships but lack an effective method. The technical challenge here indicates that if RPS intends to create meaningful and lasting relationships with its community, they must first look inward.

Richmond Public Schools Office of Family and Community Engagement suffers from too much ambiguity in role responsibility and communication practices. This ambiguity strains office relationships with community stakeholders.

Client Overview

The client of this report is Charles Paige, the Director of Family and Community Engagement (FCE) in the RPS EO. The FCE office seeks to improve communication with key stakeholders, including community partners, volunteers, and especially families. Communication with these stakeholders has been challenging for the FCE branch because of the "siloed" nature of office responsibilities in the EO. For example, branches like the FCE office and Advocacy and Outreach office should responsibly be coordinating on projects like community walks. The time and resource constraints placed on the office force the branch to coordinate responsibilities within the office instead of reaching out to other branches. This "siloing" places heavy workloads on FCE employees

and neglects other branches that could improve the overall quality of the projects. Combating this tendency is a central concern of the FCE Director. The director wants to improve coordination between the EO branches to strengthen the deliverables of projects and foster stronger relationships between employees of different offices.

Charles is positioned as a manager with several operators underneath him, but he is also an operator under the Chief Engagement Officer. As a “middle manager,” he helps facilitate new practices and procedures to address ambiguity in the EO. His unique position allows him to gauge where improvements are needed on the ground and assess how feasible administrative requests are in practice. Charles believes that the EO could benefit from more structure, stating that more standardization within the EO would improve the office’s communication with its stakeholders and the deliverables they present (including more-resourced events, more successful student interventions like dropout prevention, etc.). The EO depends on stakeholder relationships to secure resources for RPS schools and to create educational and occupational opportunities for students.

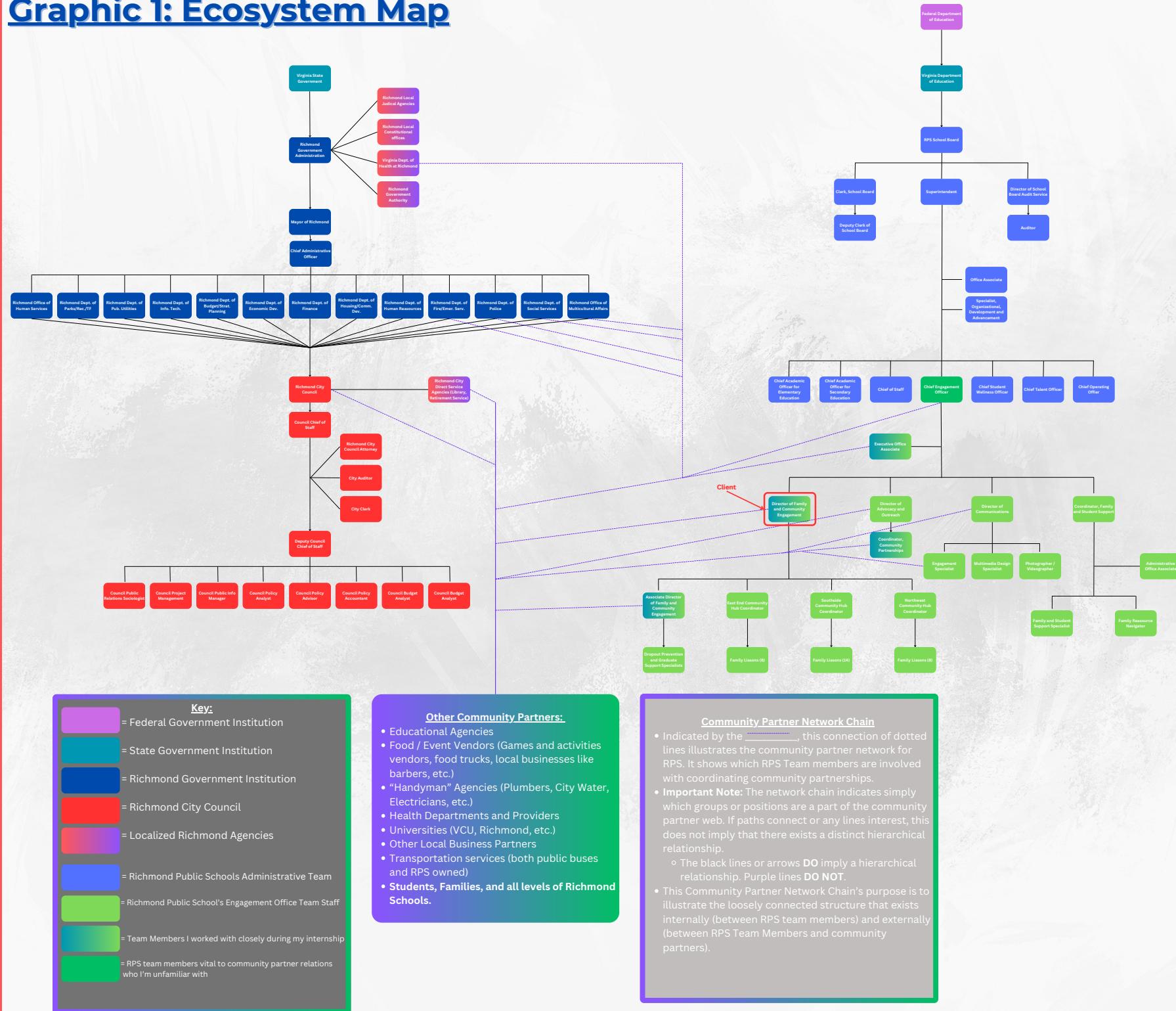
Charles has also made a clear distinction between “planning the work” and “doing the work”. He desires an alternative that prioritizes “planning the work” over “doing the work”. His primary goal is to improve how he and other office directors plan ahead on projects. The EO office seeks to implement more efficient planning strategies instead of changing how team members conduct their work. In short, the FCE Director wants a solution that fosters greater collaboration between branches, assists managers in “planning the work,” and ultimately improves how the FCE office communicates with students, families, and community partners.

Problem Ecosystem

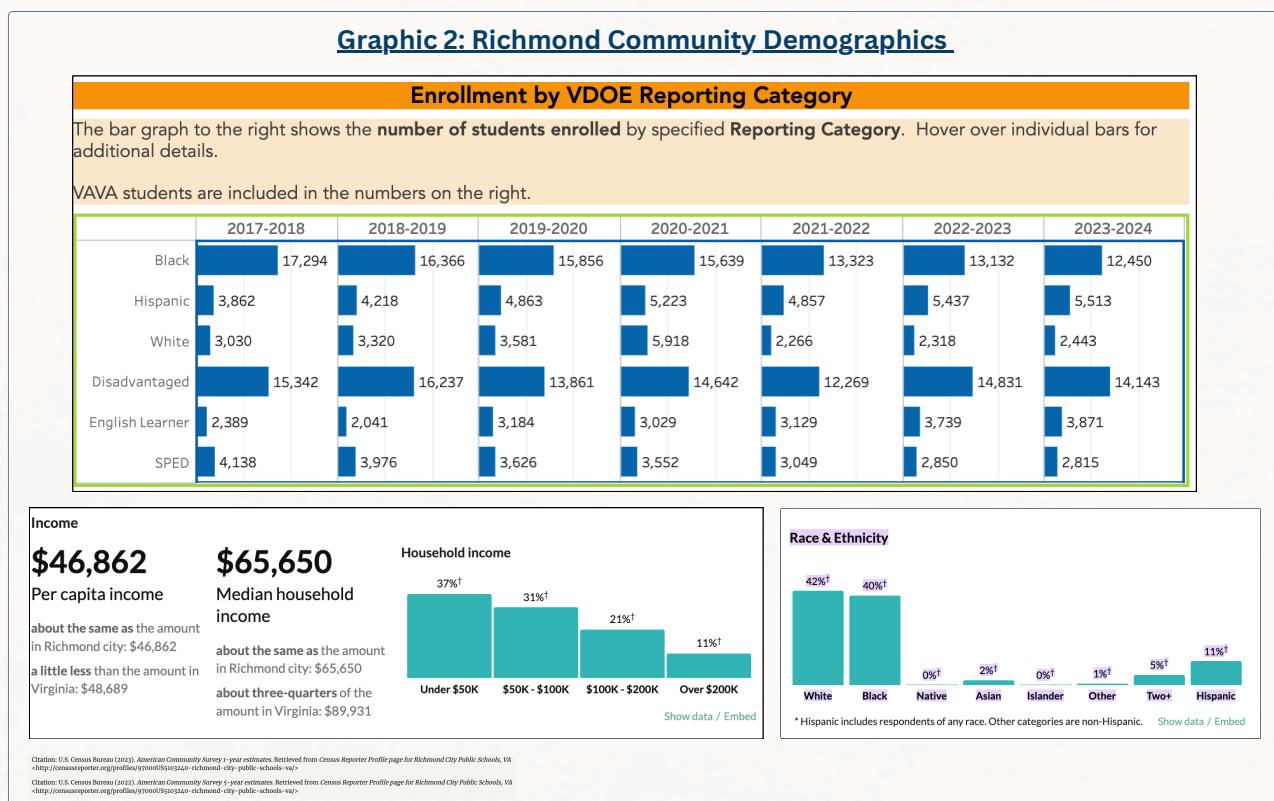
The FCE Office Ecosystem, Virginia’s Funding Formula, and Staff Turnover

Graphic 1 illustrates the complex community relationships the FCE office manages. The graphic demonstrates the wide range of networks the FCE office operates in and presents visual evidence to portray ambiguity in the EO. With an abundance of stakeholders, the EO encounters challenges in delegating responsibility to account for vital community relationships. Historically, RPS has struggled to develop these stakeholder relationships for several reasons. Under Virginia’s Standards of Quality (SOQ) funding formula, Virginia schools receive 14 percent less state funding than the national average (Moommaw, 2023; JLARC, 2024). Virginia students also receive \$1,900 less per pupil than the national average (JLARC, 2024). At roughly \$16,400 per student, Virginia spends significantly less than high-performing K-12 states such as Pennsylvania (\$21,400) and New York (\$33,400) (Hanson, 2024). For RPS, this is alarming as it demonstrates the division cannot rely on the state to address poverty or resource allocation in their communities. From 2024 to 2025, the EO lost 9.1 percentage points worth of state funding equivalent to \$426,129 (Bragga, 2024). Losing funding has consequences for RPS as they serve a student population that is 67 percent economically disadvantaged and 90 percent minority status (U.S. News, 2024). As the state

Graphic 1: Ecosystem Map



continues to limit funding, it is imperative that RPS builds strong relationships with community stakeholders to support these students. This becomes challenging with RPS' history of high staff turnover rates. From the 2021 to 2022 school year alone, RPS experienced a teacher turnover rate of 25 percent, losing more than 550 teachers in one year (Lee, 2023). Unfortunately, specific estimates for the EO do not exist. These factors create a situation where RPS' EO encounters limited state funding and access to educational resources, forcing them to rely on staff members who are constantly leaving or community stakeholders. Under these circumstances, the FCE Director plays a key role in navigating employees through a standardized system to combat outward-facing issues.



Richmond Community's Historic Trauma and Biases

The student population of RPS is highly diverse and economically disadvantaged, and its students have historically suffered from significant trauma that can result in long-term mental and physical consequences (Bailey et al., 2023; Straussner & Calnan, 2014). Students from these backgrounds experience higher rates of depression and PTSD (Bailey et al., 2023; Bemak & Chung, 2017; Kim, 2018) and trauma passed down from their parents. Trauma can be transmitted to students through generations, family systems, sociocultural exposure, and biology (Chokshi et al., 2023; Kellerman, 2001). Trauma stunts cognitive developments in the brain and can be triggered by traumatic events. These events impair emotional and behavioral growth (Chokshi et al., 2023; Danese & McEwen,

2012; National Child Traumatic Stress Network Schools Committee, 2017). Trauma has also been associated with lower student performance (math, reading, and science), increased rates of suspension, and higher rates of behavioral problems in school (Davis et. al, 2022; National Child Traumatic Stress Network Schools Committee, 2017; Perfect et al., 2016). This evidence suggests that the traumatic events experienced by families, such as school segregation and exclusionary policies, directly impact a student's development (Davis et al., 2022; National Child Traumatic Stress Network Schools Committee, 2017). This sentiment is especially true for RPS' growing population of refugee and non-English students who encounter the struggles of immigration, navigating a new culture, and learning a different language (Bailey et al., 2023; Bemak & Chung, 2017; Li & Grineva, 2016). These factors in tandem make community outreach a significant challenge for the EO. Historic trauma creates additional hurdles for FCE employees in connecting with students and accommodating their diverse needs and unique circumstances.

This historic trauma creates RPS populations that are implicitly biased against authority (especially school divisions) and biased toward their ingroup. Implicit bias refers to the hidden stereotypes and attitudes that the Richmond community has adopted in response to trauma, which dictates their hesitancy toward school divisions and authority (Brion, 2020; Banaji & Greenwald, 2016). This bias impacts the EO's ability to effectively interact with parents. A study conducted by Pierre Sherrill examined this relationship between disadvantaged communities and authority figures, with a specific focus on the relationship between black males and authority figures on college campuses (Sherrill, 2024). The study concluded that black males were 3.1 percentage points more likely to engage with black faculty or authority figures, a difference that was statistically significant at the 99 percent confidence level (Sherrill, 2024). This evidence suggests that black Americans and other minority groups have a significant in-group bias which can influence their hesitancy toward authority. To measure this ingroup bias, researchers conducted a cross-sectional study comparing the implicit bias between black children and young adults who attended racially heterogeneous or homogenous schools (Richmond would fall into the heterogeneous category) (Gibson et al., 2017). The study consisted of 86 children and 130 young adults, demonstrating that black students in homogenous schools exhibit a much greater sense of in-group bias than students in a heterogeneous school. The EO office serves a population that is very heterogeneous and hesitant toward authority, meaning that effective outreach with the community is a significant challenge.

Many of the EO team members come directly from the Richmond community, indicating that they understand the struggles of their constituency. If leveraged correctly, such familiarity can present an avenue for overcoming this challenge. Cultural trauma, and its influence on creating implicit and in-group bias, paints a clearer picture of why the EO struggles to establish a standardized communication system. They serve a diverse community with drastically different needs, making effective communication between team members and community stakeholders difficult. One example of this is communication with Muslim families. When reaching out to these families, a team member must directly speak to the father of the household, otherwise it is seen as disrespectful. Team members must be very culturally aware of the families they interact with to avoid potential

conflict. Situations like these demonstrate why the FCE office faces cultural and historical challenges in outreach with their community.

FCE Office and EO Problem Background

Utilizing the research and information collected during stakeholder interviews, several causes contribute to ambiguity in the FCE office. These causes are role ambiguity, middle management in loosely coupled systems, and staff turnover.

Role Ambiguity

In the FCE office, team members suffer from an excessive amount of role ambiguity that directly impacts their job performance. Role ambiguity refers to the lack of clear, consistent information regarding the requirements of an employee's job. Employees are unable to properly evaluate their superior's assessment of their performance or the tasks they're expected to fulfill (Wang et al., 2011; Sauri & Rahyuda, 2022; Baron, 1986; Breaugh & Colihan, 1994). Organizations with excessive amounts of role ambiguity experience high levels of employee autonomy and low levels of direct supervision. Organizations with excessive role ambiguity (like RPS) create uncertainty for employees concerning goals, evaluation standards, and procedures which become hindrance-oriented stressors for employees (Wang et al., 2011; Kahneman, 1973). Role ambiguity has a direct effect on increased employee work stress (Sauari & Rahyuda, 2022) and should be concerning for the FCE office. This is because role ambiguity can lead employees to deviate from their expected roles (Agnew, 1992). In 2011, Shuhong Wang and his team of researchers developed a study to measure the relationship between role ambiguity and employee deviance and creativity (Wang et al., 2011). The study consisted of 242 graduate students in business or a related field and is potentially limited in its external validity. The study's sample of graduate students may not be conducive to other organizations. Regardless of this limitation, the researchers found that a moderate level of role ambiguity can positively influence employee creativity and decision-making. Middle managers, such as EO Directors, are well-positioned to influence employee creativity through moderate role ambiguity as they occupy a complex space between administration and front-line employees (Gahagan, 2023; Buick et al. 2017).

Middle Management in Loosely Coupled Systems

Before discussing middle managers, it's important to understand the complex loosely coupled system they exist in. In 1976, Karl E. Weick defined loosely coupled systems as organizations "composed of autonomous elements that are often unresponsive to another" (Weick, 1976). This has been built upon in subsequent years to describe systems that experience low levels of effective coordination between employees while exhibiting high levels of employee autonomy and low levels of organizational control (Ingersoll, 1991). School divisions fit this description as they encounter high levels of decentralization while also experiencing low levels of coordination (Ingersoll, 1991). This is why middle managers are pivotal, as their position between administration and the frontline allows them to effectively move between levels, understand the subculture that exists among team

members, and ultimately assist their subordinates navigate through transitional periods (Gahagan, 2023; Huy, 2002; Balogun, 2003). During these transitional periods, senior management expects middle managers to enforce the change, which can be incredibly challenging given a lack of clear guidelines and adherence to multiple stakeholders (Gahagan, 2023). Understanding the importance of middle managers, Linda Johnsrud and Vicki Rosser conducted a study to determine the leading causes of middle management turnover, a problem that is persistent in the EO (Johnsrud & Rosser, 1997). The sample consisted of 901 mid-level administrators from a ten-campus university system. Data was collected from “intent to leave or stay” survey responses which indicated the leading causes for potential turnover. The study concluded that the leading causes were low employee morale, lack of upward mobility, burnout from student interaction, age and employee recognition, and experience (Johnsrud & Rosser, 1997). Turnover among middle management, especially for the EO, can have severe consequences for the functionality of the office. This is because the loosely coupled administrative RPS system relies on middle managers to assist team members in navigating organizational change. Middle managers, like the FCE Director, play the most impactful role in directing change in the EO, and the heavy responsibility they bear can lead to burnout and the dissipation of existing office standards.

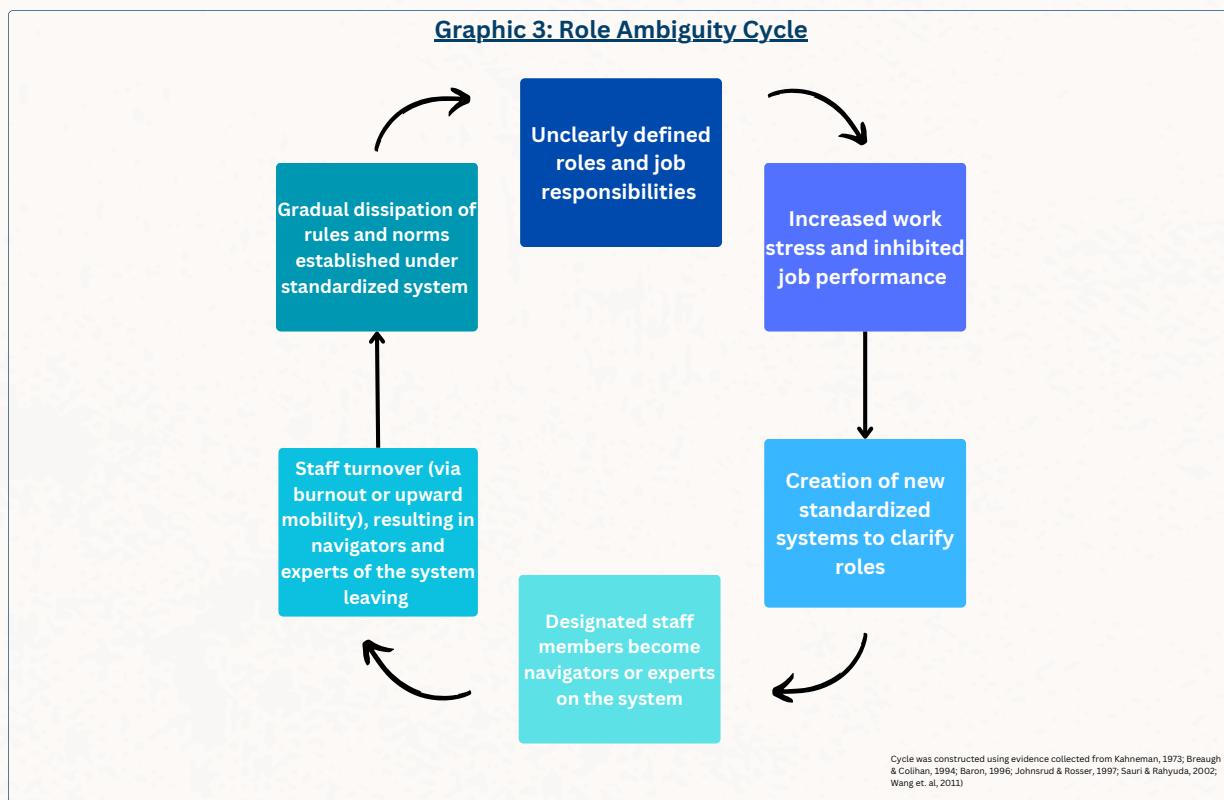
Staff Turnover

Staff turnover is a growing problem in the education world (Akosile & Ekeman, 2022) and for the EO, often resulting in increased workload for team members, burnout, and poor retention (Figueroa, 2008; Du Plooy & Roodt, 2010). Many studies have identified leading causes of turnover in education, with the primary causes concerning relationship with supervisors, lack of recognition, limited advancement opportunities, job satisfaction, and compensation (Figueroa, 2008; Jo, 2008). The evidence suggests that recognition (perceptions of trust, communication, mentoring, etc.) and working conditions (salary, benefits, resources, etc.) strongly correlate with turnover intention. Organizational advancement and position change are strong motivators for employee retention (Johnsrud & Rosser, 1997). The EO experiences this upward mobility often and it is common for operators in the EO to become managers. Turnover directly influences role ambiguity because when experts on the communicative system leave, roles and practices dissolve on the frontline, leading to staff uncertainty concerning responsibilities and duties.

Role Ambiguity Cycle

To illustrate the relationship between these causes, Graphic 3 depicts a role ambiguity cycle outlining a typical sequence of changes in the EO. Specifically, the EO has very structured office responsibilities, yet struggles with coordination and role designation between branches. The cycle begins with unclearly defined roles and job responsibilities leading to increased work stress and inhibited job performance. When role ambiguity presents these issues, the organization typically constructs new standardized systems to clarify these roles and improve internal communication between staff. To operate these systems, organizations designate staff members to navigate employees through the system, serving as experts on the new practices (the FCE Director would be

one of these navigators). It is often the case that through turnover these experts exit and leave employees confused about how to operate the system. Gradually, after the expert leaves, the system and its practices dissolve as people forget how to navigate the system, leading us back to the starting point. This model was constructed to demonstrate that role ambiguity, middle managers, and turnover are all strongly connected. These three factors influence each other and are integral to overcoming ambiguity in the EO.



Potential Solutions

To address the problem and its causes, potential solutions are included to guide the alternatives of this report. These solutions are middle management goal alignment, database management systems (DBMS), and the Responsible, Accountable, Consulted, and Informed (RACI) Matrix. The leading alternatives are DBMS, RACI Matrixes, and the EO current management system (Salesforce Education Cloud and Slack). Middle management goal alignment is an important consideration that literature has demonstrated to be an effective measure for mitigating the impact of role ambiguity.

Middle Management Goal Alignment

The most prominent solution in the literature for role ambiguity concerns goal alignment between employees and administrative staff. Planned work targets and concrete shared goals between management and employees can mitigate work stress caused by role ambiguity and result in improved deliverables (Ingersoll, 1991; Suari & Rahyuda, 2022). Constructing rules can help implement these principles, however, this requires constant enforcement that is likely to constrain employees and contribute to work stress (Ingersoll, 1991). This is why a moderate level of ambiguity, or flexibility within guidelines, is beneficial, as it influences employees to be more creative with implementation. To align project goals, middle managers require time and space to plan for their employees and resources to bridge the gap between administrative and frontline knowledge (Gahagan, 2023). For the EO to effectively address excessive role ambiguity, middle managers (such as the FCE Director) need these freedoms to ensure they can align the goals between administration and the frontline.

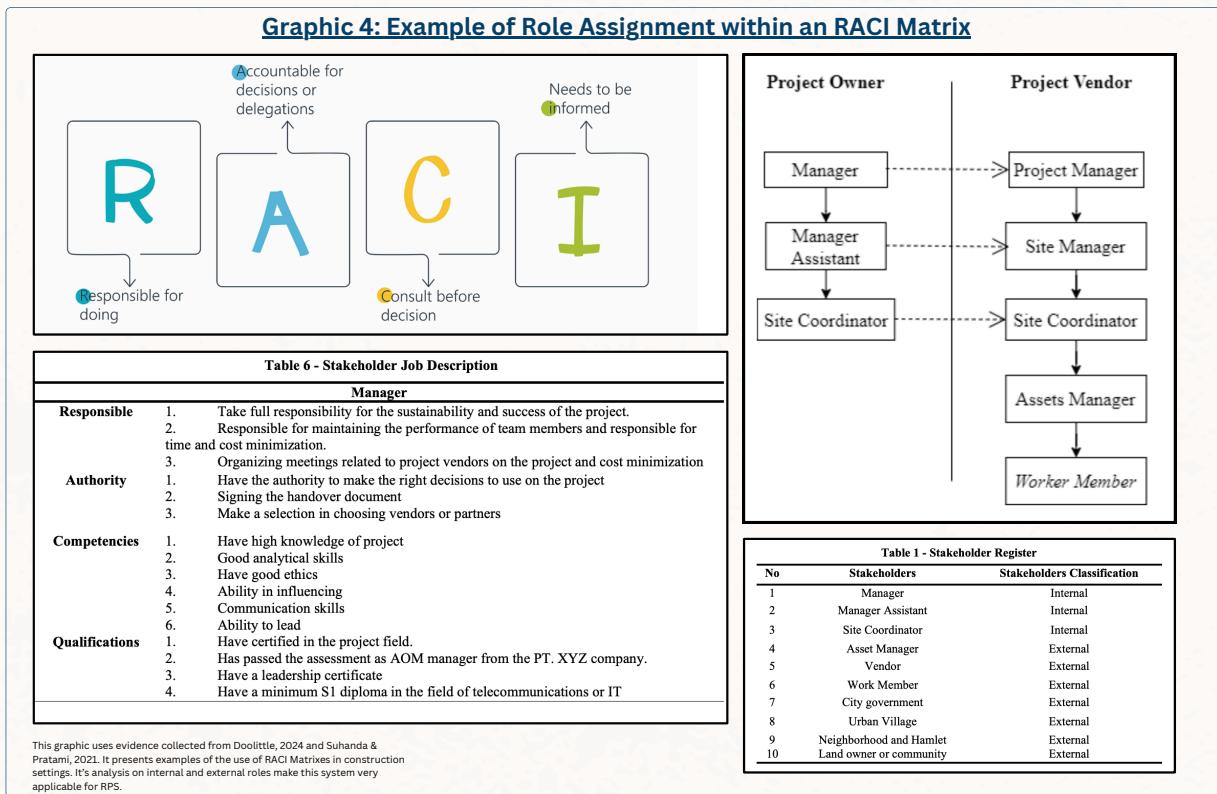
Database Management Systems

A remedial solution that can address role ambiguity and unstandardized communication practices is a database management system (DBMS). A DBMS refers to software that stores and organizes data in a structured manner while providing tools for easy navigation of the system (Bisht, 2024). These systems provide school divisions with a centralized hub for information sharing which improves data accuracy and ensures that all the necessary data can be found in one place (Bisht, 2024). DBMS assist school divisions in terms of data entry and retrieval, data accuracy, improved data-driven decision-making, personal data security, scalability, and cost-effectiveness (Bisht, 2024). These systems can address role ambiguity in the EO as they present a centralized system where roles can be clearly defined and adjusted based on staff turnover or organizational change. Because these systems are aimed at entire school divisions, the FCE and EO require a specific type of DBMS, a Role-Based Access Control (RBAC). RBAC models provide a scalable framework for managing resources based on designated roles, where each employee is given a specific set of roles and privileges (Dongdong et al., 2017; Kabier et al., 2023). Tasks can be assigned to these roles by the system administrator who oversees the RBAC (Oh & Park, 2003; Dongdong et al., 2017). One of the most popular RBACs is Permify, which is integrated with Google, grants administrators access to create highly specific tasks and roles for employees, and allows for complex decision-making with large datasets (Permify, 2024). These systems can address unstandardized communication practices as the systems establish a central location for data sharing and communication between employees and community stakeholders.

RACI Matrix

When researching examples of “turnover-proof systems,” RACI Matrices emerged as a creative solution. RACI Matrices are systems used to manage responsibilities, direct resource allocation, and describe the relationships between job roles on a project (Suhanda & Pratami, 2021). These systems are built on four principles: responsible, accountable, consulted, and informed. Responsible designates which team members are expected to fulfill project tasks and accountable refers to the

project leader (in this case the FCE Director) who makes project-wide decisions (Suhanada & Pratami, 2021; Doolittle, 2024). Consulted relates to the navigators of a project who are experts on a



particular area (ex: knowledge from the Director of Community Partnerships on how to coordinate with Richmond Health Departments). Informed refers to the frontline employees who perform most project tasks and require updates on “audibles” during a project (Suhanda & Pratami, 2021; Doolittle, 2024). RACI matrixes enable organizations to group their employees into different roles during a project which ensures accountability and clearly defined job responsibilities. To create an RACI procedure, organizations must select a team (in this case the FCE office), group employees into roles, identify the tasks within each role, and align these groups with the project’s goal (Doolittle, 2024). Graphic 4 provides a high-level overview of the RACI structure and project leader responsibilities.

Several qualitative studies have been conducted to gauge the effectiveness of these systems, including a study by Suhanda and Pratami. The study examined nine stakeholders in a tech company in Indonesia (PT XYZ) and assigned them roles according to the RACI model. Their results demonstrate that RACI models clarified work responsibilities, allowing employees to complete tasks more frequently and understand their roles (Suhanda & Pratami, 2021). Another study conducted by Lee et al. in 2021 analyzed RACI models in six construction cases, four from South Korea and two from the United States. Their study is limited by the small range of programs

surveyed; however, it still presents highly valuable insight. Their findings suggest that in the closure phase of a project (near completion), there is a disconnect between the responsible and informed levels of the system (Lee et al., 2021). Here, frontline employees have a vested interest in the project's completion and hold high levels of autonomy, yet they are designated fewer tasks and responsibilities (Lee et al., 2021). In this sense, employees are very interested in completing the project, but implementation lags as roles are no longer clearly defined during this period. If the EO implements a RACI structure, they must clearly define roles during the closure of a project. In short, RACI Matrices can help the EO establish a procedure for task management within projects, which can address the ambiguity in role responsibility and communication practices in the office.

Evaluative Criteria

Transitioning from potential solutions, a set of criteria has been constructed to gauge which alternative is the best solution for the FCE office and EO. The FCE office aims to improve the office's efficiency and increase planning time to strengthen project deliverables. The office desires an affordable solution within a limited budget. Above all else, the office seeks an alternative that encourages coordination between branches and provides team members with an easily navigable system that clearly identifies roles. Referencing the goals of the office, the following criteria will be used to operationalize each alternative.

Cost

The first criterion is cost. It concerns whether the alternative is an affordable option for the office. It's important to note that the EO will not directly pay for these alternatives. Instead, the purchase of these alternatives is conducted through the RPS Education Foundation. The FCE Director can provide the cost calculations of this document to the foundation to advocate for a given alternative. This criterion will measure the total cost to the FCE office along two dimensions:

1. Direct Cost: How much will the FCE office pay annually to operate the alternative? What are the travel costs associated with training sessions?
2. Indirect Cost: What are the associated costs with lost productivity? What are the potential savings from improved productivity?

Direct cost refers to how much the FCE office, and subsequently, the Education Foundation will pay in dollars annually to operate the alternative. Training costs will account for additional professional development sessions and travel costs to each session. Indirect costs refer to the productivity lost from training sessions and eventual savings from increased productivity. Full cost calculations can be found in the Appendix.

Efficiency

Given the FCE office's desire for more efficiency in their office and greater collaboration between branches, this criterion deserves heavy consideration. This criterion will be assessed according to a ranking system of "low", "medium", and "high". Efficiency will be measured along four dimensions:

1. Communication and Collaboration
2. Planning Time
3. Deliverables
4. Turnover Durability

Communication will be measured by monitoring how FCE office employees use the alternative to communicate, and collaboration will be assessed by determining how well each alternative fosters cross-branch interactions on projects. Planning time will be measured according to the potential each alternative has for organizing and designating project resources earlier in the project's lifespan. Deliverables can be assessed by predicting how each alternative impacts the resources delivered at the end of a project. Finally, turnover durability will assess the likelihood of the alternative engraining itself in the organizational culture with the presence of staff turnover.

Administrative Feasibility

Feasibility refers to how realistic it is for the FCE office to implement a given alternative and how likely it is for employees in the office to actively utilize the alternative. Feasibility will be measured using a rating scale of “low”, “medium”, and “high”. Each alternative will be placed into one of these ratings in correspondence with two dimensions:

1. Team Member Buy-In
2. Administrative Burden

Team member buy-in is assessed by analyzing how easy it is for users to navigate the alternative while also considering the likelihood of FCE office employees actively engaging with the alternative. Administrative burden will be measured by comparing how much responsibility each alternative will place on the FCE Director in training team members and learning how to operate the alternative.

Overview of the Status Quo (Salesforce Education Cloud and Slack)

Before evaluating the alternatives, the EO's current operating system requires consideration. The EO has roughly 49 employees and uses Salesforce Education Cloud to manage student data reporting, volunteer intake, and communicate with community partners. Salesforce and Slack were implemented in 2024 with the arrival of Danielle Greene-Bell as the new Chief Engagement Officer. This is why the status quo is an alternative, as team members are still adapting to the system, and it's possible this could be the most efficient option in the long term. There are several ways that team members in the EO utilize Salesforce, one being family and student outreach. Salesforce is a scalable cloud database that allows school divisions to facilitate student enrollment, coordinate with community partners, and provide team members with real-time data necessary to make informed decisions (Ascendix, 2024; Denizhenko, 2024). Even though these descriptions apply to school divisions, the scalable nature of Salesforce has allowed the EO to integrate this system within their office.

Slack, an Enterprise Social Network tool under Salesforce, centralizes communication by allowing employees to share information, collaborate on projects, and strengthen internal relationships (Stray & Barbala, 2024). Slack can be used to align multiple teams on a project and overcome barriers to cross-team communication, something the EO struggles with (Stray & Barbala, 2024). Slack allows the EO to save important messages, send announcements, and utilize shared channels to unite the different branches on a collective project (Slack from Salesforce, 2025). Collectively, this section illustrates how the EO currently uses Salesforce and Slack to perform office duties.

Evaluation of Alternatives

Three alternatives are presented to the FCE office as potential solutions for the ambiguity they experience within their office. The three alternatives under consideration are Salesforce Education Cloud and Slack (the status quo), Permify RBAC Database, and the RACI Matrix. Each will be assessed based on cost, efficiency, and administrative feasibility. The discussion will conclude with a recommendation for the most suitable option for the FCE office.

Alternative 1: Salesforce and Slack (Status Quo)

Annual Cost: \$66,473.43 - \$233,318.43

Direct Costs: \$47,989.20 - \$214,834.20

Purchase Costs

Low-End Models: \$66,473.43

High-End Models: \$233,318.43

Salesforce and Slack have several tiered purchase models which are calculated on a per-worker and per month basis. The cost estimates for each model will be calculated annually (12 months). There is a basic Salesforce Enterprise plan, an Unlimited plan, and the Einstein 1 plan which offers artificial intelligence integration (Salesforce Education Cloud, 2025). There is a basic free Slack plan, a Pro plan, and a Business plan (Slack from Salesforce, 2025). The EO currently uses the Salesforce Enterprise plan and Slack basic plan. The direct purchase costs for each plan are listed in the Appendix.

Training and Travel Costs: \$214.20

In addition to purchase costs, training costs are also important to consider for effectively using Salesforce and Slack in the EO. Effective use of Salesforce and Slack in the EO requires professional development training sessions to ensure all team members are proficient with the system. For this report, training sessions will occur once every two weeks for six months, totaling 12 sessions. There is no direct cost for reserving space as the EO leverages community partners to provide locations such as the Virginia Commonwealth University (VCU) health hub.

The Virginia mileage reimbursement rate is \$0.70 per mile, and it's assumed that all 49 EO team members will be required to attend these sessions (ramp, 2025). About 75 percent of team members carpool to these sessions, indicating that roughly on average 15 cars are traveling to each session. The EO's central office and VCU health hub are the locations used to calculate the distance employees must travel per session, totaling 1.7 miles (Google Maps, 2025).

Indirect Costs: \$18,484.23

Productivity Lost in First Six Session Weeks: \$21,966.95

Productivity Savings Over Final Six Session Weeks: \$3,482.72

Training sessions for Salesforce and Slack will result in indirect costs due to lost productivity for the FCE Director and EO employees. These losses in productivity will occur over the first six session weeks, where team members and the FCE Director will lose productivity from learning how to operate Salesforce and Slack more efficiently. After six session weeks, both groups will be more comfortable operating the systems, leading to savings associated with greater productivity. From stakeholder interviews, the average EO employee engages in five community interactions (with families, students, or partners) per day. After six session weeks, stronger comfortability with these operating systems will increase these interactions from five per day to seven. Further cost considerations can be found in the Appendix.

The FCE Director, as the onboarding director, loses a total of 3.5 hours per week in the first six session weeks. They lose two hours per training session and 1.5 hours organizing the meetings, connecting with team members, and clarifying confusion throughout the process. The FCE Director's hourly wage, including benefits, was estimated to be \$68.17 per hour using RPS' 2024-2025 Salary Schedules document (Richmond Public Schools, 2024). For the other 48 EO employees, the Salary Schedules document was used to estimate an average EO hourly wage of \$35.65 per hour, compiled from the salaries of several different pay grades, including family liaisons, associate directors, and the Chief Engagement Officer among several other positions. Each employee loses two hours of productivity per session in the first six session weeks.

Efficiency

Communication and Coordination

Salesforce fosters collaboration by creating a centralized platform for disseminating student and family data while Slack provides team members with an avenue to share documents and coordinate team meetings (Patkar, 2024; Stray & Barbala, 2024). These tools support social interactions between EO branches, where employees can coordinate project tasks and engage in specific channels tailored to a project, branch, or topic (Montcrief et al., 2020; Stray & Barbala, 2024). Evidence suggests that Slack helps overcome inter-team communication barriers, making it easier for employees to seek assistance and understand each other's responsibilities (Stray & Barbala, 2024). These systems also assist managers in communicating with their employees by allowing them to send automated messages that update employees on project changes, upcoming events, and important office updates

(Serhiienko, 2024). Although quantitative data is very limited on these systems, the provisions mentioned above present avenues for the EO to improve their communication and collaboration between branches.

Planning Time

The centralized spaces that Salesforce and Slack offer ensure that directors and team members share information throughout a project (DW Bridges, 2025; Stray & Barabala, 2024). This transparency allows for additional planning time and considers key stakeholders and resources that might have been overlooked (Salesforce, 2025). These systems limit the time employees spend searching through databases and documents to find necessary project details (Salesforce, 2025). A study conducted on the Institut Químic de Sarrià (IQS) demonstrated that Salesforce improved the organization's internal operations by granting access to siloed department information across divisions. This enabled the IQS to engage more effectively with students and track department task performance (Salesforce, 2025).

Deliverables

Evidence suggests that Salesforce and Slack result in a 10 percent increase in funding contributions from community partners and alumni (Davydov, 2024). This measure may indicate that these systems can improve EO relationships with community partners. Aside from this measure, Salesforce establishes student-family portals which offer teacher and EO communication channels that provide student progress tracking with detailed reports and intervention support mechanisms (Sabitov, 2025).

Turnover Durability

The potential Salesforce and Slack have to withstand turnover is moderate but slightly limited. New employees can be added to existing groups with access to the information and resources of a given project (Ard, 2023). However, encouraging new employees to engage with these channels can be challenging. This can potentially lead to communication gaps and employees being out of the loop on projects (Brina et al., 2022; Stray & Barbala, 2024). In the presence of turnover, existing evidence suggests that Salesforce and Slack encourage horizontal communication between branches, where branches can coordinate to fill in lost roles and develop stronger relationships between employees on a project (Brinia et al., 2022).

Efficiency Score: Medium

This alternative receives a score of medium because it creates avenues for greater communication and collaboration between branches but still reinforces the siloed nature of information gatekeeping between branches. The alternative provides a centralized space for data sharing and provides strong community engagement mechanisms that offer additional planning time and improve project deliverables. Finally, the alternative provides newly onboarded members with essential resources but struggles to influence new employees to actively engage in communication channels.

Administrative Feasibility

Team Member Buy-In

From stakeholder interviews, it is apparent that team members struggle to buy into this alternative, causing significant gaps in communication. These systems can be clunky to navigate and if buy-in varies across employees, it can lead to employees neglecting the system and missing critical pieces of information (Montcrief et al., 2020; Serhiienko, 2024). Such instances of miscommunication also increase the probability of unprofessional behavior or conflict arising. This may change with time, as surveys conducted by Slack have suggested that the platform can lead to employees feeling more engaged with their work and more productive (Ard, 2023).

Administrative Burden

For these systems to be more efficient in the EO, the directors must take on more responsibility in overseeing coordination between team members and project outcomes for students and families (Sabitov, 2025). These directors play a catalytic role in ensuring that Salesforce and Slack are efficiently used in the EO, which can be time-consuming and overwhelming (Brinia et al., 2022; DW Bridges, 2025). However, the automation capabilities provided by these systems, such as automated team messages, can reduce the time spent connecting employees and scheduling meetings (DW Bridges, 2025). Evidence suggests that managers who take an active role in the process are more suited to connect employees with the vision, mission, and goals of a project (Sharma et al., 2024). However, it can still be challenging for directors to get everyone on the same page.

Administrative Feasibility Score: Medium

This alternative receives a medium ranking because it struggles to encourage team member buy-in but assists directors with automated messages to streamline employee communication. This requires more effort from directors to increase efficiency. Finally, the alternative's cloud integration with Google allows employees to continue using existing systems for document creation and communication.

Alternative 2: Permify Role-Based Access Control Database

Annual Cost: \$131,130.38 - \$133,530.38

Direct Costs: \$67,836.36 - \$70,236.36

Purchase Costs

Low-Cost Model: \$0

High-Cost Model: \$2,400

Permify has two purchase plans that deserve consideration. Permify offers an Open Source plan and a Cloud plan (Permify, 2024). Permify has a steeper learning curve than Salesforce and because of this, more training sessions will be required. This alternative will also include the annual purchase costs for current Salesforce and Slack models, totaling \$47,775 annually.

Training and Travel Costs: \$428.40

This alternative requires four sessions per month over six months, totaling 24 total sessions. The travel cost considerations are the same as Salesforce (mileage rate, number of cars, etc.) except for the number of training sessions. However, because Permify is a more complicated system, it will also require the four office directors to move data and resources from Salesforce to Permify, which is expected to incur an additional three hours of work for each director per session week.

Indirect Costs: \$63,294.02

Productivity Lost in First Six Session Weeks: \$75,756.48

Productivity Savings Over Final Six Session Weeks: \$12,462.46

The indirect costs associated with Permify relate to the lost time in productivity from office directors and the other EO employees in the first 16 session weeks. Permify's complex system will require more training sessions and much more effort from EO employees to learn the system. Permify offers the greatest potential for productivity improvements in the long term, as the specific authorization channels will enable project teams to more effectively engage with community stakeholders. After EO employees are comfortable with the system, in the final 8 session weeks, it's estimated that the average EO employee will engage in 10 community interactions per day. Full cost calculations for this alternative can be found in the Appendix.

Office directors will lose roughly six hours of productivity in the first 16 session weeks. They lose two hours from the weekly sessions and four hours from transitioning Salesforce resources to Permify, connecting with team members, and coordinating with other office directors. The other 45 EO team members will lose two hours of productivity in the first 16 session weeks from the training sessions.

Efficiency

Communication and Collaboration

Permify offers a multi-tenancy feature that allows managers to group employees by team, define their unique roles, and isolate the specific information they need to avoid confusion on task assignments (Permify, 2024). Managers can provide information access across teams through group linkages which foster collaboration between two or more teams (enSYNC Corporation, 2022). These factors assist managers in establishing the role parameters and specifics of a given project. Managers oversee critical information like student data centrally and then disburse this information to the established teams. Misallocation problems can arise if managers disburse this information to the wrong team or fail to clearly state the responsibilities of a given team (Marquis, 2024; George Washington Information Technology, 2025). Team leaders can be assigned within groups to create team guidelines, limiting the need for strict director oversight of team functions (Le et al., 2012). With this said, it is important to note that concrete data concerning the impact of Permify on team communication is unavailable.

Planning Time

The Permify monitorization system enables managers to track employee usage, providing access to see when employees make changes to documents, what changes are made, and who is active within their team (Marquis, 2024). This flexibility provides managers with additional planning time as it limits the time managers spend tracking down employees and reviewing document updates.

Deliverables

Evidence suggests that the centralized data format simplifies the management of team access controls, securely protects private student data, and allows managers to make data-informed decisions (Permify, 2024). Several studies have noted the benefits of using a database system like Permify, such as the San Diego Unified School District, finding that the system enabled district managers to work more directly with employees on operational strategies and project goals (Education Week, 2006). Further studies have demonstrated that database management systems improve data collection, processing, storage, accuracy, and dissemination of student data (Ordonez & Diña, 2023).

Turnover Durability

When organizations face turnover, Permify allows managers to quickly reassigned roles and authorizations to newly onboarded members and existing team members (Le et al., 2012). Managers can update the permissions and roles for existing employees based on the assignment of newly onboarded members (McCarthy, 2025). When an employee leaves the system, managers can also revoke the permissions of these users and remove their linkages to other teams (Aytin, 2023). However, evidence suggests that dynamic constantly changing work environments like the EO present a potential challenge (Marquis, 2024). When organizations expand and shift job functions,

previously defined roles may no longer be applicable (McCarthy, 2025). This causes managers to scramble in redefining roles, often leading to unclear employee responsibilities.

Efficiency Score: High

This alternative receives a score of high because it enables team collaboration within and between groups and allows directors to directly oversee team functionality. The alternative allows organizations to compile large datasets and greatly improves employee efficiency and decision-making. Finally, the alternative is built to accommodate turnover by enabling managers to automatically adjust project permissions and linkages with minimal effort.

Administrative Feasibility

Team Member Buy-In

Permify has the steepest learning curve for employees, where it can be especially difficult for inexperienced employees to navigate the system (Permify, 2024). To mitigate some of these problems, Permify offers an employee feedback mechanism where employees can provide their input and make suggestions to improve the system (Ordonez & Diña, 2023). Permify's access restrictions also grant less restrictive permissions to team leaders and more restrictive permissions to less experienced team members, like family liaisons (McCarthy, 2025; Tools4Ever, 2025). This ensures that team members don't get lost and that team leaders can direct their team members to the correct spaces. Another problem that arises with buy-in concerns role explosion where the real-world roles and access needs of an employee differ from their assigned roles in Permify (McCarthy, 2025). This can create tension between managers and employees, especially in highly dynamic work environments like the EO where responsibilities are constantly shifting.

Administrative Burden

EO directors face a heavy administrative burden with Permify, where they are tasked with designing the EO's organizational structure in Permify, assigning roles, creating teams, and classifying each employee by job title (Dongdong et al., 2017). Once roles are assigned, Permify reduces the time managers spend doing these redundant tasks as automatic permissions can be granted based on the role type (enSYNC Corporation, 2022; George Washington Information Technology, 2025). For example, similar jobs in the EO like Community Hub Coordinators can be assigned to the same role even though they occupy different locations, allowing managers to automatically grant the same permissions. Aside from this burden, office directors require specialized training programs to understand how to practically define roles and integrate Permify in the EO (Marquis, 2024). Defining roles and managing access controls is highly complex and requires significant effort from directors, meaning this alternative has a high administrative burden (Permify, 2024).

Administrative Feasibility Score: Low

This alternative receives a low score because it has a steep learning curve for employees with minimal technical skills. The alternative also places a significant burden on directors to manage

permissions and role assignments. Finally, the alternative requires the EO to transition resources from Salesforce, creating additional hurdles that the EO would have to overcome.

Alternative 3: Responsible, Accountable, Consulted, and Informed (RACI) Matrix

Annual Cost: \$67,751.66

Direct Costs: \$47,989.20

Purchase Costs: \$0

The RACI Matrix is a free project planning template that can be easily constructed using Google Sheets. A RACI Matrix would have no purchase cost to the EO, although it would require training sessions for directors and employees to learn the model. This alternative also incurs the annual purchase costs of Salesforce and Slack.

Training and Travel Costs: \$214.20

For this alternative, training sessions would mirror Salesforce, occurring twice per month over six months, totaling 12 sessions. This means that the associated travel costs follow the same parameters as Salesforce. A RACI Matrix can be used alongside the status quo and does not require the EO to alter operating systems.

Indirect Costs: \$19,762.46

Productivity Lost in First Six Session Weeks: \$26,772.60

Productivity Savings Over Final Six Session Weeks: \$7,010.14

RACI Matrices place greater responsibility on directors as they must learn how to construct these models and disburse them to employees. Similar to the first alternative, the first six weeks of sessions will result in productivity losses for EO employees and office directors. After six session weeks, office directors and EO employees will be more comfortable navigating RACI Matrices. During the last six weeks of sessions, productivity savings become evident through increased community interactions. EO employees will engage in eight interactions per day with the community.

Office directors will lose five hours of productivity in the first six session weeks, with two hours lost from the training session and three hours lost from learning to construct the matrices, scheduling sessions, and working with team members to clarify responsibilities. The other 45 EO employees will lose two hours of productivity per session in the first six session weeks.

Efficiency

Communication and Collaboration

The RACI framework designates specific roles during a project which allocate responsibilities based on who is responsible, accountable, consulted, and informed during each project phase. Evidence suggests that this structure prevents the overlapping of duties, reduces miscommunication, provides clarity to team members on whom to reach out to, and ensures everyone is aligned on project goals and timelines (Matthews, 2024). The model dictates who is accountable as a project leader and fosters project collaboration by grouping members according to their RACI role (Tartell, 2017). Studies show that agile models like RACI Matrices present clearer communication flows, limit design costs, increase team productivity, and provide more flexibility in constructing a project (Farnetti & Minotti, 2022; Cric et al., 2022). Organizations that utilize RACI Matrices engage team members more actively throughout a project's life cycle, foster greater collaboration between project leaders and team members, and enable project teams to stay accountable and connected to their roles during a project (Matthews, 2024).

Planning Time

By clearly defining who is responsible for a specific task, RACI Matrices can ensure that work is balanced across teams and that one person does not take on an excessive number of tasks, something that the EO experiences frequently (Brower et al., 2020). The matrix is a reference point that can be adjusted during any project phase to resolve disputes associated with overloaded team members (Read, 2024). The model also presents early role identification which helps organizations identify any missing roles, stakeholders, or resources that are neglected in the project's design (Kahn & Quraishi, 2014). This ability to plan ahead and account for missing pieces early would present EO directors and employees with more time to focus on improving the end deliverables of a project.

Deliverables

A study conducted by Suhanada and Pratami on nine tech companies in Indonesia using RACI Matrices found that the model allowed employees to complete their tasks more frequently and was beneficial for managers (Suhanda & Pratami, 2021). The study demonstrated that managers held greater project authority and could more effectively stick to the project plan and account for unintended changes (Suhanda & Pratami, 2021). Available evidence suggests that RACI Matrices as agile planning models improve teamwork effectiveness and employee satisfaction, ultimately leading to stronger project deliverables such as community outreach (Cric et al., 2022).

Turnover Durability

The fluidity of the RACI Matrix enables organizations to onboard new team members and adjust roles on a project (Brower et al., 2020). New members can be easily placed within the matrix, allowing them to clearly identify their roles and responsibilities (Harned, 2024). If applied to the EO, the RACI Matrix presents a formal mapping structure for reallocating responsibility in the face of turnover (Farnetti & Minotti, 2022). Once directors are comfortable with the system, they can

effectively engrain the matrix within the EO culture, diminishing the likelihood of the model being forgotten in the future. However, it can be difficult to include all members relevant to a specific project in the planning phase, meaning that the system can become outdated if the needs of a project are not adjusted for unintended changes (Kantor, 2024). Mitigating this problem requires office directors to consistently update the matrix, accounting for any missing roles or new members added to a project (Read, 2024).

Efficiency Score: Medium

This alternative receives a score of medium because it reduces miscommunication errors between teams on projects and engages employees more actively throughout the duration of a project. The alternative enables managers to plan ahead on projects and can improve employee deliverables. Finally, the alternative allows roles to be quickly adjusted for newly onboarded members but requires constant updates from managers to address unintended challenges during a project.

Administrative Feasibility

Team Member Buy-In

EO team members would likely appreciate the clear role definitions that RACI Matrices present as the model minimizes the need for clarification meetings, allowing employees to make more efficient use of time (Read, 2024). The consulted category also gives EO employees a stronger voice in the planning process, enabling them to provide first-hand experience, practical input, and feedback (Matthews, 2024). The different role categories also enable the construction of project teams to redirect workload from team members who feel they are overloaded with tasks (Matthews, 2024). Directors communicating with employees on their assigned roles ensures they are comfortable with their responsibilities and can influence how much team members buy into the matrix (Read, 2024; Kantor, 2024). Overall, EO employees are likely to buy into this model as it empowers them to take a more active role during a project and prioritizes their opinions and interactions (Ciric et al., 2022).

Administrative Burden

Managers, like the EO directors, play a pivotal role in the construction of RACI Matrices, where they are tasked with coordinating resources, managing budgets, tracking project progress, and communicating with team members and stakeholders (such as families) (Alexander, 2023; Matthews, 2024). During the planning stage, directors construct the matrix, assign roles to relevant team members, and identify the targeted outcomes of the project (Alexander, 2023). During project execution, directors develop and manage project teams, oversee communication between project teams, and connect with stakeholders to provide updates on the project's progress (Alexander, 2023). In closure, the directors close all procurements, settle budgets, and present deliverables to the stakeholders (Alexander, 2023). While this may seem burdensome, EO directors already perform these duties by creating detailed project plans that require significant time and effort. The RACI Matrix provides a template for them to use instead of these plans, enabling them to track the responsibilities of individual team members and minimize the time they spend constructing project

plans (Matthews, 2024). Surveys indicate that RACI Matrices help managers balance workloads more effectively between employees, determine where additional input is needed, and ensure that vital responsibilities are covered during a project (Brower et al., 2020).

Administrative Feasibility Score: High

This alternative receives a high score because it clarifies employee roles and prioritizes their opinions and input. The alternative provides directors with a more streamlined project planning template, allowing them to account for unintended project hurdles. Finally, the matrix integrates well within the existing EO operating systems and professional development training structure.

Outcomes Matrix

Below is the Outcomes Matrix which assesses each alternative relative to its cost, efficiency, and administrative feasibility. The assumptions and calculations used to construct the cost estimates can be found in the Appendix.

Outcomes Matrix

Alternatives

Criteria	Salesforce and Slack	Permify RBAC	RACI Matrix
Total Costs	\$66,473.43 - \$233,318.43	\$131,130.38 - \$133,530.38	\$67,751.66
Direct Costs	\$47,989.20 - \$214,834.20	\$67,836.36 - \$70,236.36	\$47,989.20
Indirect Costs	\$18,484.23	\$63,294.02	\$19,762.46
Efficiency	Medium	High	Medium
Administrative Feasibility	Medium	Low	High

In the Outcomes Matrix, it is important to differentiate between “planning the work” and “doing the work”. Alternatives one and two enable team members to be more efficient while “doing the work”. These alternatives improve how team members perform their duties and provide streamlined channels for communication. Alternative three corresponds to “planning the work,” where the matrix enables the clear identification of responsibilities but requires team members to carry out the work. For the EO, “planning the work” takes greater precedence.

Recommendation

After comparing the strengths and weaknesses of each alternative, the EO and FCE office should incorporate alternative three, the RACI Matrix, in their organization. In terms of cost, the RACI Matrix is the lowest-cost method and requires no direct purchase cost. For efficiency, the RACI Matrix presents benefits in terms of reducing miscommunication and improving team productivity. The matrix is relatively durable in the face of turnover, although alternative two is the strongest in this category. The RACI Matrix is the most administratively feasible option because it centers employees in project design to a greater extent than the other two alternatives. The matrix improves planning strategies for directors while minimizing administrative burdens. In contrast, the other alternatives increase their workload. Directors have limited time and resources, and the RACI Matrix allows them to manage these factors more efficiently. Finally, the matrix is the easiest to implement and allows the EO to continue operating Salesforce and Slack, avoiding the potential hurdles that the office would encounter in transitioning to alternative two.

Implementation

To move RACI Matrices forward in the EO, directors, and the FCE Director will play a crucial role. In other contexts, project managers begin the implementation process by outlining clear project goals, defining the scope of the project, involving relevant team members, establishing key resources, and scheduling onboarding clarification meetings (Matthews, 2024). According to stakeholder interviews, team members must be presented with a clear outline to justify why change is necessary for the EO. Failing to provide a clear outline and reason for change will likely increase the backlash the matrix receives from team members. The introduction of the matrix should begin at the FCE level, with the FCE Director responsible for piloting the system. They must consider key factors, develop the pilot matrix, and set project deadlines and roles (Harned, 2024). This director plays the most pivotal role in moving the RACI Matrix forward in the office. With this, the pilot matrix in the FCE branch will need to illustrate to the EO the communicative and efficient benefits of the system before the plan is extended outward.

Planning an upcoming Parent Teacher Association (PTA) onboarding meeting serves as a strong project for the pilot matrix. The matrix's success can be measured by how many new family liaisons are onboarded, how many community members attend, and how many EO branches participate in setting up the PTA meeting. The first two indicators are metrics that assess community outreach and deliverables, which in this case are new family liaisons. The final indicator illustrates the improvement of coordination between EO branches on a project.

The steps necessary to move the matrix's implementation forward involve three phases. In the first phase (weeks one through three), the FCE Director will outline a specific project in line with the key considerations above and schedule RACI training workshops with team members. These meetings clarify how roles and tasks will be delegated by the matrix, build project team foundations, and

connect team members on project goals (Brower et al., 2020; Matthews, 2024). Slack feedback channels will be established to allow team members to share opinions outside of workshops. During this phase, the workshops will occur once per week. Team members experienced with project management templates, like the Director of Communications, can also be consulted during training workshops to assist the FCE Director and team members onboard the matrix. After these requirements are met, the FCE Director will construct the pilot RACI project matrix.

In phase two (weeks four through six), the FCE Director will use the matrix to track employee task completion and adjust roles based on employee feedback. Workshops will still occur once per week to ensure that the FCE Director can receive feedback from the team and identify missing pieces with the template. The FCE Director can assign Community Hub Coordinators as team leads for the family liaisons. Through this mechanism, the director can track the actions of family liaisons through coordinators, minimizing their workload and need for strict oversight. In this phase, the director will adjust the matrix to account for neglected EO team members and designate roles that were overlooked in the planning phase. An example of this is including Communications team members to construct flyers for the PTA meeting. The FCE Director and Associate Director will also communicate with key stakeholders (families, students, etc.) to update them on the project's progress and deliverables.

In the closure phase (project completion), the PTA meeting is executed and the effectiveness of the RACI Matrix will be assessed. The FCE Director will be accountable to the Chief Engagement Officer for the success of the matrix and PTA meeting. Here, the FCE Director and their team can assess what went well with the project and highlight where changes need to be made for future matrixes. Team members will reflect on how the matrix impacted their team communication and task performance during the project. This stage also allows the FCE Director to assess how the matrix influenced their coordination with team members and their ability to plan for unintended challenges. If the pilot matrix succeeds, the FCE Director can collaborate with office directors to implement the matrix across other EO branches.

According to stakeholder interviews, the FCE Director will appreciate the matrix's "copy-paste" format which enables them to adjust roles during a project. This will diminish the need for supplementary project documents designed to clarify responsibilities for team members. These interviews demonstrated that the matrix would face significant resistance from team members who prefer operating existing systems. Team members resist change in the EO because they grow comfortable creating a routine that works for them and dislike alterations to their system. Each EO employee has a unique set of responsibilities and the autonomy to create a schedule that fits them best. These employees fear changes to the status quo and the increased workload that potentially comes with change.

For example, a family liaison constructs a comfortable routine that addresses their current office responsibilities. With a RACI Matrix, they are assigned additional responsibilities they did not have previously. It's likely in this scenario that the liaison will push back on the added responsibilities of their position because they were comfortable with their previous routine and fear the added

workload. To mitigate this resistance, the FCE Director must clearly illustrate the value of adopting the matrix during the planning phase and demonstrate to team members why change is necessary, which can be accomplished during workshops. They must communicate with individual EO employees to redirect work if a team member feels they are being overloaded with tasks. It is also essential to provide team members with a feedback loop through Slack to ensure that everyone's opinions are heard and valued by the FCE Director.

Conclusion

In conclusion, the EO and FCE office require a solution that will enable them to counter the ambiguity within their office. This ambiguity in role responsibility and communication practices makes community outreach a significant challenge for the FCE office. The solution to this problem must effectively address the internal issues of the office, which concern role ambiguity, loosely coupled systems, and staff turnover. It must also account for a Richmond community that is economically disadvantaged and diverse, while also placing minimal costs on the office because of Virginia's uneven state funding formula. If this ambiguity is left unchecked, the office will struggle to maintain essential relationships with its community. These relationships are the backbone for providing students and families with the academic and social resources necessary to succeed in their community. This highlights the importance of addressing ambiguity in the office, as the problem limits the office's ability to strengthen and maintain these valuable support networks. The RACI Matrix directly counters the internal issues of the office by presenting clear role identification, encouraging communication flows between employees, and prioritizing greater input from employees in planning projects. The matrix addresses these internal concerns and will enable the office to improve its outreach with the community. Clearly identified roles and project responsibilities will combat the lack of clarity in the office and ensure the office creates targeted outreach strategies. In the long run, the RACI Matrix has the potential to engrave itself within the EO's organizational culture, becoming a staple project planning template that office directors use to plan projects. Above all else, the RACI Matrix provides the EO and FCE office with a solution that can improve how the office accounts for time, planning, and communication. Accounting for these factors will ultimately strengthen the resources and support systems they provide to their most important stakeholders – students and families.

Appendix

Pilot RACI Matrix: Parent Teacher Association Onboarding Meeting

R= Responsible, A= Accountable, C= Consulted, I= Informed								
	Position							
Task	FCE Director	Associate FCE Director	East End Community Hub Coordinator	Soutside Community Hub Coordinator	Northwest Community Hub Coordinator	Family Liasons	Communications Director	Director of Advocacy and Outreach
Community Walks (give out flyers, inform families)			C/R	C/R	C/R	R		
Connect with Community Partners	R/A	R	C	C	C			C
Coordinate with food vendors / organize food		R/A	C/I	C/I	C/I			
Manage event resources / conduct inventory	R/A/C/I	R	I	I	I	I		
Send automated emails to families	R/A	R						R
Reserve an event space	R/A	R/A	C	C	C	I	C	
Connect with procurement for needed purchases	R	R	I	I	I			
Check in with team members	R/A	R	C/I	C/I	C/I	I		
Transporting families to event	C/I	C/I	A/I	A/I	A/I	R		
Construct flyers, family packets, and relevant graphics	I	I	R, connect with coms	R, connect with coms	R, connect with coms	I/C	R	

Cost Calculations (Scan QR Code for Full Spreadsheet)

Engagement Office Cost Assumptions	Number and \$ Estimates	Calculations
Engagement Office 2024-2025 Fiscal Year Total Budget	\$4,256,720	
		
Engagement Office Estimated Budget for Alternatives		
Purchased Services	\$386,000	
Materials & Supplies	\$103,200	
Media Supplies	\$12,350	
Travel Budget	\$8,000	
Total Estimated Budget	\$509,550	\$386,000 + \$103,200 + \$12,350 + \$8,000
Engagement Office Salary & Hourly Wage Estimates		
Number of Employees	49	

Average Days Worked in Calendar Year	260 days	
Average Hours Worked Per Day	8 hours	
Average Hours Worked Per Year	2080 hours	260 days x 8 hours per day
Office Director Pay Grade	133.2	
Average Office Director Yearly Salary	\$141,799	
Number of Office Directors	4	
Family Liaison Pay Grade	117.2	
Average Family Liaison Yearly Salary	\$71,463	
Number of Family Liaisons	34	
Associate Director Pay Grade	131	
Average Associate Director Yearly Salary	\$116,464	$(\$104,316 + \$128,612) / 2$
Number of Associate Directors	3	
Communications Media Experts Pay Grade	118	
Average Media Expert Yearly Salary	\$68,224	
Number of Media Experts	3	
Community Hub Coordinators Pay Grade	125	
Average Community Hub Coordinator Yearly Salary	\$86,916.50	$(\$77,851 + \$95,982) / 2$
Number of Community Hub Coordinators	3	
Chief Engagement Officer Pay Grade	139	
Average Chief Engagement Officer Yearly Salary	\$172,082.50	$(\$154,134 + \$190,031) / 2$
Number of Chief Engagement Officers	1	
Executive Office Associate Pay Grade	116.2	
Average Executive Office Associate Yearly Salary	\$66,823	
Number of Executive Office Associates	1	
Average Engagement Office Yearly Salary	\$82,666.47	$[4(\$141,799) + 34(\$71,463) + 3(\$116,464) + 3(\$68,224) + 3(\$86,916.50) + (\$172,082.50) + (\$66,823)] / 49 \text{ employees}$
Average Engagement Office Hourly Wage	\$39.74	$\$82,666.47 / 2080 \text{ hours}$
Average Family and Community Engagement Director Hourly Wage	\$68.17	$\$141,799 / 2080 \text{ hours}$
Average Engagement Office Yearly Salary (W/out FCE Director)	\$74,155.54	$[3(141799) + 34(71463) + 3(116464) + 3(68224) + 3(86916.50) + 172082.50 + 66823] / 48$
Average Engagement Office Hourly Wage (W/out FCE Director)	\$35.65	$\$74,155.54 / 2080 \text{ hours}$ \$39.74 hourly wage x 8 hours per day x 5 days
Average Engagement Office Weekly Salary	\$1,589.60	

Alternative 2 and 3 Additional Salary Estimates

EO Employee Average Yearly Salary Without Director Salaries	\$71,615.81	[$34(\$71,463) + 3(\$116,464) + 3(\$68,224) + 3(\$86,916.50) + (\$172,082.50) + (\$66,823)$] / 45
EO Employee Average Hourly Wage Without Director Salaries	\$34.43	\$71,615.81 / 2080 hours
Travel Costs Estimates		
Available Spaces for Training Sessions	Free	
Number of Cars Traveling to Each Session	15	
Average gas mileage reimbursement rate in Richmond	\$0.70 per gallon	
Location for Session Meetings	VCU Health Hub	
Engagement Central Office	301 North 9th Street	
Distance from Central Office to VCU Health Hub	1.7 Miles	
Baseline Productivity Measures		
Assessed through daily interactions with community members and families		
What is the average amount of interactions that an Engagement Office employee has with families or community members?	Roughly 5	This estimate was captured from stakeholder interviews with the FCE director. It varies between roles, however, most positions in the EO interact with at least 5 community members per day
Average weekly Engagement Office Interactions	1225	49 employees x 5 interactions per day x 5 days worked per week
Base Productivity (pre-intervention)	25 interactions per employee per week	1225 weekly interactions / 49 employees
Cost per weekly interaction	\$63.58	\$1,589.60 per week / 25 interactions per week
Salesforce and Slack Cost Assumptions and Estimates		
Number and \$ Estimates		Calculations
Direct Costs		
Salesforce and Slack Purchase Costs		
Salesforce		
Enterprise Plan	\$81.25 per worker per month \$138.75 per worker per month	
Unlimited Plan		
Einstein 1 Plan	\$350 per worker per month	
Slack		
Slack Free Plan	\$0	
Slack Pro Plan	\$4.38 per worker per month (first 3 months), \$8.75 per worker per month after	

Slack Business Plan	\$15 per month per worker	
Training Session Estimates		
Number of Training Sessions per month	2	
Number of Months	6	
Total Number of Sessions	12	
<i>Estimated Travel Costs for Training Sessions</i>	\$214.20	\$0.70 per gallon x 15 cars x 1.7 miles x 12 sessions
Indirect Costs		
Total FCE Director Productivity Lost in first 6 session weeks	\$1,431.57	3.5 hours lost x first 6 session weeks x \$68.17 hourly wage
Total Other EO Employees Productivity Lost in first 6 sessions	\$20,535.38	2 hours lost x first 6 sessions x 48 employees x \$35.652 hourly wage
Daily interaction improvement after 6 session weeks	7 interactions per worker per day	2 more interactions per employee per day because of training sessions
Total weekly interactions per employee after 6 session weeks	35 interactions per worker per week	
New Cost per weekly interaction	\$45.42	7 interactions x 5 days
Cost savings (after 6 session weeks)	\$11.85	\$1,589.60 / 35 interactions
Total weekly savings for 49 EO employees	\$580.45	\$57.263 - \$45.417
Total savings over final 6 session weeks	\$3,482.72	49 employees x \$11.846 saved per interaction
TOTAL ESTIMATED ANNUAL COST FOR ALTERNATIVE 1		
<i>Low End Estimate</i>	\$66,473.43	Salesforce Enterprise Plan (\$47,775) + Slack Free Plan (\$0) + Travel Costs (\$214.20) + Indirect FCE Director Costs (\$1,431.57) + Indirect Employee Training Costs (\$20,535.38) - Productivity Savings (\$3,482.72)

		Salesforce Einstein 1 Plan (\$205,800) + Slack Business Plan (\$8,820) + Travel Costs (\$951.66) + Indirect Director Costs (\$1,431.57) + Indirect Employee Training Costs (\$20,535.38) - Productivity Savings (\$3,482.72)
<i>High End Estimate</i>	\$233,318.43	
Permify Cost Assumptions and Estimates	Number and \$ Estimates	Calculations
<i>Direct Costs</i>		
Permify Purchase Cost		
Permify Open Source Plan	\$0	
Permify Cloud Plan (monthly, not per worker)	\$200 per month	
Salesforce and Slack Current Annual Purchase Price	\$47,775	
Transition From Salesforce		
Average Hours per Director Transitioning resources from Salesforce to Permify (per session week)	3	
Number of Directors	4	
Director Average Hourly Wage	\$68.17	4 directors x 3 hours per session week x \$68.17 hourly wage x 24 session weeks
Total transition costs	\$19,632.96	
Training Session Estimates		
Number of Training Sessions per month	4	
Number of Months	6	
Total Number of Sessions	24	
Estimated Travel Costs for Training Sessions	\$428.40	\$0.70 per gallon x (15 cars per session) x 1.7 miles x 24 sessions
<i>Indirect Costs</i>		
Total Office Directors (4) Productivity Lost in first 16 Session Weeks	\$26,177.28	6 hours lost per week x first 16 session weeks x \$68.17 hourly wage x 4 directors
Total Other 45 EO Employees Productivity Lost in first 16 Sessions	\$49,579.20	2 hours lost per session x first 16 sessions x 45 employees x \$34.43 hourly wage

Daily interaction improvement after 16 session weeks	10 interactions per worker per day	Permify increases daily interactions by 5 per worker per day Permify's automation capabilities allow greatest ability to improve employee performance of outreach
Rationale for more interactions		
Total weekly interactions per employee after 16 session weeks	50 interactions per employee per week	10 interactions per employee per day x 5 days
New Cost per weekly interaction	\$31.79	\$1,589.60 weekly salary / 50 interactions per week
Cost savings (after 16 session weeks)	\$31.79	\$63.584 - \$31.792
Total weekly savings for 49 EO employees	\$1,557.81	\$31.792 x 49 employees
Total savings over final 8 session weeks	\$12,462.46	\$1,557.808 x 8 session weeks

TOTAL ESTIMATED ANNUAL COST FOR ALTERNATIVE 2

		Permify Open Source Plan (\$0) + Travel Costs (24 sessions x 15 cars driving x \$0.70 per gallon x 1.7 miles) + Software Transition Dependence on Directors (4 directors x \$68.17 hourly wage x 3 hours lost x 24 session weeks) + Indirect Office Director costs (\$68.17 hourly wage x 6 hours lost x 16 session weeks x 4 directors) + Indirect Employee Training Costs (2 hours lost x 16 sessions x 45 employees x \$34.43 Hourly Wage) - Productivity Savings (\$12,462.464)
<i>Low End Estimate</i>	\$131,130.38	
<i>High End Estimate</i>	\$133,530.38	Permify Cloud Plan (\$200 per month x 12 months) + Travel Costs (24 sessions x 15 cars driving x \$0.70 per gallon x 1.7 miles) + Software Transition Dependence on Directors (4 directors x \$68.17 hourly wage x 3 hours lost x 24 session weeks) + Indirect FCE Director costs (\$68.17 hourly wage x 6 hours lost x 16 session weeks x 4 directors) + Indirect Employee Training Costs (2 hours lost x 16 sessions x 45 employees x \$34.43 Hourly Wage) - Productivity Savings (\$12,462.464)

RACI Matrix Cost Assumptions and Estimates	Number and \$ Estimates	Calculations
<i>Direct Costs</i>		
RACI Matrix Purchase Cost		
RACI Matrix Cost	\$0	
Salesforce and Slack Current Annual Purchase Price	\$47,775	
Training Session Estimates		
Number of Training Sessions per month	2	

Number of Months	6	
Total Number of Sessions	12	
<i>Estimated Travel Costs for Training Sessions</i>	\$214.20	\$0.70 per gallon x 15 cars x 1.7 miles x 12 sessions
<i>Indirect Costs</i>		
Total EO Directors (4) Productivity Lost in First 6 Session Weeks	\$8,180.40	4 directors x 5 hours lost per session week x \$68.17 hourly wage x first 6 session weeks
Total Other EO Employees Productivity Lost in First 6 Sessions	\$18,592.20	45 employees x \$34.43 hourly wage x 2 hours lost per session x first 6 sessions
Daily interaction improvement after 6 session weeks	8 interactions per employee per day	RACI matrix improves daily interactions per worker per day by 3 interactions
Rationale for more interactions		Over the long term, once integrated it will allow EO team members to account for missing stakeholders and reach out to more community members. Important people usually forgotten in planning process will be accounted for, thereby increasing the daily interactions with the community per employee
Total weekly interactions per employee after 6 session weeks	40 interactions per week per worker	8 interactions per day x 5 days
New Cost per weekly interaction	\$39.74 per interaction	\$1,589.60 per week / 40 interactions per week
Cost savings (after 6 session weeks)	\$23.84	\$63.584 - \$39.74
Total weekly savings for 49 EO employees	\$1,168.36	\$23.844 x 49 employees
Total savings over final 6 session weeks	\$7,010.14	\$1,168.356 x 6 session weeks
TOTAL ESTIMATED ANNUAL COST FOR ALTERNATIVE 3		

<i>Total Estimated Cost for RACI Matrix</i>	\$67,751.66	RACI Matrix (\$0) + Travel Costs (\$214.20) + Indirect Director Costs (\$68.17 hourly wage x 4 directors x 5 hours lost x 6 session weeks) + Indirect Employee Training Costs (45 employees x \$34.43 hourly wage x 2 hours lost x 6 sessions) - Productivity Savings (\$7,010.14)
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Bibliography

- Agnew, R., 1992. Foundation for a general strain theory of crime and delinquency. *Criminology*, 30(1), pp.47-88.
- Akosile, A. L., & Ekemen, M. A. (2022). The Impact of Core Self-Evaluations on Job Satisfaction and Turnover Intention among Higher Education Academic Staff: Mediating Roles of Intrinsic and Extrinsic Motivation. *Behavioral Sciences*, 12(7), 236. <https://doi.org/10.3390/bs12070236>
- Alexander, M. (2023, June 26). What is a project manager? The lead role for project success. Cio.com; IDG Communications. <https://www.cio.com/article/230682/what-is-a-project-manager-the-lead-role-for-project-success.html>
- Aman Bisht. (2024, September 16). Efficient Database Management Systems for Small Schools - Schoolcues Blog. Schoolcues Blog. <https://www.schoolcues.com/blog/the-small-schools-guide-to-effective-database-management-systems/>
- American Automobile Association. (2016). AAA Gas Prices. AAA Gas Prices; American Automobile Association. <https://gasprices.aaa.com/?state=VA>
- Anand, A. (2024, November 14). Salesforce Education Cloud: Transforming Universities & Student Experience. Mirketa -. <https://mirketa.com/salesforce-education-cloud-in-higher-education-transforming-university-operations-and-student-experience/>
- Ard, D. (2023, August 11). What does a culture of efficiency really look like? Insights from Slack, Salesforce. Hrexcutive.com; HR Executive. <https://hrexcutive.com/what-does-a-culture-of-efficiency-really-look-like-insights-from-slack-salesforce/>
- Bailey, M., Kim, W., Koury, S., Green, S. A., & I, K. (2023). Cultivating Trauma-Informed Educational Practices for Students with Refugee Backgrounds. *Children & Schools*, 45(4), 223–232. <https://doi.org/10.1093/cs/cdad017>
- Balogun, J. 2003. “From Blaming the Middle to Harnessing its Potential.” *British Journal of Management* 14, no. 1: 69–83.
- Banaji, M. R., & Greenwald, A. G. (2016). *Blindspot: Hidden biases of good people*. New York: Random House.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bemak, F., & Chung, R. C.-Y. (2017). Refugee Trauma: Culturally Responsive Counseling Interventions. *Journal of Counseling & Development*, 95(3), 299–308. <https://doi.org/10.1002/jcad.12144>
- Bragga, L. (2024). Budget - Richmond Public Schools. Www.rvaschools.net; Richmond Public Schools. <https://www.rvaschools.net/chief-of-staff/budget>
- Breaugh, J. A., & Colihan, J. P. (1994). Measuring facets of job ambiguity: Construct validity evidence. *Journal of Applied Psychology*, 79(2), 191–202.

- Brinia, V., Selimi, P., Dimos, A., & Kondea, A. (2022). The impact of communication on the effectiveness of educational organizations. *Education Sciences*, 12(3), 170. <https://doi.org/10.3390/educsci12030170>
- Brion, C. (2020). Implicit Bias: An Unconscious Barrier to Family Engagement. ECommons; North American Community: Uniting for Equity. https://ecommons.udayton.edu/eda_fac_pub/242/
- Brower, H. H., Nicklas, B. J., Nader, M. A., Trost, L. M., & Miller, D. P. (2020). Creating effective academic research teams: Two tools borrowed from business practice. *Journal of Clinical and Translational Science*, 5(1). <https://doi.org/10.1017/cts.2020.553>
- Bui, S. (2024, December 3). Corporate Training Costs: Budget Breakdown & 8 Tips for Saving. Flearningstudio.com; F. Learning Studio. <https://flearningstudio.com/corporate-training-costs/>
- Buick, F., D. Blackman, and S. Johnson. 2017. “Enabling Middle Managers as Change Agents: Why Organizational Support Needs to Change.” *Australian Journal of Public Administration* 77, no. 2: 222–235.
- Census Reporter. (2023). Richmond City Public Schools, VA. Census Reporter; Census Reporter . <https://censusreporter.org/profiles/97000US5103240-richmond-city-public-schools-va/#race>
- Cerna, L. (2019). Refugee education. OECD Education Working Papers, 203. <https://doi.org/10.1787/a3251a00-en>
- Chokshi, B., Pukatch, C., Ramsey, N., Dzienny, A., & Smiley, Y. (2022). The Generational Trauma Card: A Tool to Educate on Intergenerational Trauma Transmission. *Journal of Loss and Trauma*, 28(5), 1–8. <https://doi.org/10.1080/15325024.2022.2091315>
- Ciric, D. L., Lalic, B., Delić, M., Gracanin, D., & Stefanovic, D. (2022). How Project Management Approach Impact Project success? From traditional to Agile. *International Journal of Managing Projects in Business*, 15(3), 494–521. <https://doi.org/10.1108/ijmpb-04-2021-0108>
- ClassReach. (2024). School Management Systems - The Ultimate Guide. Classreach.com; ClassReach. <https://classreach.com/school-management-systems-guide>
- Cole, S. F., Eisner, A., Gregory, M., & Ristuccia, J. (2013). Helping traumatized children learn: Creating and advocating for trauma-sensitive schools. Massachusetts Advocates for Children.
- Dampf, E. (2023). The Crucible of Staff Turnover. *Educational Leadership*, 80(6), 32–37. <https://eric.ed.gov/?id=EJ1381176>
- Danese, A., & McEwen, B. S. (2012). Adverse childhood experiences, allostasis, allostatic load, and age-related disease. *Physiology & Behavior*, 106(1), 29–39.
- Davis, W., Petrovic, L., Whalen, K., Danna, L., Zeigler, K., Brewton, A., Joseph, M., Baker, C. N., & Overstreet, S. (2022). Centering trauma-informed approaches in schools within a social justice framework. *Psychology in the Schools*, 59(12). <https://doi.org/10.1002/pits.22664>
- Davydov, R. (2024, July 31). 3 Use Cases for Salesforce Education Cloud. Salesforceben.com; Salesforce Ben. <https://www.salesforceben.com/use-cases-for-salesforce-education-cloud/>
- Denizhenko, N. (2024, August 22). Salesforce for Education: Functionality and Payoffs. Itransition.com; Itransition. <https://www.itransition.com/crm/salesforce/education>

- Dongdong, L., Shiliang, X., Yan, Z., Fuxiao, T., Lei, N., & Jia, Z. (2017). Role - based Access Control in Educational Administration System. MATEC Web of Conferences, 139(10), 00120. <https://doi.org/10.1051/matecconf/201713900120>
- Doolittle, J. (2021, August 10). Dealing with Ambiguity at Work: 1 Tool You Need. Organizationaltalent.com; Organizational Talent Consulting . <https://www.organizationaltalent.com/post/dealing-with-ambiguity-at-work>
- Du Plooy, J., & Roodt, G. (2010). Work engagement, burnout and related constructs as predictors of turnover intentions. SA Journal of Industrial Psychology, 36(1). <https://doi.org/10.4102/sajip.v36i1.910>
- DW Bridges. (2023, October 26). Leveraging CRM for School Improvement - DW Bridges. Dwbridges.com; DW Bridges. <https://dwbridges.com/leveraging-crm-for-school-improvement/>
- Dworkin, G. The Theory and Practice of Autonomy; Cambridge University Press: Cambridge, UK, 1988.
- Education Week . (2006). How Four School Districts are Achieving Excellence Through Information-Driven Education. Education Week, 25(17), 52. <https://www.proquest.com/docview/202772244?sourceType=Trade%20Journals>
- Ege Aytin. (2023, July 10). Enhancing Authorization Efficiency: The Power of Relational-Based Access Control. DEV Community; Permify. <https://dev.to/permify/enhancing-authorization-efficiency-the-power-of-relational-based-access-control-46ek>
- Emirbayer, M., & Mische, A. (1998). What is agency? American Journal of Sociology, 103, 962–1023
- enSYNC Corporation. (2022, October 27). Benefits of Data Management for Education Associations. Www.ensync-Corp.com; enSYNC Corporation. <https://www.ensync-corp.com/blog/data-management-for-education>
- Farnetti, B., Trani, M. L., & Minotti, N. M. (2022). OPTIMIZING COMMUNICATION FLOWS USING A STANDARD BIM ORIENTED RACI MATRIX. Proceedings of International Structural Engineering and Construction, 9(2). [https://doi.org/10.14455/isec.2022.9\(2\).cpm-04](https://doi.org/10.14455/isec.2022.9(2).cpm-04)
- Figueroa, O. (2015). The Influences Impacting Staff Turnover in Higher Education. Journal of Management and Sustainability, 5(4), 86. <https://doi.org/10.5539/jms.v5n4p86>
- Forrester . (2024). The Total Economic Impact™ Of Salesforce Commerce Cloud Composable Storefront Cost Savings And Business Benefits Enabled By Composable Storefront (pp. 1–43). Forrester from Salesforce. https://tei.forrester.com/go/salesforce/composablestorefront/docs/TEI_of_Composable_Storefronts_PDF_FINAL.pdf
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. Journal of Organizational Behavior, 26, 331–362.
- Gahagan, N. H. (2023). Managing Change from the Murky Middle: Offering Role Structure and Support Helps Middle Managers Effectively Lead Change. Planning for Higher Education, 51(2), 1–11. <https://go.gale.com/ps/i.do?id=GALE%7CA757467588&sid=sitemap&v=2.1&it=r&p=AONE&sw=w&userGroupName=anon%7E6a26b6b8&aty=open-web-entry>

- George Washington Information Technology. (2025). Role-Based Access Control (RBAC) | GW Information Technology | The George Washington University. GW Information Technology; George Washington University . <https://it.gwu.edu/role-based-access-control-rbac>
- Gibson, B. L., Rochat, P., Tone, E. B., & Baron, A. S. (2017). Sources of implicit and explicit intergroup race bias among African-American children and young adults. *PLOS ONE*, 12(9), e0183015. <https://doi.org/10.1371/journal.pone.0183015>
- Google Maps. (2019). Google Maps. Google Maps; Google. <https://www.google.com/maps/dir/301+N+9th+St>
- Green, T. L. (2016). From positivism to critical theory: school-community relations toward community equity literacy. *International Journal of Qualitative Studies in Education*, 30(4), 370–387. <https://doi.org/10.1080/09518398.2016.1253892>
- Hanson, M. (2024, July 14). U.S. Public Education Spending Statistics [2022]: per Pupil + Total. Education Data; Education Data Initiative. <https://educationdata.org/public-education-spending-statistics#virginia>
- Harned, B. (2024, January 17). RACI Chart Definition, Tips, & Example | TeamGantt. Teamgantt.com; TeamGantt. <https://www.teamgantt.com/blog/raci-chart-definition-tips-and-example>
- HEMS. (2024, May 29). CRM for Higher Education: Data Integration and Analytics. Higher-Education-Marketing.com; Higher Education Marketing. <https://www.higher-education-marketing.com/blog/next-level-strategies-in-crm-for-higher-education-advanced-data-integration-and-engagement-analytics>
- Huy, Q. N. 2002. “Emotional Balancing of Organizational Continuity and Radical Change: the Contribution of Middle Managers.” *Administrative Science Quarterly* 47, no. 1: 31–69.
- Ingersoll, R. (1991). Loosely Coupled Organizations Revisited.
- JLARC. (2024). JLARC | Pandemic Impact on K-12 Public Education. Jlarc.virginia.gov; Joint Legislative Audit and Review Commission. <https://jlarc.virginia.gov/landing-2023-virginias-k-12-funding-formula.asp>
- Jo, V. H. (2008). Voluntary turnover and women administrators in higher education. *Higher Education*, 56(5), 565–582. <https://doi.org/10.1007/s10734-008-9111-y>
- Johnsrud, L. K., & Rosser, V. J. (1997). Administrative Staff Turnover: Predicting the Intentions of Stayers and Leavers.
- Kabier , M., Yassin , A., & Abduljabbar, Z. (2023). Towards for Designing Educational System Using Role-Based Access Control. *International Journal of Intelligent Engineering and Systems*, 16(2), 50–63. <https://doi.org/10.22266/ijies2023.0430.05>
- Kahneman, D. (1973). Attention and Effort. <https://www.semanticscholar.org/paper/Attention-and-Effort-Kahneman/a07ffad799cffee3ef6a2b33f4a56bffcc5b747d>
- Kamras, J. (2024). Third Draft for Review by the Richmond City School Board. Richmond Public Schools. <https://resources.finalsuite.net/images/v1725921221/rvaschoolsnet/zq4imotz8wa8sbq4q0mu/Dreams4RPSTHIRDDraftfor9-9-24BoardMeeting.pdf>

- Kantor, B. (2023, January 31). The RACI matrix: Your blueprint for project success. [Www.cio.com; IDG Communications](http://www.cio.com/article/287088/project-management-how-to-design-a-successful-raci-project-plan.html). <https://www.cio.com/article/287088/project-management-how-to-design-a-successful-raci-project-plan.html>
- Katz, V. S. (2020). *Kids in the middle: How children of immigrants negotiate community interactions for their families*. Rutgers University Press
- Kellermann, N. P. F. (2001). Transmission of Holocaust Trauma - An Integrative View. *Psychiatry: Interpersonal and Biological Processes*, 64(3), 256–267. <https://doi.org/10.1521/psyc.64.3.256.18464>
- Khan, P. M., & Quraishi, K. A. (2014). Impact of RACI on Delivery and Outcome of Software Development Projects. *2014 Fourth International Conference on Advanced Computing & Communication Technologies*, 177–184. <https://doi.org/10.1109/acct.2014.66>
- Kim, I. (2018). Behavioral health symptoms among refugees from Burma: Examination of sociodemographic and migration-related factors. *Asian American Journal of Psychology*, 9(3), 179–189. <https://doi.org/10.1037/aap0000103>
- Le, X. H., Doll, T., Barbosu, M., Luque, A., & Wang, D. (2012). An enhancement of the Role-Based Access Control model to facilitate information access management in context of team collaboration and workflow. *Journal of Biomedical Informatics*, 45(6), 1084–1107. <https://doi.org/10.1016/j.jbi.2012.06.001>
- Lee, L. A. (2023, October 23). The Last Straw. [Richmondmagazine.com; Richmond Magazine](http://richmondmagazine.com/news/education/the-last-straw/). <https://richmondmagazine.com/news/education/the-last-straw/>
- Lee, W., Lee, S., Jin, C., & Hyun, C. (2021). Development of the RACI Model for Processes of the Closure Phase in Construction Programs. *Sustainability*, 13(4), 1806. <https://doi.org/10.3390/su13041806>
- Li, X., & Grineva, M. (2016). Academic and social adjustment of high school refugee youth in Newfoundland. *TESL Canada Journal/Revue TESL du Canada*, 34, 51–71. <http://doi.org/1018806/tesl.v34i1.1253>
- Made, A., Agoes Ganesha Rahyuda, I Gede Riana, Made, I., & Putra, N. (2022). The effect of role ambiguity on cyberloafing with work stress as a mediation variable. *International Journal of Health Sciences*, 6(S4). <https://doi.org/10.53730/ijhs.v6nS4.7145>
- Marquis, Y. A. (2024). From Theory to Practice: Implementing Effective Role-Based Access Control Strategies to Mitigate Insider Risks in Diverse Organizational Contexts. *Journal of Engineering Research and Reports*, 26(5), 138–154. <https://doi.org/10.9734/jerr/2024/v26i51141>
- Matthews, B. (2024, April 19). Understanding responsibility assignment matrix (RACI matrix). [Project-Management.com](http://project-management.com/understanding-responsibility-assignment-matrix-raci-matrix/). <https://project-management.com/understanding-responsibility-assignment-matrix-raci-matrix/>
- McCarthy, M. (2023, February 9). Understanding Role-Based Access Control (RBAC). [Www.strongdm.com; strongdm](http://www.strongdm.com; strongdm). <https://www.strongdm.com/rbac>
- Montrief, T., Haas, M. R. C., Alvarez, A., Gottlieb, M., Siegal, D., & Chan, T. (2020). Thinking Outside the Inbox: Use of Slack in Clinical Groups as a Collaborative Team Communication Platform. *AEM Education and Training*, 5(1), 121–129. <https://doi.org/10.1002/aet2.10497>

- Moomaw, G. (2023, July 10). Study finds Virginia underfunds K-12 schools, recommends spending billions more • Virginia Mercury. Virginia Mercury - Part of States Newsroom; Virginia Mercury. <https://virginiamercury.com/2023/07/10/study-finds-virginia-underfunds-k-12-schools-recommends-spending-billions-more/>
- National Child Traumatic Stress Network, Schools Committee. (2017). Creating, supporting, and sustaining trauma-informed schools: A system framework. National Center for Child Traumatic Stress.
- Oh, S., & Park, S. (2003). Task-role-based access control model. *Information Systems*, 28(6), 533–562. [https://doi.org/10.1016/s0306-4379\(02\)00029-7](https://doi.org/10.1016/s0306-4379(02)00029-7)
- Ordonez, J., Diña, M. D., & Ann, M. (2023, November 17). “The Efficiency of E-SBM (Electronic- School-Based Management) Database and Its Impact on School Personnel’s Function.” ResearchGate; Republic of Philippines Department of Education . <https://doi.org/10.13140/RG.2.2.14135.29605>
- Perfect, M. M., Turley, M. R., Carlson, J. S., Yohanna, J., & Saint Gilles, M. P. (2016). School-Related Outcomes of Traumatic Event Exposure and Traumatic Stress Symptoms in Students: A Systematic Review of Research from 1990 to 2015. *School Mental Health*, 8(1), 7–43. <https://doi.org/10.1007/s12310-016-9175-2>
- Permify . (2024, August 16). 7 Best Role-Based Access Control (RBAC) Tools of 2024. Permify.co; Permify. <https://permify.co/post/rbac-tools/>
- ramp. (2025). Virginia Mileage Reimbursement Rates 2025. Ramp.com; Ramp. <https://ramp.com/mileage-reimbursement-calculator/virginia>
- Read, H. (2024, February 20). Advantages and Disadvantages of the RACI Matrix for Project Teams. [Www.usemotion.com](https://www.usemotion.com); Motion. <https://www.usemotion.com/blog/disadvantages-of-raci-matrix>
- Richmond Public Schools School Board. (2024). School Board’s Adopted Budget 2024-25 (pp. 1–198). Richmond Public Schools. https://resources.finalsites.net/images/v1716927352/rvaschoolsnet/noodhdrj81umlbetue9z/FY25SCHOOLBOARDADOPTEDBUDGET5-20-2024_1.pdf
- Richmond Public Schools. (2024). Enrollment Dashboard - Richmond Public Schools. Rvaschools.net; Richmond Public Schools. <https://www.rvaschools.net/about/goals4rps-dashboards/enrollment-dashboard>
- Richmond Public Schools. (2024). Salary Schedules 2024 - 2025 School Year (pp. 1–50). Richmond Public Schools. <https://resources.finalsites.net/images/v1721741869/rvaschoolsnet/vxhrqgobqk9snxdii8yjy/FY25SalaryScheduleJuly12024.pdf>
- Ross, T. (2017). Who Does What? Use RACI to Figure It Out! Training, Minneapolis , 54(4), 12. <https://www.proquest.com/docview/1941266146?sourceType=Trade%20Journals>
- Sabitov, D. (2024, February 15). Salesforce Education Cloud Implementation Guide 2025. Salesforce Apps; SF Apps. <https://www.sfapps.info/salesforce-education-cloud-implementation/>
- Salesforce. (2025a). Pricing | Slack. Slack.com; Salesforce. <https://slack.com/pricing>
- Salesforce. (2025b). Salesforce Education Cloud Pricing. Salesforce.com; Salesforce. <https://www.salesforce.com/education/pricing/>

- Serhiienko, A. (2021, January 14). Salesforce Pros and Cons Overview Based on 2,000 Reviews. Ascendix; Ascendix . <https://ascendix.com/blog/salesforce-pros-and-cons/>
- Sharma, N., Mishra, P., & Gupta, S. K. (2024). The mediating effect of organizational communication on emotional intelligence and turnover intention. *Multidisciplinary Reviews*, 7(9), 2024205. <https://doi.org/10.31893/multirev.2024205>
- Sherrill, A. P. (2024). When Race Matters: Black Men and Authority Figures. *Peabody Journal of Education*, 99(2), 191–200. <https://doi.org/10.1080/0161956x.2024.2331934>
- Slack. (2024). Your guide to Slack for higher education. Slack; Salesforce. <https://slack.com/resources/using-slack/your-guide-to-slack-for-higher-education>
- Straussner, S. L. A., & Calnan, A. J. (2014). Trauma Through the Life Cycle: A Review of Current Literature. *Clinical Social Work Journal*, 42(4), 323–335. <https://doi.org/10.1007/s10615-014-0496-z>
- Stray, V., & Astri Moksnes Barbala. (2024). Slack Use in Large-Scale Agile Organizations: ESN Tools as Catalysts for Alignment? Agile Processes in Software Engineering and Extreme Programming (XP2024), 512, 1–16. https://www.researchgate.net/publication/380368943_Slack_Use_in_Large-Scale_Agile_Organizations_ESN_Tools_as_Catalysts_for_Alignment
- Substance Abuse and Mental Health Services Administration. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS Publication no. (SMA) 14-4884, Substance Abuse and Mental Health Services Administration
- Suhanda, R. D. P., & Pratami, D. (2021). RACI Matrix Design for Managing Stakeholders in Project Case Study of PT. XYZ. *International Journal of Innovation in Enterprise System*, 5(02), 122–133. Researchgate. <https://ijies.sie.telkomuniversity.ac.id/index.php/IJIES/article/view/134>
- Tartell, R. (2017). Who Does What? Use RACI to Figure It Out! Training, 54(4), 12. <https://www.proquest.com/docview/1941266146?sourceType=Trade%20Journals>
- Tools4Ever. (2023, March 17). Security Access Control Models for Schools. Tools4ever.com; Tools4Ever. <https://www.tools4ever.com/blog/school-security-access-control-models/>
- U.S. Bureau of Labor Statistics. “How Is Productivity Measured? : Calculating Productivity : U.S. Bureau of Labor Statistics.” *Www.bls.gov*, U.S. Bureau of Labor Statistics, 2025, www.bls.gov/k12/productivity-101/content/how-is-productivity-measured/calculating-productivity.htm.
- U.S. News. (2024). Overview of Richmond Public Schools. U.S. News - Education; U.S. News. <https://www.usnews.com/education/k12/virginia/districts/richmond-city-pblc-sch-105942#:~:text=Richmond%20City%20Public%20Schools%20contains,of%20students%20are%20economically%20disadvantaged.>
- Wang, S., Zhang, X., & Martocchio, J. (2011). Thinking Outside of the Box When the Box Is Missing: Role Ambiguity and Its Linkage to Creativity. *Creativity Research Journal*, 23(3), 211–221. <https://doi.org/10.1080/10400419.2011.595661>
- Weick, K. E. (1976). Educational Organizations as Loosely Coupled Systems. *Administrative Science Quarterly*, 21(1), 1–19. <https://doi.org/10.2307/2391875>

Wilson, M.E., D.L. Liddell, A.S. Hirschy & K. Pasquesi. 2016. "Professional Identity, Career Commitment, and Career Entrenchment of Midlevel Student Affairs Professionals." *Journal of College Student Development* 57, no. 5: 557–572. <https://doi.org/10.1353/csd.2016.0059>