Prince William County Schools Data Transformation Journey

*Vision, Adoption, and Strategy
to drive Student Outcomes*

Prince William County Schools' approach to modernizing data infrastructure and cultivating a culture of continuous improvement.

Vision for Data Transformation

At Prince William County Schools (PWCS), our vision for data transformation is rooted in our commitment to Launching Thriving Futures. We recognized early on that data isn't just a technical asset—it's a strategic lever for equity, accountability, and student success. Our journey began with a simple but powerful idea: **every decision, from the classroom to the cabinet, should be informed by unified, timely, trusted data.**

That vision evolved as we defined our strategy, aligning our systems and culture to support a more agile, transparent, and student-centered division.

"Technology is the easy part. People and process are hard—changing habits and mindsets takes time."
— Matt Guilfoyle - CIO, Prince William County Schools

Strategic Alignment & Leadership

Alignment with Strategic Goals

Our transformation directly supports PWCS's strategic pillars; **learning and achievement for all, positive climate and culture, family and community engagement, and organizational coherence.** Whether it's using predictive analytics to identify at-risk students or streamlining operational workflows to free up instructional time, every initiative is designed to improve outcomes and close achievement gaps. Our PWCS Strategic Plan explicitly ties modernization efforts to these goals, ensuring that our technology investments are not just upgrades but enablers of excellence.

Leadership Buy-In

We started by listening. Leadership buy-in came from framing data transformation not as an IT initiative, but as a strategic imperative. We engaged board members, principals, and department heads in defining pain points and co-creating solutions. By showing how data could solve real problems—from attendance tracking to resource allocation—we built momentum and trust.

Identifying the Need for Change

Technical Challenges

It was a mix of technical debt and cultural inertia. Our legacy systems couldn't scale, and data lived in silos.

Strategic Imperative

But more importantly, we saw missed opportunities teachers lacked insights into student progress, and leaders couldn't act on trends fast enough. The need for change became urgent when we realized that our data systems weren't serving our mission. Modernization through replacing systems, implementing data quality, governance, and connecting all our data sources to drive insight became critical to the student growth mission.

Strategy & Execution
Aligning Strategy and Execution

We restructured our data governance, invested in cloud-native platforms like Qlik, Snowflake, and created new roles, restructured our IT organization to lead the charge. We also partnered with vendors like IPC Global to accelerate implementation and ensure technical excellence. Execution was guided by a clear roadmap, with milestones tied to strategic outcomes.

01

Data Governance Restructure

Established clear ownership, data quality standards, and accountability frameworks

02

Cloud-Native Investment

Deployed Qlik, Snowflake and other modern platforms for scalability

03

Strategic Roles

Created new critical positions to lead the transformation

04

Partnership Development

Engaged IPC Global for implementation excellence

Change Management Across Schools and Departments

Change management was embedded from day one. We used a phased rollout, starting with pilot data and expanding based on feedback. Training wasn't just technical—it focused on mindset shifts. We emphasized the "why" behind the data, data literacy, helping educators see its value in everyday decisions.

Future Evolution & Key Recommendations

Future Evolution of the Initiative

We're moving from foundational to transformational. Next steps include expanding predictive analytics, integrating AI literacy (as outlined in the PWCS Artificial Intelligence Literacy Framework), and deepening community engagement through transparent data sharing. We're also exploring student-facing dashboards to empower learners directly.

Advice to Other CIOs and Districts

Start with the "Why"

Tie data strategy directly to instructional and operational outcomes.

Build Coalitions Early

Engage stakeholders across departments to co-create use cases and maintain buy-in.

Prioritize Change Management

Invest as much in culture and communication as in technology.

Select Partners, Not Vendors

Choose partners who can align strategy, execution, and training for lasting success.

Why Qlik and IPC Global

Qlik Platform Advantages

Qlik offered the flexibility and power we needed role-based dashboards, machine learning capabilities, and Qlik Answers and Insight Advisor were must-haves. **It wasn't just a BI tool; it was a platform for unification of mission and purpose.**

Key Capabilities

Automation, predictive modeling, and natural language querying helped democratize data. Our goal is to all teachers to ask questions and get answers without needing a data analyst. That accessibility is critical.
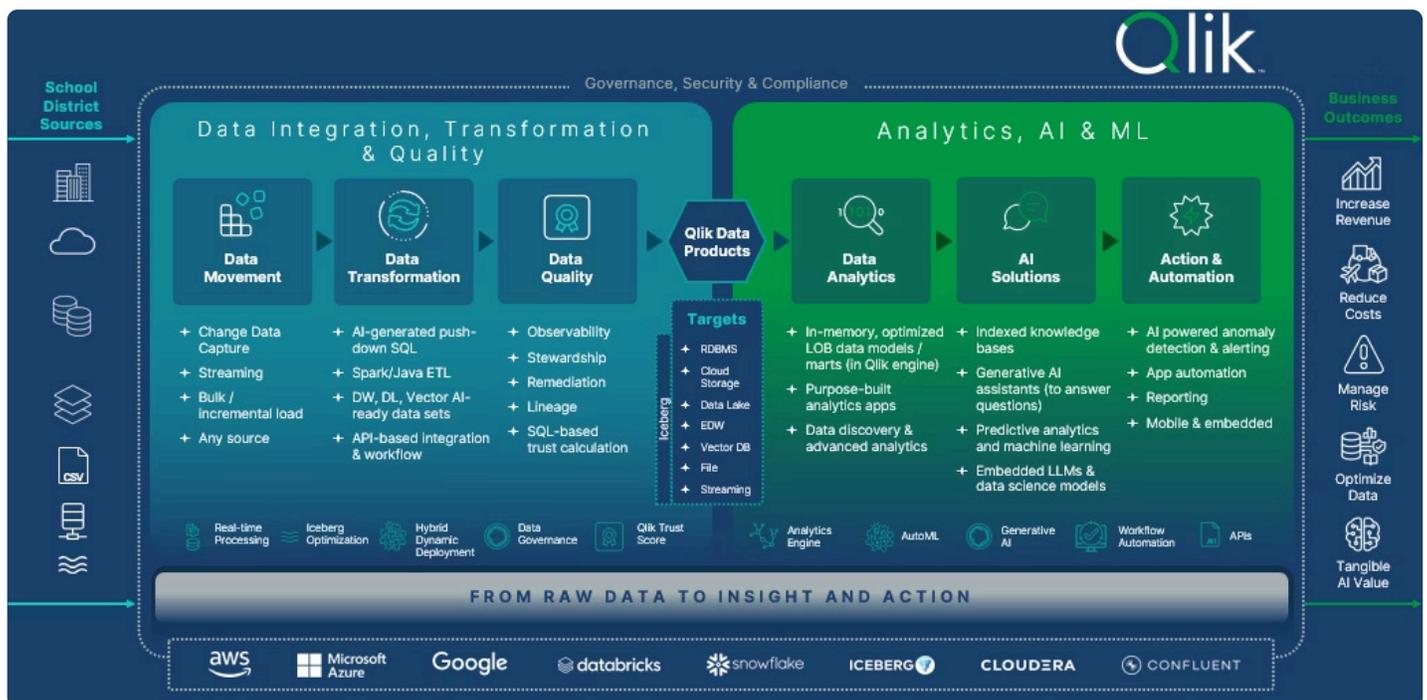
The IPC Global Partnership

Choosing IPC Global

IPC Global brought expertise and a collaborative spirit. They didn't just implement —they partnered with us at each step. Their understanding of education and their commitment to training made them the right fit.

IPC Global's Support

They've been instrumental in both technical execution and adoption. From building scalable pipelines to leading training sessions, IPC Global has helped us turn strategy into reality. Their responsiveness and depth of knowledge set them apart.

Differentiators of IPC Global

They're not just consultants—they're true partners. IPC Global listens, adapts, and delivers. Their ability to bridge technical rigor with humor and passion for our mission is the foundation of success for all.

Impact & Results

Strategic Asset

Transformed data into a true strategic asset supporting all organizational goals
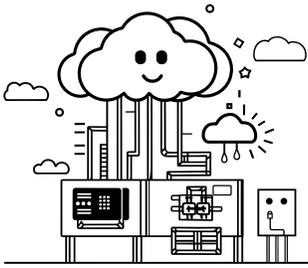
Cultural Shift

Cultivated a culture of continuous improvement and shared accountability

Modern Infrastructure

Built scalable, cloud-native foundation for future innovation

Qlik's Agnostic approach enables IT leadership to make the right technology changes when needed and not impact the overall vision created to drive student outcomes.

Modernizing with the right technology unleashes the power of connected data, enabling faster decisions, greater collaboration, and a culture where innovation directly fuels student success.

About Prince William County Schools

Prince William County Schools (PWCS) is a major educational institution, recognized for its substantial scale and diverse student body. It holds the distinction of being the second largest school division in Virginia and the 32nd largest in the nation.

90,709

Total Enrollment

for the 2024-25 school year

Enrollment Breakdown by Level

The total enrollment is distributed across various educational levels:

38,563	20,428	28,716
Elementary	**Middle**	**High**
2,058	943	208
Preschool	**Other Programs**	**Thomas Jefferson HSST**

Student Demographics

PWCS proudly serves a highly diverse student population:

37.14%
Hispanic/Latino

25.56%
White

18.71%
Black or African American

12.01%
Asian

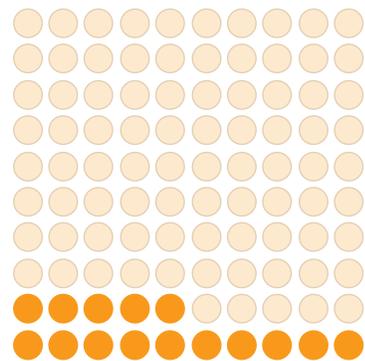**6.24%**
Two or more races

0.34%
Other

Special Populations

The district is also dedicated to supporting students with specific needs:
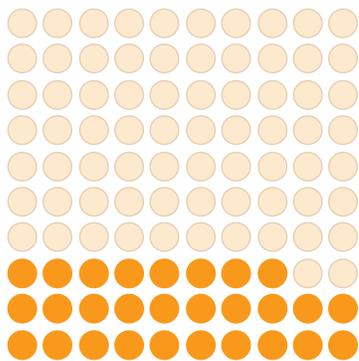
28.37%
English Learners

14.55%
Students with Disabilities

Conclusion

Prince William County Schools' journey illustrates how aligning vision, change management, culture, and lastly technology can redefine what's possible in public education. By choosing Qlik, IPC Global, and Snowflake, PWCS has built a foundation that not only modernizes data infrastructure but also cultivates a culture of continuous improvement and shared accountability transforming data into a true strategic asset.

By empowering every leader, educator with timely, trusted data, the school district transforms insight into action—driving equitable opportunities, measurable student growth, and lasting positive student outcomes for every learner.

📝 **About This Case Study:** This document showcases Prince William County Schools' comprehensive data transformation initiative, highlighting cultural shift, change management, and the strategic partnership between PWCS, Qlik, and IPC Global in creating a modern, student-centered data ecosystem.

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Data + Analytics + Cloud

Qlik