



Learn, Grow, Lead:

Transforming Public Service Through Data Mastery

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Agency

Ohio Department of
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State

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Award Category

Information and
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EXECUTIVE SUMMARY

Under the leadership of Governor Mike DeWine, Ohio has been at the forefront of leveraging data as a strategic asset to drive innovation, improve efficiency, and enhance outcomes across government operations. Investments in advanced data analytics technology promote transparency and improve the lives of Ohioans. The [Data Analytics Learning Center \(DALC\)](#) was created to balance this technology with people and processes, while ensuring Ohio's workforce is prepared to take advantage of current analytic capabilities and adapt to the technological capabilities of the future. The Data Analytics Learning Center offers a comprehensive continuing education curriculum tailored to Ohio's data analytics professionals and data leaders.

In April 2019, Governor DeWine signed [Executive Order 2019-15D](#), launching the InnovateOhio Platform (IOP). The IOP coordinates data and, resources across state government, enhancing problem-solving capabilities and streamlining technology services for Ohioans and businesses.

In 2024, the Ohio Department of Administrative Services established the Office of Data and Efficiency led by the state chief data officer (CDO). The office is comprised of four units: IOP Data Analytics; Learning and Organizational Change Management; Data Governance and Policy; and LeanOhio. The state CDO's strategic roadmap focuses on the following people and process foundational initiatives to complement technology:

- CDO Council, and agency CDOs, collaborate to promote a robust data culture within the state.
- Dedicated [data analytics position classification](#) to ensure alignment of roles, responsibilities, and job titles.
- [Data Governance Policy](#).
- The DALC to promote data literacy and upskill the existing workforce.



“In today’s digital age, arming our state workforce with knowledge of data analytics is not just an investment in our employees, it’s an investment in our future. Advanced data skills enhance decision-making, improve public services, and drives innovation, ensuring we stay agile, responsive, and equipped to meet the challenges and opportunities of tomorrow.”

**Kathleen C. Madden, Director
Ohio Department of
Administrative Services**

IDEA

WHAT PROBLEM OR OPPORTUNITY DOES THE PROJECT ADDRESS?

State leaders actively encourage employees to utilize data to make informed decisions and enhance services, and we must ensure technology investments are leveraged and maximized by our workforce. The [DALC](#) was created with these goals in mind and offers an accessible, online, on-demand curriculum covering a wide range of data learning activities. This comprehensive program includes skill-based learning modules suitable for all proficiency levels, providing professional development, practical application opportunities, and certification badges to advance careers in data analytics and support data-informed decision-making.

The DALC offers a range of in-person and online learning certification programs for:

- Data analysts
- Data engineers
- Data scientists
- Data leaders
- General data literacy for all state employees
- Specialized enterprise analytics applications for data practitioners.

These certification programs reflect the broader trend of micro-credentials and are aligned with the state's new data classification position series. It is also available to all state employees, catering to various levels of data expertise.

WHY DOES IT MATTER?

Data analytics, the process of collecting and analyzing information to draw insights, significantly enhances state government operations, enabling leaders to make more informed decisions. The State of Ohio is committed to making evidence-based decisions to ensure taxpayer dollars achieve the best possible outcomes.

However, ensuring personnel are skilled in managing and drawing insights from data while staying current with evolving advanced capabilities – including artificial intelligence – presents a challenge. The DALC offers relevant data analytics learning programs that provide a wide range of knowledge and skills development opportunities to build the capacity of existing state staff who have valuable institutional and domain knowledge.

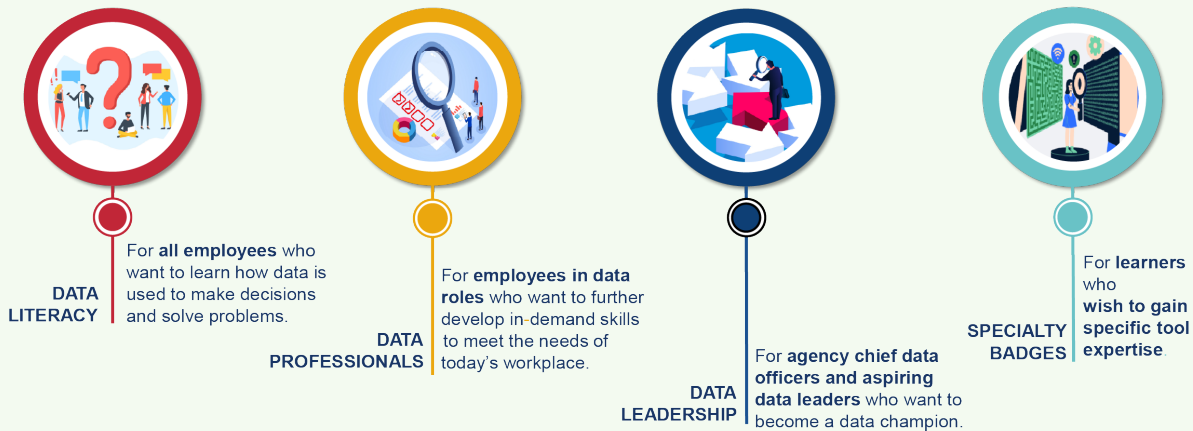
WHAT MAKES IT DIFFERENT?

The DALC is a pioneering initiative designed to enhance data analytics skills and knowledge among state employees. This certification program aligns with qualifications and competencies of the state's data analytics classification positions, which include key roles such as data analyst, data engineer, data scientist, and data leaders.

With a wide range of learning opportunities, from basic, entry-level data literacy to specialty badges and advanced professional programs, the DALC is designed so the learner can develop a unique training plan based on where they are on their data journey. Employees seeking Data Professional Badges are required to complete a data capstone project and those in Data Leadership programs are required to complete a data strategy project. This ensures the participants can demonstrate and apply the knowledge and skills learned in the training courses. It provides real-world experience for the learners that also benefits the sponsoring agency.

LEARNING PROGRAMS

The Data Analytics Learning Center has **four programs** offering a distinct blend of **online classes, in-person learning, and capstone projects.**



WHAT MAKES IT UNIVERSAL?

The **DALC** has something for everyone, regardless of their data skillset or background, with programs designed to equip all State of Ohio employees with the knowledge and skills needed to excel in the field of data analytics. Each program offers a badge certification, recognized by the state, that showcases professional experience and expertise. From on-demand, self-paced, introductory Data Literacy certifications to more advanced, in-depth, cohort-based learning experiences in the Data Professional and Data Leadership programs, we provide opportunities for everyone to learn, grow, and lead with data.

IMPLEMENTATION

WHO WAS INVOLVED?

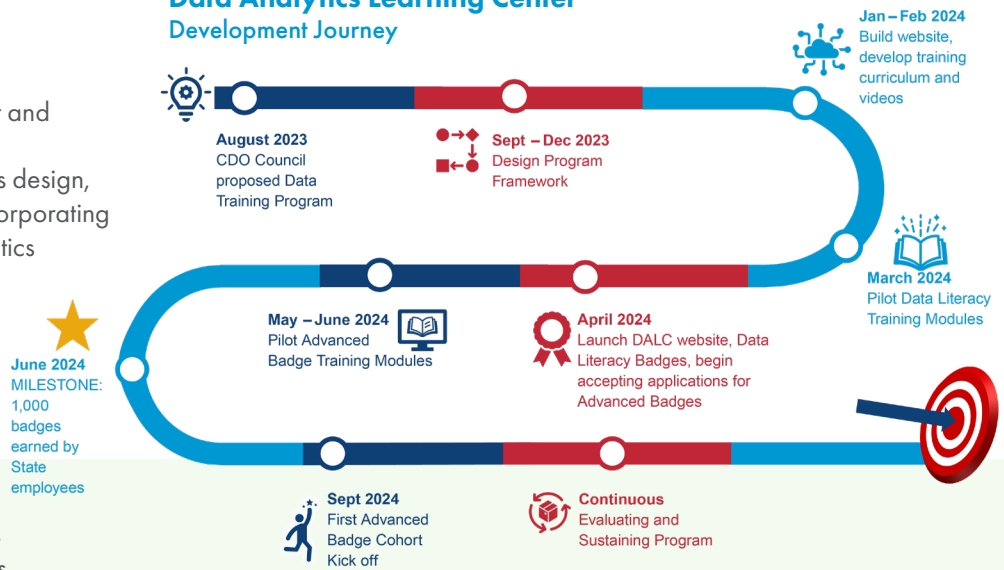
A small project team led by the state CDO, including the learning and change manager and her staff, established the framework for the DALC. Their work was integral to the center’s design, development, and implementation while incorporating input from the CDO Council and data analytics subject matter experts.

HOW DID YOU DO IT?

The DALC project framework had four main pillars:

1. The **website** includes information about the badge programs, applications for advanced badge cohorts, and videos with links to the literacy assessments.
2. The State of Ohio **learning management system (LMS)**, OhioLearn, houses all course content, SCORM Files, enrollments, and learning plans required for badge completions. External learning platforms **Percipio** and **Pluralsight**, are used to curate industry standard content for the advanced badges.
3. **Microsoft Teams** is used to establish a community of practice for those in the Advanced Badge cohorts.
4. Practical application of a **capstone/strategy project** is an opportunity for participants to have an immediate impact on their agency. By creating a customized solution specific to their agency using their newly acquired knowledge and skills, participants and their agency leaders can see first-hand the real-world benefit of the DALC.

Data Analytics Learning Center Development Journey



1 2 3 4

Data Analytics Program Quick Stats Website	OhioLearn (The State’s LMS)	Community of Practice (Microsoft Teams)	Practical Application of Skills
<ul style="list-style-type: none"> Developed website for centralized access and superior user experience. Accessible only to state employees via OHID authentication. Secure, user-friendly platform for programs and certifications. Functions as learning catalog and calendar of events. Combined motion graphics, narration, and real-world examples. Integrates with OhioLearn (the state’s LMS) for seamless access to learning content. 	<ul style="list-style-type: none"> Structured badges as learning plans. Progress tracking, badge awarding, and transcript integration. Managers gain visibility into completion metrics and progress. Produced high-quality videos and courses with Adobe Premiere Pro and Adobe Captivate. Scalable curriculum delivery across all platforms. Progress tracking APIs to create an interactive Tableau dashboard. 	<ul style="list-style-type: none"> Functions as a communications hub for the advanced badge cohorts. Provides access to applications, training schedules, and supplemental resources. Seamless experience across online training, instructor-led sessions, and third-party content. Frequent office hours with subject matter experts from the DAS Office of Data and Efficiency. Private channels for individual cohorts to collaborate on capstone projects. 	<ul style="list-style-type: none"> Employees seeking a Data Professional Badges are required to complete a data capstone project. Employees seeking a Data Leadership Badge are required to complete a Data Strategy Project. This ensures the participants can demonstrate and apply the knowledge and skills learned in the training courses. This also provides real-world experience for the learners that also benefits the agency. Resources and templates were created to provide guidance and support in these projects.

IMPACT

WHAT DID THE PROJECT MAKE BETTER?

The DALC enhances the skills of state staff, enabling them to immediately apply their expertise within their agencies. For the Advanced Badge Certification, staff must complete a capstone or strategy project that showcases their newly acquired skills in a practical, agency-specific context.

Capstone projects for analysts focus on tailored tasks for example conducting detailed data analysis and reporting using structured query language and data visualization; or cataloging and mapping specific data types across Ohio's state and local agencies to identify available information, study legislative impacts, and uncover data gaps.

Strategy Projects for Data Leaders may include creating agency-specific data governance policies; building a community of excellence and fostering a data-driven culture; implementing new tools and technological capabilities; or developing and executing a Data Maturation roadmap.

These projects ensure that state staff can effectively contribute to their agency's data initiatives immediately upon completing the program. Below are two real-life examples of capstone and strategy projects completed by advanced badge participants.



STREAMLINING ANNUAL FORECASTING REPORT

Streamline the annual forecasting report process by integrating data into the data lake, revising Statistical Analysis System code to export Excel files, and building Tableau dashboards that are ready for download and inclusion in the final report.

STRATEGIC GOALS VISUALIZATION PROJECT

Capture strategic goals in partnership with directors, collect relevant data, and lead a team of ten Tableau cohort members to build dashboards that visualize progress toward those goals.

HOW DO YOU KNOW?

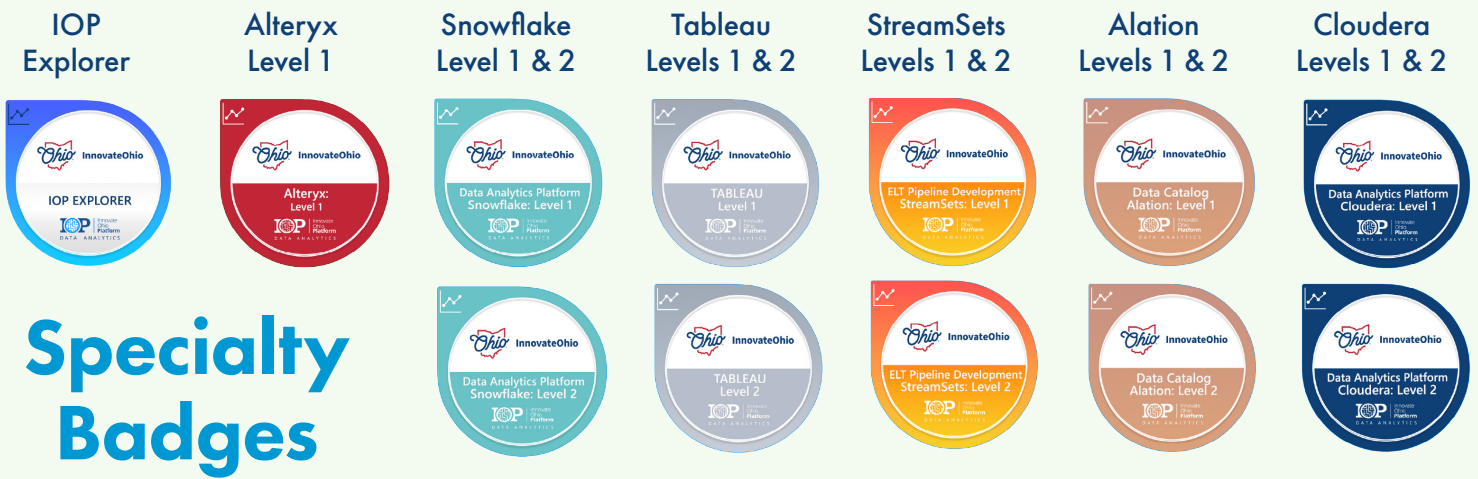
The DALC has profoundly elevated the professional development of Ohio's state employees through its comprehensive and innovative programs. A recent survey of advanced badge program participants revealed an impressive average rating of 4.4 out of 5 stars, demonstrating a high level of satisfaction with the program. As of May 2025, 4,577 Data Literacy Badges have been earned by 2,006 state employees, 167 have received specialty badges, and over 100 staff members from 39 state agencies have enrolled in advanced badge programs. This widespread participation underscores not only the interest level but also the DALC's significant impact on enhancing data analytics skills across Ohio's state workforce.



Data Analytics Program Quick Stats

WHAT NOW?

In addition to the Data Literacy and Advanced Badges, we recently offered a suite of Specialty Badges that includes a curated learning path of courses on a specific tool or capability. We currently offer 12 specialty badges and plan to add more later this summer.



In April, we commissioned a Data Analytics Learning Needs Analysis, a strategic effort to identify the specific skill gaps within the workforce and ensure training programs are tailored to meet the actual needs of employees and state agencies.

As part of this initiative, we are conducting surveys, interviews, and focus groups to gather valuable insights from data leaders and staff. Using the results of this analysis, we are developing a structured training plan responding to the needs of the enterprise to further enhance our program, including timelines, resources, and measurable outcomes to support our existing learning infrastructure of application labs, lecture series, and data analytics forums. This effort is designed to optimize our training resources and empower staff with the skills needed to continue to excel in data roles and contribute meaningfully to benefit all Ohioans.

