

CURATING DIGITAL CONTENT FOR PERSONALIZED LEARNING

Orange County Public Schools

An APQC Education Case Study
Member of APQC's North Star Community

Orange County, Florida
www.ocps.net

- ◆ Tenth-largest district in the U.S. and fourth-largest in Florida, serving 192,000 students
- ◆ Diverse student population: 30% Caucasian, 37% Hispanic, 27% African-American, 4% Asian, 2% Other
- ◆ 182 campuses: 123 elementary schools, 3 K-8 schools, 35 middle schools, 19 high schools, 1 alternative school, 1 charter school
- ◆ 26 magnet programs across elementary, middle, and high school
- ◆ Florida's leading provider for career and technical education, serving 30,000+ students
- ◆ District spans 930 square miles including Orlando and 10 surrounding municipalities
- ◆ 22,902 employees with 13,557 working in instruction
- ◆ Co-winner of the 2014 *Broad Prize for Urban Education* and received \$500,000 for scholarships for the class of 2015

“Everything we do is focused on nurturing the success of our students. And we understand that success can be defined in many ways. That is why we have created different academic paths that lead to the same end result: high student achievement.”

— Dr. Barbara Jenkins, Superintendent, OCPS

In 2012, Florida’s Orange County Public Schools began development of a two-year digital curriculum pilot program in response to changing student, workforce, community, and legislative requirements. The long-term goal was to have devices for all students and a digital curriculum to support personalized learning.

The original pilot included seven schools, selected to represent the district’s diverse geographic community, and 8,000 students. The next phase (2015-2016) will add all seven high schools and 36,000 students.

As the district was implementing this teaching and learning-driven initiative, the state of Florida was recognizing the critical importance of digital learning for all students and enacting new statutory requirements. Among them was a mandate that 50 percent of instructional materials funding be spent on digital curricula, that digital tool certificates be implemented for elementary and middle schools, and that computer science be expanded.

BILL AND MELINDA GATES FOUNDATION GRANT

As a recipient of a Bill and Melinda Gates Foundation grant, the district enlisted the support of APQC Education to identify and document the processes to curate digital content. The grant focused on developing district understanding of Master Planning for Innovation (MPI), a systems-oriented approach to help organizations define their customers, products and services, structure, objectives, and work processes. APQC Education’s support for the project included working with the OCPS team:

- ◆ **Providing ongoing project management and organization.** APQC Education established the project team and organizational structure, as well as its meeting and coaching schedules. It also hosted a project orientation and kickoff meeting and provided a high-level executive overview of the project, and provided monthly progress reports throughout the eight-month effort.
- ◆ **Creating a project plan.** This work plan detailed the desired outcomes and results, identified stakeholder and customer groups, and established a project charter and timeline.
- ◆ **Architecture capabilities assessment.** Documenting the current state of the district’s digital content curation processes, conducting interviews with key stakeholders and customers, hosting focus group meetings, and performing site visits.
- ◆ **Gap analysis.** Building on the information from the assessment, APQC Education and the OCPS team created a capability model and defined the processes, expertise, and assets needed for each capability.

“The use of MPI allowed our team to take a deep dive into our processes, find common language on what we do, and work toward finding efficiencies in our practices.”

*Rob Bixler, Executive Area
Director Department of Digital
Learning*

- ◆ **Future state development.** Engaging relevant stakeholders helped to create a solution, create “to-be” future state process diagrams, and validate the proposed new processes.
- ◆ **Project finalization.** Finally, the APQC Education team documented the final artifacts of the program, as well as benefits of the new processes, and provided ongoing systems monitoring and support.

OCPS’ PERSONALIZED LEARNING JOURNEY

One priority of the district’s strategic plan is to accelerate student achievement, which is one of the ways the district aims to achieve its vision to be the nation’s top producer of successful students. With this in mind, the district chose to implement a scalable personalized learning environment, creating a program that engaged students, schools, families, and the community in a continuously improving cycle of growth and collaborative support for student success.

OCPS has taken a conservative, purposeful, researched, three-phase approach to personalized learning, with all phases sharing a common goal for all students to graduate college- and career-ready:

Phase 1: Traditional Learning

- ◆ Method: Development of strategic plan and governance processes
- ◆ Focus: Using traditional pedagogy to close achievement gaps

Phase 2: Electronic and Digital Learning

- ◆ Method: Implementation of the strategic plan and continued monitoring of governance processes
- ◆ Focus: Using traditional pedagogy to close achievement gaps

Phase 3: Personalized Learning

- ◆ Method: Use of personalized content aggregator to enable personalized learning
- ◆ Focus: Technology transformation using a blended learning model to enable competency-based instruction

(See Figure 1.)

Personalized learning includes competency-based progressions, learner profiles, flexible learning environments, and personal learning paths, all of which require people, assets, and clear processes to realize the program’s goals. While the OCPS grant project focused on the processes for “curating digital content” within the teaching and learning work system, these processes had organization wide, cross-functional implications. This major reform initiative required collaboration across the school system, the community, and suppliers.



Figure 1: Phased Approach to Learning

ESTABLISHING GOVERNANCE AND GATHERING INPUT

OCPS committed to aligning vision, mission, goals, and outcomes through a strong governance system. Understanding the importance of stakeholder input, the OCPS project team also wanted to include teachers, curriculum specialists, and other stakeholders in the design and implementation of the new processes.

With support from APQC Education, Dr. Jesus Jara, deputy superintendent, organized functional groups that determined what processes were in place and what processes needed to be designed or revised to meet customer and stakeholder requirements for digital content. These requirements were captured in APQC-led “Voice of the Customer” focus groups and surveys, which clarified teachers’ and students’ specific content needs.

Asking, “What do we need to do differently?” the functional groups made changes to organizational and technological infrastructure, establishing a foundation to implement and sustain the OCPS personalized learning model.

PROCESS DESIGN

Using skills gained in APQC Education on-site facilitation, the project team developed a high-level block diagram with input from teachers, refining it throughout the course of the project. This “SIPOC” tool contributed to a deeper understanding of the suppliers, inputs, outputs, and key customer requirements involved in curating digital content. (See Figure 2.)

Because the process for curating digital content proved so complex, the team developed a SIPOC for each of the three major process steps, clarifying hand-offs across the organization and specific “Voice of the Customer” requirements.

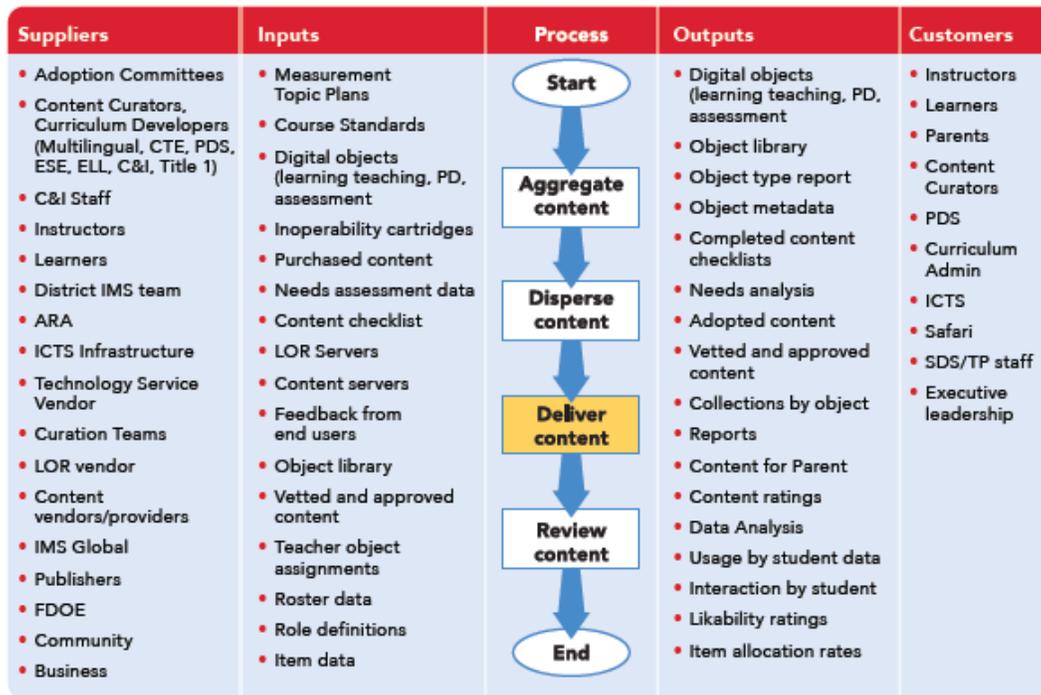


Figure 2: SIPOC Example

TECHNOLOGY IMPLICATIONS

During the early planning phase, the district identified the need for centralized technology functions to control cost, create consistency, and minimize unplanned variation. OCPS partnered with pilot campuses to help them understand the need for centralization, and to manage change resulting from the implementation. They also clearly defined what constituted “digital” content.

From the beginning, the district did not want the device to drive the path to personalized learning, instead identifying required device features as defined by its teaching and learning team. The No. 1 requirement was to provide value for students and teachers.

The team developed processes to mitigate risk to the district and students, including loss or misuse of devices, privacy of student information, and security for students and teachers. To achieve a personalized pupil progression pathway, OCPS sought to invest the Gates Foundation grant in achieving the following key results:

1. Bidirectional Learning Tools Interoperability (LTI) integration, which allows procured content to be integrated within the learning object repository and available for district, teacher, and student use. LTI integration also allows the assignment of content, based on metadata surrounding that object, to address a specific student need.

2. The rostering of students using Learning Information Services standards within the learning object repository, which allows digital resources to be targeted to students.
3. Curating resources within the learning object repository to first target students who had not mastered the core curriculum, pragmatically applying personalized learning to increase student achievement.
4. Using Question and Test Interoperability to connect assignments completed in the learning object repository to the district's testing system, measuring student mastery of content and allowing teachers to curate content based on student progress.
5. Implementation of a blended learning software system that meets students at their level and progresses them towards mastery, giving students and teachers a single system to consistently house and access a variety of content.

RESULTS

The project's success can be credited to the commitment and collaboration of the project team and senior leaders. The team had a clear understanding of the work processes required to implement curation of digital content, and of the importance of the voice of the customer in obtaining key requirements to meet expectations.

Through a strong governance structure, OCPS has established the organizational systems to accomplish its long-term roadmap for personalized learning. Senior leaders championed the project and supported the design of cross-functional processes that other districts can use in their own personalized learning initiatives.

Through this initiative, OCPS learned a few valuable lessons:

- ◆ Do not jump to changing classroom practice without a solid foundation upon which to build
- ◆ Cross-functional teams are both challenging and imperative
- ◆ Move from silos, lack of communication, and multiple handoffs to cross-functional roles, high collaboration, and results oriented

OCPS' next steps include organizing a personalized learning working group, developing a detailed personal learning project plan, and exploring a small-scale personalized learning pilot. The district also plans to implement organizational change strategies that will educate staff members, parents, students and the community on the benefits of personalized learning. As the rollout expands to cover more students and devices, the district is equipped to manage the strain with well-defined processes, policies, and a governance system for managing processes and performance.

ABOUT APQC EDUCATION

APQC helps organizations work smarter, faster, and with greater confidence. It is the world's foremost authority in benchmarking, best practices, process and performance improvement, and knowledge management. Since 1996, APQC has been helping education leaders capture, scale, and sustain transformation to improve student outcomes through the implementation of Process and Performance Management methodologies and the identification of best practices. Among other things, we help educators redesign outdated or inefficient processes and break down functional silos to save time, money, and empower people. Learn more at www.apqc.org.