Realizing the Spirit of Clark County Schools ACHIEVE

Community Implementation Council
Clark County School District Training
Summary and Recommended Next Steps

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Background and Acknowledgements

This progress report was requested by the Community Implementation Council (CIC) of the Advisory Committee to Reorganize the Clark County School District (Advisory Committee). This report is a supplement to a previous document[1], which was submitted to the CIC on December 15, 2016. This progress report is intended to provide the CIC and the Advisory Committee with an update on activities related to the implementation of the plan and regulations. These activities were conducted by the Clark County School District with the frequent assistance of the consulting team. Special thanks to the following individuals who have contributed to this effort so far:

The Advisory Committee to Reorganize the School District (Current & Former):
Senator Michael Roberson, Chair; Assemblywoman Olivia Diaz, Vice Chair; Senator Moises Denis; Senator Aaron Ford; Senator Joseph P. (Joe) Hardy, M.D.; Senator Becky Harris; Assemblyman Paul Anderson; Assemblywoman Dina Neal; former Assemblyman Steven Silberkraus; former Assemblyman Lynn Stewart; Assemblywoman Melissa Woodbury

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[1] *Clark County Schools Achieve: An Initial Assessment of the Transition of the Clark County School District to a Decentralized Model*.

Introduction and Summary

The regulation denoting the contours of the school district reorganization states that "each local school precinct must operate using site-based decision making" for new responsibilities that are transferred from the central administration to the school site. Building leaders will need site-based decision making tools to make informed decisions. Having the right data on hand in clear, accessible formats will help make these tools more useful to building leaders. It is vital to keep the focus on the systems' end-user, the principal and district staff. This focus underscores that the current need for systemic upgrades to business systems is both technical and financial but is primarily human in nature. New systems change workflows and behavior. They provide people with usable data and allow better decisions to be made. In a site-based decision-making model, availability and transparency of data and decision-making structures will be crucial to a successful implementation of the "Clark County Schools Achieve" vision.

Policymakers and the public at-large should understand that "Clark County Schools Achieve" is progressing in line with the timeline noted in state regulation, albeit with the assistance of technology systems that do not optimally communicate with each other. Indeed, the district has already made significant progress in implementing the regulation. An expenditure to purchase software tools is important to move the reorganization forward, but it is best seen in the context of a human change management process that has already begun but will take years to reach full maturation. In turn, a fully mature system means the district will be in a state of high systems integration in which management has the tools and practices in place to make management decisions with the assistance of easily accessible data.

It is also important to note that it is commonplace in both the public and private sectors for large-scale system implementation to take years. Following a standard, public sector purchasing process, the district's new system will require hundreds of employees to change the way they currently work. This will require training in the new tools and systems. Large amounts of data will need to be migrated and standardized. Initial investments can help cover the cost of initial licenses and implementation for systems; the district should plan on ongoing costs as implementation ensues over 5-10 years from the initial licensing date.

While there are numerous complexities to implementing and integrating a large system for the largest employer in Clark County, the benefits of upgrading and implementing operational systems are straightforward, as are the stakes of not doing so. Improved management systems and tools should result in money saved and greater transparency for all stakeholders. Principals and administrators will benefit by having current, more responsive data to make decisions, and the public should obtain greater clarity of district operations and decision-making processes.

The consultant team has reported on technology systems in the past. Building upon the initial assessment published in December, 2016, the consultant team met over the course of January and early February with several school district administrators to further explore the systems in place. The product of these interviews and a review of district policies, reports, and documents, informs the work below. Of special note here is the assistance of the CIC Vice Chair Felicia Ortiz.

In this section, the consultant team reviews the recent context of systems reforms; provides an analysis of the current state of systems reforms based on interviews and information requests; and outlines a proposed state of systems in the future.

A Brief History of Recent CCSD Systems Reforms

The need today to upgrade systems can best be viewed in the context of a timeline of decisions, reforms, and incremental progress. The district uses several systems that are decades old. Even some of the more modern systems in use at the school district are more than ten years old. The district, however, has undertaken efforts to improve systems districtwide.

Primary among these efforts is the recent step to develop and implement a data management strategy. This began with a series of research, recommendations, and reports published in 2011 and 2012 during the administration of former Superintendent Dwight Jones. These reports remain the current framework for district goals and aspirations as they relate to systems. The overarching strategy is to improve and integrate data across district divisions and departments, ensuring that it is accurate, secure, easily accessible, and highly usable.

Key studies include:

- “Educational and Operational Efficiency Study” - Gibson Consulting Group (August, 2011)
- “Enterprise Data Management Plan” - Shelley Kooser, a Colorado-based educational data specialist (January – May, 2012)
- “Clark County School District Technology Plan 2012 - 2017” – Metiri Group (October, 2012)

Each of these documents is worth exploring in full, but for the purposes of this report, it is primarily important to note that, following these reports, the district embarked on an effort to streamline and standardize its data management practices. This framework is

outlined in the CCSD Technology Plan.[1] One clear example of standardization is refining nomenclature practices districtwide. For instance, various systems used to classify a single school by more than a dozen different names. While simple, shifting to a common nomenclature helped the district move from data as bits of information to data as actionable information. The district also mapped all its systems — referred to as the "enterprise data and process model" or "data architecture" — and visualized opportunities to redefine workflows and district operations by redefining systems. This is an ongoing process that continues today.

This is exemplified in the effort the district began in 2012-2013 to replace its student information system, leading to the launch of Infinite Campus on September 30, 2014.[2] The system is currently in its third year of implementation. Infinite Campus is a system familiar to many families in Clark County because it is the online portal through which parents can access their children's grades and other information from the school district. It is also a classroom information system for teachers and administrators.

Prior to the launch of Infinite Campus, principals faced significant difficulties in obtaining useful data that could help inform their strategies and decisions. One example is noted below:

> If you ask a principal at a Las Vegas high school to tell you how many students aren't on track to graduate, expect to wait a while to get an answer.
>
> The principal has to print out thousands of transcripts and manually count the number of pupils who are credit-deficient or failed the high school proficiency exam. That could take hours, if not days.[3]

Before Infinite Campus, every school had its own database. This created inefficiencies throughout workflows, and it meant that district staff and the public could not get meaningful data in a timely manner.

> "We eliminated 350 data silos through Infinite Campus," said one district IT employee involved with the launch of Infinite Campus.

Infinite Campus has helped solve some of these data bottlenecks. It has also helped uncomplicate the various systems that the district had in place prior to Infinite Campus. In the years-long implementation process that continues today, the district has collapsed more than a dozen formerly distinct processes or systems into Infinite Campus. As a platform, Infinite Campus continues to be a repository for an increasing

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[1] http://ccsd.net/resources/technology-information-systems-services/ccsd-tech-plan-2012.pdf

[2] Clark County School District, 2014. "Parents and guardians can access Infinite Campus beginning this week,"http://static.ccsd.net/ccsd/content/ccsd-press/pdf/infinite-campus-parent-launch-9-30-14.pdf.

[3] Takahashi, Paul. "School District's new data collection system 'will change the way we teach students'" LasVegasSun.com. May 10, 2014. https://lasvegassun.com/news/2014/may/10/school-districts-new-data-collection-system-will-c/.

number of systems as its implementation continues. For instance, the district says it is working on phasing in secure student health records into Infinite Campus as its license with a separate health records database is expiring. If done correctly, this creates a streamlining of workflows for the district and helps the district better serve its stakeholders by moving as many external-facing systems as possible onto a single portal.

Another example of this thinking was in the implementation of core finance, accounting, and budgeting systems through the vendor SAP, a large software corporation. Implementation of this system began in the early 2000s. At the time, the district intended to replace the Human Capital Management System (HCMS) — the system currently the subject of public policy conversation — concurrent with the implementation of SAP financing and budgeting systems, or "modules." Following an attempt to implement the Human Resources (HR) SAP "modules," the district decided not to proceed due to technical difficulties in implementation, per multiple interviews with district personnel. According to the director of the payroll department, implementation consultants had severe difficulties in running trial payroll processes and replicating the necessary procedures to ensure the district's employees could be paid on contractually obligated timelines. These ongoing delays led the district to "hibernate" the HR aspect of the SAP implementation in 2007, according to district IT staff.

Following recommendations of the Gibson report (noted above), the district moved forward with the data management framework laid out in the Enterprise Data Management Plan and formally established in the CCSD Technology Plan. Following a second recommendation of the Gibson report, the district replaced its outdated student information system with Infinite Campus, as detailed above. The district then began to execute on the recommendation to replace the Human Capital Management System (HCMS), according to interviews with district personnel. Numerous district employees told the consultant team that this process began in late 2014. The district assembled a team to put together a Request For Proposal to replace the HCMS. This team evaluated responses, narrowed responses to three finalists, and obtained three proposals.[4] This was completed in June, 2015. At the time, the district chose to pause the process following the passage of Assembly Bill 394 (implementing the school district reorganization) in order to wait and see what policies the Advisory Committee to Develop a Plan to Reorganize the Clark County School District would ultimately approve. Given the time that has now elapsed, these 2015 RFPs are no longer valid

[4] The variable cost ranges currently cited in public policy debates about replacing the HCMS stem from these three proposals. The variable cost ranges vary by magnitudes of tens of millions of dollars because the responses to the RFP outline included short, medium, and long-term implementation costs. Higher cost estimates reflect longer implementation timeframes; lower cost estimates reflect short implementation timeframes. Total cost was never finalized due to the RFP process ceasing prior to moving to "best and final offer" stage of the RFP process.

and should only be referenced as a way to estimate future costs of a new HCMS.

This summary brings us to the present date at which the district is rekindling efforts to update its HCMS system.

In sum, although no new system will present the perfect solution, the district has shown that it is moving in the direction of collapsing data silos and moving toward integrated solutions that offer managers greater amounts of actionable data. Rather than continue to require multiple usernames and passwords, the district is moving in the direction of consolidating databases and authentications. This systemic approach to a “one-stop shop” should help the district overall as it shifts to a customer service model. To improve customer service within the reorganization regulation framework, a successful implementation of the reorganization will require better systems and training to ensure staff are getting the most value out of new systems.

Current CCSD Systems Challenges

It is important to note this history in the context of contemporary and public discussions about the district’s stated need for a new Human Capital Management System (HCMS). The district systems architecture framework shows that the current HCMS is part and parcel to wide-ranging district functions and operations. The purpose of these core systems is to ensure the district manages critical functions related to payroll; recruiting and hiring; contracts, licensure, and evaluations; and records and compliance. These systems *should* integrate directly with core accounting, finance, budgeting, purchasing, and other operations systems. In turn, these two systems *should* integrate into the world of student information systems in Infinite Campus. The current problem is that these systems do not interact well together, creating duplicative work-streams at best and data-poor environments and unacceptable delays at worst. Indeed, the current state of systems architecture at the district contributes to the lack of public trust in the district and the perception that the district can do much to improve on its transparency to the public.

In interviews with district personnel with decision-making authority, there is widespread consensus about the necessity of systemic upgrades and reforms. Many of the systems-related challenges facing the district are not new and have indeed been studied internally as noted above. Several of these challenges are presented below and generally fall into one or more of the three following categories:

- Risk: Systemic instability, cyber-security, and data storage practices that could pose a risk to district operations
- Inefficiency: Systems that do not approach optimal use of resources
- Lack of Interoperability: Technical challenge in which computer systems do not

directly exchange information and may only do so by technical workarounds

Risk

The reorganization regulations call for the district to track a greater number of expenditures at the school-site level. This will require systems that generate that information. The district's investigatory work into updating its systems has exposed several risks that lie primarily in a few departments:

- Several systems in day-to-day use at the school district can be traced to a single, exceptionally prolific support staff employee whose computer programming skills have been put to use in both the Human Resources department and toward the district's Strategic Budgeting applications. The greater the district relies on this single employee, the greater he represents a single point of failure for district operations.
- Likewise, numerous district employees note with concern the thin base of computer programmers who are both proficient in the COBOL programming language and in their working knowledge of the district's specific COBOL programs. Administrators note that it is very difficult to hire IT professionals to upkeep the district's critical systems when expertise in COBOL is such a rare skillset in the marketplace. This is identical to the risk the Nevada Department of Motor Vehicles noted as it moved to replace its COBOL-backed system with a new system that would better serve customers during the 2015 legislative session.[5]

Inefficiency

The reorganization inverts the school district's organizational chart to place schools at the top of the hierarchy and operational and academic support divisions at the bottom of the chart. As one district administrator notes, the "roots" at the bottom of the chart support the "branches" at the top of the chart. In other words, the better and more efficiently the central divisions are able to support the schools, the healthier the district will be.

According to numerous interviews with central service employees, there is a real need for operational processes and practices. Such systemic gains in efficiencies will allow for a more responsive customer service model. The below examples are several areas

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[5] "The problem was that many younger IT professionals were unfamiliar with those antiquated technologies" - Troy L. Dillard, Director, Department of Motor Vehicles
Per verbal report by Troy L. Dillard, Director, Nevada Department of Motor Vehicles (Legislative Commission's Budget Subcommittee, 72).

that require further investigation:

- There is no standard system for tracking professional development contact unit (credits) for teachers, according to interviews with human resources employees. A digital system would likely be more efficient than the current paper-based system. According to HR employees, the district is exploring the purchase of a system to house this data.[6]
- Every May, the district must inform (post-probationary) teachers of an intent to re-employ with the district.[7] As one HR employee notes: "We issue 18,000 of these for teachers. We sort these paper forms, ship them, the schools do them, and they ship them back, and our people make sure they're input, and then we ship them to records. It'd be nice to be online because it's one form." The same employee notes that an online system would be preferable.
- Practices and procedures for different employee categories are not standardized across the COBOL-based Human Resources Management System. Information related to licensed staff (teachers), support staff, and administrators is stored in separate databases. Records management and retention practices for employees also differ across employee subgroup.

Lack of Interoperability

The district has identified a need for a new Human Capital Management System. The lack of such a system creates inefficiencies due to a lack of interoperability between the HCMS and other systems. This seriously affects the ability to manage 40,000 employees and makes HR compliance more difficult. In other words, the district's aging HCMS system requires translations and workarounds to "talk to" other essential district systems. This creates inefficiencies and represents an impediment to the smooth operation of a reorganized school district.

- The district's strategic budget workbook — the budget tool for principals and School Organizational Teams — does not directly integrate with either the human resources or budget systems. There is limited connectivity between these systems, meaning that time-consuming manual reconciliations must happen along the workstream.
- Finance and HR systems link together in a limited manner that only allows user identification for purchasing functions (Principal A purchased X in the system). There is duplicative work, or "double duty" as one district employee noted, in basic district processes.
- The HCMS does not currently allow for a timecard function, which is essential for

[6] HR employees also note that prospective employees still file pre-employment documents by hand on paper, but there are efforts underway to digitize this documentary process as well.

[7] Pursuant to NRS 391.810 https://www.leg.state.nv.us/nrs/nrs-391.html#NRS391Sec810

the district reorganization framework of matching dollars to schools. Several classes of employees travel between different schools as a part of their normal job duties. The district has no way to track time spent at each school and thus has limited means to track school-based expenses of these employees.

Proposed State of CCSD Systems

The district should address (and in many cases is addressing) the challenges laid out in the above section. Working toward solutions to these challenges will increase the likelihood of success of within the reorganization implementation and will help move the district toward greater transparency and responsiveness, two philosophical tenets underlying the reorganization work.

The consultant team concurs with the district's IT leads when they say the goal is to collapse unnecessary logins and authentications and move to a greater state of data integration that is simpler and more useful for the end user. The district is beginning to undertake an effort to update its 2012-2017 CCSD Technology Plan with a general framework that CCSD should be, in the words of one IT director, "highly digitized, highly transparent to the user with high customer service. That's the vision."

In line with the Gibson report, the school district has created a data management framework and has replaced the outdated student information system with Infinite Campus. The last major reform left outstanding is the purchase and implementation of a new HCMS. Implementation and reorganization aligning to the enterprise data management framework is a process that will take years. As an ethos and practice, the framework will always be a work in progress.

Getting all departments the best and most useful data in the most efficient manner at the best value is also an imperative for these systems needs. This necessitates a look toward the future. As the district embarks on a new RFP to replace its HCMS, it should be taking steps to align the system toward future needs. This needs to be a sustainable system that can grow with the District and with population increases.

- What are the best systems for reporting to the Nevada Department of Education and fulfilling state mandated reports?
- Does current planning reflect prospective/forecasted future needs such as compliance with the new federal Every Student Succeeds Act (ESSA) and the Nevada State Education Plan for implementing ESSA[8] that is currently in draft

[8] ESSA Advisory Group. Nevada Department of Education. webpage. Accessed February 10, 2017. http://www.doe.nv.gov/Boards_Commissions_Councils/ESSA_Adv_Group/ESSA_Advisory_Group/.

form at the state level?
- Does the current systems plan reflect a willingness and thoughtfulness regarding integrating data with Nevada Systems of Higher Education (NSHE) systems (remediation, student tracking, teacher programs)?
- Do district systems enable the district to track actual spending in real-time to compare to average spending, as is the current practice?
- What management tools need to be in place to enable staff to translate the letter of the reorganization regulation into systemic practices?

Next Steps

The district reports that it is preparing a new Request For Proposal for a new HCMS during the next few months. Purchasing process timelines for a large system can be variable, and it should become clearer soon if the district is proceeding along a conservative or aggressive timeline or anticipates a blended approach.

Once the district selects a vendor, the district will begin implementation with a focus on training and processes to prepare the district for launch of its new system. This is common industry practice for both public agencies and private sector companies. Clients oftentimes employ an implementation consultant to assist in the transition to the selected vendor's system.

The district predicts that the launch or "go live" date for the system will be Jan. 1, 2019. This means that new systems will be fully operational for 2019-2020 school year planning purposes. This is not to say, however, that no work will happen prior to 2019 nor is to say that reorganization timelines should be pushed back. As stated earlier, implementation is an ongoing process. The letter of the regulation can be met; the systems contemplated here will allow the stipulations of the regulation to be *better* met. For instance, the district is moving toward a modified zero-based budget process; the new system should allow the district to fully implement a zero-based budget process.

Prior to implementation or launch, much can be done today to streamline and migrate data to prepare for a near-term transition to a new HCMS. This should significantly assist implementation of a new HCMS.

As stated earlier, the previous 2015 RFP costs are no longer valid but may be used as estimates to project cost going forward. The range from the 2015 RFP was between $10-45 million. The range, as noted earlier, exists because it includes proposals from three vendors along different implementation time ranges. The *lowest* cost estimate is the lowest bid on the shortest implementation timeline. The *highest* cost estimate is the highest bid on the longest implementation timeline.

The district's current position is that funding should derive from a legislative appropriation. This is an expeditious way to ensure the district has the funding necessary to move forward with a RFP process.

It is the consultant team's recommendation that the district needs a state-of-the-art system to operate the largest organization in the State as measured by number of employees and recommends that the district continue to explore funding options. As the consultant team has stated in the past, the private sector could help provide funds to assist this effort. As a next step, the consultant team recommends that the Community Implementation Council continue to positively engage with the district with the goal of assisting the district in obtaining a new HCMS.

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