Supporting Wide-Scale District Digital Transformation (DDT)

I. Introduction

At no other time has there been the pressure and collective understanding that all aspects of teaching, learning, and schooling can be made more effective and efficient by technology. District leaders are striving to make a strategic, purposeful shift that transforms pedagogy and experience, and goes beyond the tools and the infrastructure alone. However, the K-12 educational community does not share a standard approach for district digital transformation, which then leads to differences in collecting, measuring, and sharing performance indicators and final benchmarks of progress in the district digital transformation (DDT) process. There remains too great of a focus on the shift from print to digital and not enough focus on how to integrate blended learning into pedagogy in a purposeful manner. Without a common glossary and specific best practices on how districts are successfully making the shift to digital, challenges abound for administrators, teachers, students, and education technology vendors as these stakeholders from districts all over the nation lack clear objectives on making a successful, scalable transition. A greater policy focus on district digital transformation can help school districts close the gaps in student achievement and address equity issues.

There are numerous examples of effective, digitally enabled classrooms and schools, but very few examples of district-wide successful digital conversions. This position paper provides an overview of DDT and some of its core components policymakers and other stakeholders should consider in supporting, developing, and implementing such programs. This position paper also discusses McGraw-Hill Education's commitment to DDT and offers five policy recommendations to improve district-wide digital conversions throughout the country.

II. Key Stakeholders Impacted by DDT:

The critical need for a strategic and streamlined DDT impacts a wide range of education stakeholders, and further research on best practices as well as more robust supports from governmental entities can help by enabling districts to take their DDT to scale.

The following education stakeholders face critical challenges in the DDT process:

- **Administrators:** Administrators have a number of key roles in ensuring a DDT is effective:

1 Administrators must work to streamline the process of data collection, reporting, and ties to clear accountability metrics;

2 Administrators have the ability to shape professional development so that instructors are trained early on in the DDT process;

3 Administrators play a role in ensuring every child has access to the technology and content they need to have an equitable learning experience, and

4 Administrators set expectations, lead change management from the top down, and provide a road map for change.

Administrators will require greater guidance on the following: meeting the goals and benchmark progress in achieving DDT; ensuring integrated, secure systems; and meeting requirements relating to DDT in their state Every Student Succeeds Act (ESSA) plans. To make this heavy lift actionable on a wide-scale, administrators will require further resources through funding, strong representation at associations, public forums for comment, and technical support. Administrators will also benefit from support in identifying resources that can support them in creating a road map for change in the DDT, such as the Future Ready Schools® Digital Dashboard. For more on Future Ready Schools, see page 5.

- **Educators:** Many of the challenges educators face in a DDT come after the initial technology implementation, while re-framing instructional practices in light of new infrastructure capabilities. Educators must develop a meaningful design for learning that places students at the center of instruction, differentiates for student needs, and utilizes technology to personalize learning. Implementation of frameworks like the SAMR model* will allow educators to track and improve their use of purposeful technology to personalize learning during and after a DDT. In order to be successful with a wide-scale DDT, more needs to be done to provide educators with research-driven tools, through time-tested models like the SAMR. More can also be done to provide educators with effective professional learning that supports blended learning models and aligns with professional development requirements and definitions set by ESSA. (See appendix for more information on SAMR).

- **Students:** Given the unique conditions at each school across a variety of geographic regions and demographic characteristics, it is important for the DDT to personalize the student experience to its unique sub-population. To support that approach public policy needs to further study how students from various unique subgroups are utilizing technology and how districts are tailoring the DDT process to the needs of the student in a specific socioeconomic or cultural environment. Currently, ESSA provides supports for students from underserved communities and makes additional funding available for English learning (EL) and minority-serving institutions. At the district level, this can translate into funding to help schools transition into a 21st century learning environment. However, funding alone is not enough to help students make a secure transition. Ultimately, the transformation can be made possible by allowing students better visibility into approach the administrators and teachers are taking in their learning and involving both students and teachers in

technology trainings to better support students in the DDT.

- **Parents and Family:** ESSA allows for [more parental input in the process of school district design](#)[1] and requires that each school district reserve at least one percent of its Title I funds aside for parent and family engagement activities. In an effort to act on input that is representative of the entire student body, the law also requires that parents and family members of low-income schools be involved in deciding how those funds should be spent. While moving forward, it will be important for districts to collect feedback on the parent and family engagement process, look for ways to ensure that these funds are being used appropriately, and verify that all stakeholders are making the greatest use of these funds. Districts will need continued support in both gathering public input on the DDT and in promoting awareness of the DDT process and priorities. For support, see [this guide from the Parent Teacher Association (PTA)](#)[2], which provides district leaders with strategies to engage parents and families in the education system, specifically through ESSA.

- **EdTech Providers:** Education technology providers can support the priorities of all stakeholders by producing content, pedagogy, and tools that enable the meaningful design of digital learning environments. The student data insights gleaned from the use of purposeful technology can then support administrators in their efforts to record outcomes, track change, and develop sound, key performance indicators as they measure the success of the DDT. EdTech providers can also support a district's interoperability challenges in a DDT by partnering to provide seamless integration to systems across communities and classrooms. Edtech providers require additional feedback from state and local governments on how to best meet and align with requirements in ESSA and would benefit from greater accountability and transparency in the government's approach

to district digital transformation. Initiatives that promote partnership between educators and vendors in the digital space, such as the Dell Foundation's [Project Unicorn](#), and interoperability standards such as those from [IMS Global Learning Consortium](#) can be powerful tools for EdTech companies to strengthen their commitment to the DDT.

III. What Are Some of the Greatest Challenges for School Districts in Undertaking a Wide-Scale DDT?

Together the stakeholders mentioned above have a profound impact on wide-scale DDT. The stakeholders' individual needs and challenges can then translate into a number of broader challenges faced by the overall district, which in turn, can impede progress in the districts' plans to successfully engage in digital transformation. Some of the most notable challenges faced by districts can include:

- **Readiness Assessment and Gap Analysis:** Perhaps the most underestimated and abstract requirement for successful digital transformation is the requirement for a school system to think and function differently on virtually every dimension, including anticipating staff needs. This includes considering whether the new tools are accessible, reliable, and easy to use by teachers and students in and outside of the classroom.

- **Integrated and Secure Systems:** A common source of consternation for school districts going digital is determining the role of legacy technology investments and how to decide what products and/or systems should interoperate with each other. This is a complex and potentially thorny strategic issue to work through before going too far down the road of added technological investments. Being clear on how added capabilities will directly impact learning and instruction is essential to making lasting changes. Also, understanding the pros and cons of closed versus open systems is

important. Equally as important, is ensuring that the products, systems, and school district policies are secure and prioritize protecting student data.

- **Alignment and Communication:** Partnering with an organization that has the experience and scale to support both the start-up implementation and the district's long-term digital transformation needs can be a key factor in a district achieving its goals. Communication planning and activities should start well before the district digital launch and continue for several months and even years.

- **Professional Development and Training:** Even though it might seem obvious, it is necessary to train and support teachers on how to be effective in a digital teaching and learning environment. Most training today only focuses on showing teachers how to use new tools. It is important for a district to know how teaching should be improved when going 1:1; otherwise, too much money could be invested with little or no return. Therefore, it is important to leverage digital instruction experts to assist with the planning and implementation of an effective digital practice.

- **Funding and Effective Uses of Resources:** School districts also should understand the Total Cost of Ownership (TCO). There are several reasons why TCO is a challenge to understand from a school system's perspective. School districts think about budgets and funding in traditional departmental ways, rather than the total cost of an organizational process. This silo-style cost center structure makes it hard to track and monitor true costs, as well as coordinate and optimize spending across multiple departments. Additionally, it is surprising how many districts still look at hardware as the key investment and decision in going digital. The hardware decision and purchase are best made after or in parallel to the digital teaching and learning environment decision.

IV. McGraw-Hill Education Commitment to DDT:

To better support a DDT, McGraw-Hill Education leverages the science of learning, robust content, and advanced technology. By aligning closely to ESSA through our approach to efficacy, research, intervention, and 21st century learning, we are dedicated to supporting a DDT that operates under an equitable, accessible, and scalable framework. We act on our commitment to the DDT through a variety of continued efforts and partnerships:

a. **Adherence to Interoperability Standards:** A core obstacle districts face in the DDT is a lack of interoperability between systems. McGraw-Hill Education actively endorses and conforms to the IMS Global Learning Standards when developing products and services, thereby contributing to a "plug-and-play" integration that improves user experiences and makes the DDT scalable. McGraw-Hill Education also supports the interoperability, privacy, and access efforts set forth by Project Unicorn, an initiative working to promote partnership between K-12 educators and vendors in the digital space.

b. **Prioritization of Student Data Privacy:** To support a secure DDT and robust, seamless data usage processes, McGraw-Hill Education complies with all student data privacy laws and endorses best practices. McGraw-Hill Education consistently ensures the appropriate collection, use, sharing, and handling of personally identifiable information (PII), supporting the administrator and educator in their efforts to use data responsibly to drive and improve the DDT.

c. **Partnership with Future Ready Schools®:** Many of the challenges districts face in the DDT – including planning, implementation, infrastructure, leadership, and budgeting – are comprehensively and strategically addressed by the Future Ready Schools frameworks. To elevate the

work of FRS, and empower them to impact more districts, McGraw-Hill Education partners with the organization to support their Interactive Planning Dashboard, a five-step collaborative planning process for districts.

d. **Development of Purposeful Technologies:** McGraw-Hill Education is committed to empowering educators to achieve a student-centered DDT by continually leveraging learning science research to develop new education technologies. Purposeful technologies enable educators, administrators, and students to move beyond tech implementation and towards a transformative model for instruction that drives positive outcomes for all students.

e. **Commitment to Educational Equity:** McGraw-Hill Education understands the vital need to provide an increasingly diverse population of students with equitable educational experiences, meaning that students have access to the resources they need at the right moment in their education (The Council of Chief State School Officers). By designing learning materials that fit within personalized, blended, and other digital models, while also supporting robust, inclusive RTI, we are committed to supporting districts in implementing their DDT through an equitable framework.

V. Policy Considerations to Support DDT

Given the critical challenge impacting the education community in engaging in wide-scale DDT, McGraw-Hill Education's top recommendations to policy makers on the subject of DDT are the following:

- **Recommendation #1:** Streamline information on DDT into non-regulatory guidance or a report to support school districts in their development and implementation of DDT. The guidance or report can encourage the coordination of federal and/or state program support to maximize the impact of available resources. For example, in the Non-Regulatory Guidance on Student Support

The Future Ready Dashboard

McGraw-Hill Education sponsors the Future Ready Schools ® Digital Dashboard, a planning tool that aligns research-based strategies and practitioner-tested techniques with each district's specific needs, allowing school district leaders to create systemic action plans for student-centered, personalized learning before purchasing additional technology. In 2016 the U.S. Department of Education named the Digital Dashboard the only non-USDOE suggested readiness assessment for ESSA's Title IV funding. The Dashboard is constructed around the seven gears of the Future Ready Framework:

Image Source: https://futureready.org/

and Academic Enrichment Grants (SSAEG), the U.S. Department of Education notes the Federal Communications Commission's (FCC) E-rate program should be considered as a resource for helping a school district build a robust
- infrastructure to support learning enabled by technology in addition to SSAEG.

- **Recommendation #2:** Endorse interoperability and IMS Global/ ISTE standards to ensure integrated, open systems which can more effectively engage in secure data sharing practices at districts across the nation. In addition, engage with initiatives such as Project Unicorn to promote
- communication and partnership between districts and vendors around privacy and interoperability.

- **Recommendation #3:** Compile a uniform glossary of terms/definitions and benchmarks regarding DDT, to address the key performance indicators (KPIs) for effective measurement and
- implementation at school districts. This will help all of the stakeholder groups in the process.

- **Recommendation #4:** Encourage states to consult with outside organizations (e.g., Future Ready Schools®) or individuals that have practical expertise in the development or use of DDT, particularly when such districts are receiving funding from federal or state governments. Additionally, encourage states and school districts to be transparent about the goals and benchmarks for DDT, as well as the timeline, process, and requirements for the approval of educational
- materials in order to minimize disruption of instruction and learning.

- **Recommendation #5:** Appropriate funding at authorized levels and encourage school districts to use data responsibly

About McGraw-Hill Education
McGraw-Hill Education is a learning science company that delivers personalized learning experiences that help

students, parents, educators and professionals drive results. McGraw-Hill Education has offices across North America, India, China, Europe, the Middle East and South America, and makes its learning solutions available in more than 60 languages. Please visit us at mheducation.com, or you can find us on Facebook or Twitter.

End Notes
[1] *"Parent and Family Engagement Provisions in the Every Student Succeeds Act." Civil Rights Docs, The Leadership Conference Education Fund, 19 Jan. 2016, civilrightsdocs. info/pdf/education/ESSA-Parent-Family-Engagement.pdf.*

[2] *"6 Keys to Engaging Families in ESSA." PTA.org/ESSA, National Parent Teacher Association , www.pta.org/docs/ default-source/uploadedfiles/advocacy/6-keys-to-engaging-families-in-essa.pdf.*

Appendix

SAMR: *The increasingly popular SAMR model offers a framework for understanding the levels of tech integration with to instructional transformation. Divided into "transformation" and "enhancement" categories the four phases of the SAMR model are:*

1. *Substitution: Tech acts as a direct tool substitute with functional change.*

2. *Augmentation: Tech acts as a direct tool substitute with functional improvement.*

3. *Modification: Tech allows for significant task redesign.*

4. *Redefinition: Tech allows for the creation of new tasks that were previously inconceivable.*

By charting current placement on the SAMR model and placement goals on a district-wide-scale, educators and administrators can collaborate to ensure that DDT is universally emphasized and improved upon in a communal, cohesive fashion. Educators and administrators need the time, resources, and training to develop and implement frameworks for understanding how to implement the technology they have acquired in the DDT strategically.