Resource Mining: Addressing Virtual Learning Needs of K-12 Children in the COVID-19 Pandemic   July 29, 2020

Author Raymond Morton M. ED

The COVID-19 pandemic has permeated all segments of our society necessitating a myriad of responses to counter the outbreak. Our education system is one of the fundamental institutions required to respond to this pandemic. Due to recent school closures and the challenges of the reopening of schools, one of the significant responses will continue to require the educating of k-12 children outside of the long-established brick and mortar school setting through virtual learning.

Government leaders ordered school districts to provide virtual learning instruction to students through the latter months of this recent school year. This order will continue into the new school year as we follow the guidance of our public health leaders. This charge has required educators to review their strategic plans for teaching and learning to adhere to this non-traditional challenge. Many districts have some history with technology and virtual learning; however, the degree required to institute a program that involves new methodologies for teachers, students, and parents in a short time frame has been and will continue to be a monumental undertaking.

Challenges continue to exist relating to equity in the distribution of equipment, content material, access to connectivity, and transitioning to online and at-home learning. We also need to recognize the impact of environmental limitations on teachers and students between the home and school classrooms. There exists varying levels of technological competencies among teachers, socio-economic factors relating to the family structure, parental managing of childcare issues, mental health wellness, and accountabilities for both teachers and students. Additional obstacles include blending learning challenges with providing meals and safe housing for children and maintaining contact with hard to reach families.

Education is the cornerstone of our society. Given the interdependence between business and education, both segments of our society have a symbiotic need to support each other in the short and long term. Resource mining is an in-depth analysis of the societal marketplace seeking materials, funds, service providers, and programing as assets to meet operational needs. Resource mining is not a discipline. It is an activity or process[1] that serves more as a strategy to leverage assets in support of virtual learning.

Many school districts are utilizing their contacts with the business community to marshal resources to address their technology needs. However, the question remains: How are school districts mining for resources and funds to meet their virtual learning needs? An organized checklist can be a helpful tool for districts in addressing the array of needs. We know that schools are developing these relationships, but are they maximizing these outreach efforts to cover the quantity and quality of the resources they are seeking? In other words, have they "Networked" "Networked" and "Networked"? Perhaps this curated checklist can help to transform resource mining within districts:

The disruption that this pandemic has created in our culture is staggering. The higher rates of infections, hospitalizations, and deaths among African Americans and Latinos are disapprovingly consistent with the historical failures of educational and civic leaders to remedy the educational achievement problems of historically oppressed Americans. Health care and work-related disparities are primary reasons contributing to these disproportionate infection rates. Let us band together and act swiftly to address the technology access gaps and inadequate resources that disproportionately affect low performing students, underserved students, students of color and low-income families in our nation's schools.

This pandemic will not wait for us to change. Given the unknown degree of its spread society is playing catch-up. School districts are an integral part of this societal turmoil. Nevertheless, this pandemic is providing school districts with expanded opportunities to address their technology capacity needs because of the urgency for providing quality virtual instruction to students, staff, and parents. We must increase this capacity through the implementation of effective strategies and resource development. As educational leaders we have a duty to build capacity in our buildings to support teachers and improve student outcomes. Utilization of a checklist can provide strategic value to resource mining efforts and contribute to district personnel becoming more successful in addressing virtual learning needs and convert those needs into successes.

Resource Mining Checklist Sources of Potential Assets

Hardware/Software/ Technical Support

- ☐ Review and regularly update procurement processes to improve decision making and maximize preferred suppliers.[2]
- ☐ Develop a specific list of businesses that have commercial expertise addressing your district's technology equipment needs whether it be stationary or mobile hardware and various software types.
- ☐ Identify quality hardware providers of laptops, iPads, Chromebooks, notebooks, and tablets, and mobile hotspots. Park connected buses in low-income communities to give students access. [3]
- ☐ Continue to lobby government leaders for improved broadband services.

Teacher Resources

- ☐ Collaborate with teachers and paraprofessionals to develop a supplementary resource list of instructional materials. These collaborations could include quantifying the best educational learning websites for children.
- ☐ Identify websites that can provide content-driven lessons.
- ☐ Establish a working relationship with the local museum or history center, which may be adept at supplying historical lessons on a plethora of topics.
- ☐ Identify what educational resources companies such as UPS, FedEx, DHL, and USPS have to offer.

- Utilize Public Television to help meet distance learning needs. Public television can fill a void created by the digital divide for families lacking access to more advanced solutions used for online learning.[4]
- Arrange for staff professional development.
- Develop a balance between synchronous (live session) and asynchronous (tasks to be completed offline) teaching and learning. [5]

Provisional

- Be willing to "cold call" on businesses using video conferencing formats or in-person meetings.
- Organize and communicate your business presentation by clearly defining your priorities, help needed, timeframe, and ideas for implementation.
- Review your website, does it emanate a powerful presence for your district?
- Build awareness of your brand by utilizing cost-efficient online advertising ideas.
- Utilize social media sites such as Facebook, Twitter, and Instagram.
- Cull the marketplace to identify technology summits, conferences, and seminars that can share best practices for virtual learning.
- Ask companies to contribute marketing services, i.e., Goggle Ads, to support your initiative.
- Review online conferencing and video platforms such as Microsoft and Google.
- Use Local TV and Radio Public Service Announcements (PSA).
- Utilize political contacts at all levels of government to assist with your technology needs.
- Develop one to one contact with support personnel in the State Department of Education.
- Identify and categorize your needs, i.e., hardware, software, technical support, teacher training, provisional, and social service's needs and supports.
- Recognize there is a need in eLearning to identify the challenges and consider best practice solutions [6]
- Identify the top periodical resources that can provide research-based information e.g., Association for Supervision and Curriculum Development, Educational Trust, American Journal of Education, The School Administrator, Educational Leadership, and the International Journal of STEM Education.
- Build relationships with foundations, industry leaders, community, and non-profit organizations.
- Organize a list of parents with business ties to share the vision, goals, and needs of the district's online learning program.
- Compile a list of leading vendors of educational resources such as Attendance Works, ASCD, Brain Pop, Adventures for Young Explorers, and Teachwire.
- Sign up for popular online posts from major education agencies, i.e., colleges and universities.
- Tap into organizations such as the American Federation of Teachers, National Education Association, Smithsonian Institute, and the American Library Association.
- Consider engaging in the review of blog postings by educators at KQED MindShift, eLearning Industry, eschoolnews | K-12 education Blog, and A Principal's Reflections | Reflections on teaching, learning, and leadership. [7]

- ☐ Implement a Digital Accessibility Toolkit: What Education Leaders Need to Know [8]
- ☐ Explore membership in the Consortium for School Networking (CoSN) provides thought leadership resources, community, best practices, and advocacy tools to help leaders succeed in the digital transformation[9]

Emotional Wellness Supports

- ☐ National Association of School Psychologist, (n.d.) https://www.nasponline.org/resources-and-publications/resources-and-podcasts/covid-19-resource-center/crisis-and-mental-health-resources
- ☐ US Department of Education, COVID-19 ("Coronavirus") Information and Resources for Schools and School Personnel https://www.ed.gov/coronavirus
- ☐ Child Mind Institute – A brief video for parents Jamie Howard, PhD, Clinical Psychologist at the Child Mind Institute
- ☐ PBS.org – What This Chart Actually Means for COVID-19 (Video)
- ☐ Erin McClintock, 10 Mental Health Tips for Teachers During the COVID-19 Pandemic[10]

Raymond Morton M. ED is an educator and retired administrator, who has worked in public education for over 25 years. He has served as an administrator at the elementary and secondary school level. He currently serves on the board of Children and Adults Developmental Agency after school programs in Pittsburgh, Pa+++++.

References

1. Merriam Webster Dictionary https://www.merriam-webster.com/dictionary/mining

2. IBM (n.d.). Strategic Sourcing and Procurement Services. Retrieved June 17, 2020, from https://www.ibm.com/services/process/procurement

3. Pannoni, A. (2017, Oct.). How to help high schoolers without home internet access. Retrieved from https://www.usnews.com/high-schools/blogs/high-school-notes/articles/2017.

4. Rauf, D.S., (2020, June 4). An Unexpected Tool for Remote-Learning During Coronavirus: Public TV Stations. Retrieved from https://www.edweek.org/ew/articles/2020/04/06/an-unexpected-tool-for-remote-learning-during-coronavirus.html?r=1749547990 p.2

5. Sheninger, E. (2020, May 10). A Principals Reflections: Reflections on teaching, learning, and leadership. blogspot.com

6. Higley, M. (2014, March 14). *e-learning: Challenges and solutions*. Retrieved from https://elearningindustry.com/e-learning-challenges-and-solutions.

7. *Top 100 Education Blogs in 2020 for Educators and Teachers* [Blog post] Retrieved from https://blog.feedspot.com/2020/June

8. Crossland, A., Gray, T., Reynolds, J., Wellington, D., Zhou, A. (2016, Oct.). *Digital Accessibility Toolkit: What Education Leaders Need to Know.* Retrieved from https://www.ctdinstitute.org/library/2016-10-11/getting-started-accessibility

9. The Consortium for School Networking (n.d.) Retrieved from https://cosn.org/about-cosn

10. McClintock, E., *10 Mental Health Tips for Teachers During the COVID-19 Pandemic.* Retrieved from https://everfi.com/blog/k-12/10-ways-educators-can-support-their-mental-health/