Planning for Technology

Case Study on Local Technology Plan- City of Westlake School District

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This review forms part of the efforts to re-strategize and streamline the Westlake City School District Technology Plan to yield the expected outcomes. As a consultant, my task at this point entails examining the plan and suggest measures that would help to accomplish its set objectives. My specific focus, so far as this exercise is concerned, is to examine the extent of inclusion; curriculum alignment and instructional integration; technology policy, leadership and integration; management and support; and budget and planning. The last segment of this exercise captures a brief recommendation on the way forward for the City's technology policy.

The Westlake City School District technology plan is a three year plan spanning from 2009 to 2012 (Efforts were made to obtain the most current one but to no avail).The plan is framed within the context of the State of Ohio's technology plan. In this respect, it utilizes the eTech Ohio's online Technology planning tool. The plan intended to integrate technology to support effective teaching and learning by creating a technologically collaborative environment. It was also to enhance professional development and student achievement based on assessment data (Westlake City SD Technology Plan). Moreover, the plan intended to facilitate a flexible environment that motivates learning skills to apply a variety of existing and emerging technologies.

Planning Team:

Technology planning requires a variety of inputs, and as such, it is imperative that the requisite stakeholders are selected and allowed to contribute effectively to the formulation and

implementation processes (Bennet, 2003). Westlake City SD Technology Plan consisted of a team of the following membership;

- Assistive Technology/Special Needs Coordinator
- Curriculum Coordinator.
- Instructional Integrationist
- Library/Media Specialist
- Parent
- Principal
- Superintendent
- Teacher
- Technology Coordinator
- Technology Support
- Treasurer

The composition of the team is in order because it reflects the various interests that can help make the plan sustainable. That is, the nature or the composition of the team appears to addresses concerns such as technical and implementation feasibilities. However, limited information is provided about the team. First, their specific roles are not provided, and that leaves room for unnecessary conjecture. Second, and more importantly, demographic representation is not mentioned. This is quite critical considering the diversity and equity concerns pertaining to public policy on education. In their study, Warschauer, Knobe, & Stone, (2004) discussed that the introduction of information and communication technologies may exacerbate the inequality gaps in education between the rich and the poor if proper planning is not in place. Equal representation, be it gender, age, or ethnicity, cannot be overlooked when it comes to policies that produce results

(see for example Meier, Wrinkle, & Polinard, 1999). Every public policy raises the question of political viability, and it is on this score that effective representation is important. The recommendation is that more information be provided about the composition of the team for Westlake City SD technology plan, particularly with respect to gender and ethnicity. That would help address the issues such as accessibility and equity.

Curriculum Alignment and Instructional Integration:

This section highlights how the City of Westlake SD has aligned or integrate the Ohio Technology Standards into its curriculum and instructional strategies. The city has tasked Technology Integration Specialists to assist teachers to integrate technology throughout the curriculum using the state alignment tool.

The city's technology plan specifies the following areas for technology alignment and integration;

a. Using Technology to Improve Teaching and Learning in English/Language Arts: under this the plan intended to move from 2.0 to 4.0 on the ACOT Scale. That is, to focus on "cooperative, project-based, and interdisciplinary work, incorporating technology as needed".

b. Using Technology to Improve Teaching and Learning in Fine Arts: Using the ASCOT, the target here is to integrate new technology into traditional classroom practice, and thus increase student productivity and engagement via word processor, spreadsheets, and graphic tools. It will also somehow entails cooperative, project-based, and interdisciplinary work for the higher levels.

c. Using Technology to Improve Teaching and Learning in Foreign Language: The plan intended to integrate new technology into traditional classroom practice, and thus increase student productivity and engagement via word processor, spreadsheets, and graphic tools

d. Using Technology to Improve Teaching and Learning in Mathematics: The focus of the plan is on the cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.
e. Using Technology to Improve Teaching and Learning in Science: The focus of the plan was on the cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.
f. Using Technology to Improve Teaching and Learning in Social Studies: The focus of the plan is on the cooperative, project-based, and interdisciplinary work - incorporating the technology as needed and as one of many tools.
g. Teaching Students about Technology Itself: Basically the City's plan sets a high target including discovering new uses for technology tools and applying same in some subject areas.

Primarily, the city's technology plan in the area of curriculum alignment and instructional integration is well articulated. The plan identified the current situation and make future projections of improvement. It identified the stakeholders that were mandated to carry certain implementation and evaluation functions (eg. Technology Coordinating Committee- District Technology Coordinator, the Director of Academic Affairs, the Technology Integration Specialists and the District technicians). The plan also identified the needed technological equipment and the investment needed to be made to acquire those equipment. It specified measures such as constant orientation programs, data collection, and evaluation to ensure the sustainability of the plan.

The shortfall under the curriculum alignment and instructional integration is that there is lack of specificity in terms of timeline, activities, and personnel. Critical to instructional integration is the role of the teachers on the field. However, under the Westlake plan, emphasis is

missing on the role of the teacher. Although the role of the technology coordinators, technology specialists, and other officials are very important, the teacher on the field cannot be treated as an outsider. That is, the teacher should be considered as integral to the implementation process. In that respect the requirement of the TPACK framework could be met. Studies indicate that several technological tools in schools remained underutilized or have not been appropriately integrated into the curriculum or instructional activities because the teachers are not so familiar with those tools (Warschauer, Knobe, & Stone, 2004).

Technology Policy, Leadership and Integration:

Under this segment, the plan focused on analyzing district education technology policies, district leadership, and Technology Leader/Coordinator Time Commitments. This analysis were captured under awareness, adoption, exploration, and transformation. The target of the plan on technology policy was to get to the transformation stage through stakeholder collaboration for information exchange; establishing a database and sharing it with schools; design and provide technology equipment and software; and conducting research on educational technology initiatives. Other efforts included developing and sharing of educational devices, applications, and approaches. Moreover, it was to facilitate funding for technology and ensure equity and access. On district leadership, the plan intended to move from the exploratory stage to the transformation stage in the areas of Instructional leadership, assessment and curriculum, competencies/standards, advocacy for technology, measures and accountability for effective use, role model in the use of technology, professional development, support for educational technology, and professional practice. Similarly, on Technology Leader/Coordinator Time Commitments, the plan sought to advance its course by building upon its existing accomplishments.

The plan articulated those objectives and measures to accomplish them in a fine detail. For instance, under the technology policies, the city intended to make its approved plan an integral part

of the district administration and governance. This is very instructive because not only does it prioritize technology in the entire educational policy discourse but also it gets the needed political and other stakeholder inputs. Also important is the willingness to tap into other success stories by reviewing policies of other districts. The plan emphasized the efforts to provide the funding, train administrators and teachers, realigning organizations to ensure timely delivery, and adopt continuous monitoring, and evaluation. All these are critical to ensure that technology in education becomes a success. Perhaps what can be deemed missing in the plan is the role or the parents in the process. Parents can play a complementary role when it comes to the provision of technological tools and monitoring of children on the use of technology. Therefore, the role of parents must find place in the entire policy framework.

Technology Infrastructure Management and Support:

The plan underscored its targets so far as Networking, Internet & Telecommunications are concerned. Its first activity included upgrading the network infrastructure for all the educational levels and the administrative offices. It was intended to provide other internet facilities including VPN connectivity for all district laptops. To ensure cost effectiveness, the technology coordinator was tasked to continue to explore other effective but inexpensive avenues and report same to the District Administration. Access to technology was also factored into the plan. The plan intended to ensure a one is to one teacher-computer ratio, provide latest technological tools, and make sure that necessary and specialized software is available and accessible. To accomplish this, the technology coordinating committee was provided with funds to purchase new computers, upgrade the existing infrastructure, and conduct survey to ascertain the technological needs in the various buildings. The plans intended to ensure an advancement in the stakeholder access to educational information and applications. The district was to achieve these through professional development for staff on the use of eSIS and also to ensure accuracy in data collection and management.

Security is vital when it comes to the use of technology in education. The Westlake City Technology Plan addresses security concerns by focusing on advancing the acceptable use policy, user account management system, wireless network security policies, central log mechanism and review policy, application of anti-virus and spyware software.

The City's technology plan on infrastructure management and support was very detailed and instructive. Particular reference is the provision of constant training, acquiring more advance tools and making them available, and ensuring security. This are very pertinent areas looking at the rate at which technology is growing. Every day comes with new technology, and that also comes with concerns with regards to their applicability and security. Therefore, the emphasis placed on those concerns in the plan is very worthy. If not overly ambitious, the plan does a very good job in this area.

Budget and Planning

The plan recognized the indispensability of proper budgeting, and as such, outlined measures to ensure that adequate resources are provided to accomplish the set objectives. A three year budget was put together by the District Superintendent and the treasurer following a stakeholder (District Technology Committee, Technology Coordinator, and the Director of Academic Services) deliberations. The district projected adequate funding from sources such as eRate funds, school building fund from the Ohio K12 Networking Program, grants from local businesses, and the Ohio Board of Regent.

The city's efforts in the area of budgeting is well explained. However, additional information could be provided on federal assistance, assistance from not-for-profit organizations, and also how or what are proposed to local business community to provide grants. Information on this would be important to measure the coordination between outside stakeholders and the district on educational technology.

Summary and recommendations:

The City of Westlake's Technology plan is quite articulate on the pertinent issues pertaining to technology in education. The plan states the mission and the vision of the city's education policy when it comes to technology application. It goes further to provide details programs that reflect the general technology policy of the state of Ohio. Essentially, the plan identifies the principal stakeholders and their respective responsibilities. However, it is recommended that more information is provided on the characteristics of the membership of the planning and implementation teams. That would go a long way to encourage effective participation and also help to address issues of equity and accessibility. Though ethical concerns and propositions to address that are inherent in the plan, it is recommended that they should be made more explicit.

Though the plan captured the essential components of technology plan (see eTech Ohio online technology planning tool), the composition is a bit problematic in regards to reading. This is because, the city's propositions were written together with the guidelines as well as concept explanations accompanying the eTech Ohio online technology tool. It is recommended that, the City's plan addressed that and articulate the propositions without recourse to repeating the written guidelines in the actual planning document.

References

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