

Leadership for One-to-One Programs

By Leslie Wilson

Leadership for one-to-one teaching and learning in 21st century schools calls for a holistic, dynamic approach. For a successful implementation, the administrator must generate a shared leadership model within the school. The collective and individual strengths of each stakeholder will be called upon for designing and launching a one-to-one program. Adaptability and flexibility will be essential for day to day, short and long term goals and activities.

Dancing with 'change' will become the norm not the exception. The driving force within collective leadership is the school's focus on student learning. At the heart of the school's leadership are a collective vision, which calls on the spirit; learning, which embodies collaboration; and action, which produces vitality. From these perspectives, leadership development shifts from individual-centered to collective-centered; from teacher driven static curriculum and instruction to broad dimensions of learning based on student inquiry and production of dynamic content. The one-to-one classroom continuously evolves around students' personalized learning experiences. Teachers empower learners; leaders empower teachers.

A one-to-one program leader first must create a successful foundation by developing a shared vision for education technology within the school. The administrator must lead the effort with honest communications, sharing expected program outcomes, modeling technology integration, and building an effective, supportive infrastructure. An engaged leader strives to grasp the culture changes happening to stakeholders by understanding new processes, environmental shifts, accelerated pace and robust technology integration that characterize true 21st century schools. Facilitating consistent professional development and understanding the impact of 'change' for individuals is a significant piece of this leadership work.

Michigan's Freedom to Learn (FTL) administrators' professional development is a hybrid of education technology research, specifically that of one-to-one teaching and learning, and the Mid-continent Research for Education and Learning's (McREL's) Balanced Leadership. One-to-one engagement causes a dramatic shift in educational practice presenting opportunity and challenge. The leaders' ability to navigate and guide a transformed ecosystem is critical for success.

Planning is crucial. For some, the changes from traditional to a one-to-one approach will be embraced. For others, the divergence will seem to 'attack' core values and beliefs. Those in the latter group need the collective leaders to address their fears while encouraging risk-taking in a safe environment. McREL calls this 'leading second order change' in schools. There are 11 leadership responsibilities necessary for facilitating second order change (McREL 2005). Those responsibilities coincide with what we have learned about leadership needs for implementing one-to-one programs.

Following are ten focus areas for successful leadership of one-to-one programs.

1. **Vision:** The development of a shared education technology vision among the schools' leaders and stakeholders is essential. Reflecting the community at large, the vision must complement the district's values and overall mission. It must be accompanied by an action plan that is practical, aligned to goals, timelines and funding specifics.

For this process to be successful, the leader needs a solid understanding of the research on technology integration related to student achievement, curriculum and instruction. The leader can then articulate and clarify beliefs about education technology and the one-to-one approach. It is important to share study results that support this kind of implementation to enlighten stakeholders. It is recommended that one-to-one leaders provide information and data that demonstrate the need to shift from the traditional, industrial-age education approaches to those that help students engage the 21st century global marketplace. The imperative for schools to meet 21st century teaching and learning standards is grounded in research.

Sharing and working with that knowledge base must guide expectations. The latter must be realistic and grounded. It is also important that leaders make clear that technology in and of itself does NOT increase student achievement. It is the seamless integration of a guaranteed curriculum, instruction, and technology that drive student progress. Also important to the one-to-one vision is students' equal and consistent access to technology as part of their individualized instructional program.

2. **Development/Design:** Planning for a one-to-one program is essential. It is important to create procedures for pilots, evaluations, and adjustment(s) prior to full-scale and final implementation. States and districts have had success when first implementing pilots with goals and evaluations to help nail down successful, expanded, future implementations. Essential to planning are decisions around: specificity of the project; request for proposals (choice of vendor(s)); hardware; software; infrastructure; classroom management (physical and tactical); batteries; device storage; acceptable use and board policies; student use (home/school/travel to and from school); technology support; professional development for administrators, teachers, technology personnel, parents/caregivers, community members; database management of resources; back-up; disaster recovery plan; and internet access/safety/filtering.

Data collection (evaluation) of the pilot(s) is necessary. The information can be used to adjust the program where needed. Providing evidence of program success and limitation is helpful for stakeholder's understanding and buy-in.

Short and long term goals for program expansion and adjustment(s) must be part of the development and design process. The strategy can be much like that demonstrated by a quality research and design team in a successful corporation. It will be a work in progress that is entrusted to a team that reviews ongoing program feedback and interim assessments. Time for sharing findings, troubleshooting and making modifications will be needed.

The initial one-to-one implementation will include a specific set of students, teachers, schools and classrooms. Understanding the project's impact for the initial/future implementers and later expansions is very important. It is necessary to be aware of how one-to-one students and teachers will engage the learning setting to which they will migrate after being in a robust technology environment.

One-to-one experienced students bring a unique set of skills that demand a collaborative, project and inquiry based, dynamic learning environment. Organized consideration and planning must be attended to as students move from their initial one-to-one classroom to the next grade(s). Leaders must have systems in place to ensure that students' levels of achievement continue even if they move from a one-to-one environment back to a traditional classroom.

The leader and team must have plans for the following.

- Facilitating the early implementers' migration to the next grades; for them teaching and learning has been transformed
- Schedule by which students and teachers keep/hand off the laptops for next three to four years
- Professional development plans for current and future one-to-one teachers, technology staff and administrators
- Program expansion
- Costs and resources for expansions
- Refresh model for devices
- Students' migration to higher grade levels; from elementary to middle; from middle to high school; students with one-to-one experience have different learning skills and expectations than those utilized in traditional classrooms.

3. **Curriculum/Instruction:** Leaders must ensure that curricular design, pedagogy and school environment utilize the right technologies to maximize teaching and learning. As stated earlier, having a *guaranteed* curriculum with (common and measurable learning standards for all students) is an essential foundation for student achievement in one-to-one environments. Teachers' primary pedagogical shift will come in knowing how to *meaningfully* integrate technology with curriculum and instruction. This occurs through consistent, ongoing professional growth opportunities which include teachers' practicing, sharing, reflecting and debriefing within a structured learning community.

Understanding the difference between 'low-level' and 'meaningful' integration will guide expectations for curriculum/instruction/technology assimilation. Keyboarding, word processing and basic presentation development are examples of 'low-level' integration. Project-based learning, independent research, problem-solving, student collaboration, and data analysis, synthesis and

reporting are examples of 'meaningful' fusion of technology, curriculum and instruction. Michigan's experience shows that it takes, on average, three years for a teacher to become a highly skilled expert in this practice. Ongoing, focused professional development, ideally using a coach/mentor framework, is necessary for institutionalized transformation to occur.

In a one to one environment the dynamics of management change dramatically from those of a traditional classroom. A unified set of expected student technology-related behaviors must be developed and should be consistently communicated and enforced between home and school. Leaders must understand and support these new expectations and standards.

Effective and 'just in time' technical support is important to uninterrupted instruction. Leaders can help teachers become technology trouble-shooters so that they are able to solve a number of technical glitches. This will facilitate consistent teaching and learning. Inevitably, technology does present challenges. It is also important for leaders to expect teachers to have backup plans in the event that the technology usage planned for a lesson becomes unavailable. This kind of flexibility and adaptability are key ingredients for 21st century learners.

The leader can ensure a quality one-to-one instructional environment by doing the following:

- Ensure power supplies and sufficient surge protected power strips
- Specify use of printers for students and teachers
- Enforce an Acceptable Use Policy that includes 'acceptable' software
- Communicate disciplinary policies that apply to technology breaches
- Employ filtering software
- Make available a list of acceptable websites for student access
- Define and implement a plan for device re-imaging
- Provide 'swap-out' devices for loan
- Design and implement a technology trouble-shooting plan.

4. **Professional Learning:** It is essential for leaders to ensure comprehensive, ongoing, focused professional development for those engaged with the one-to-one implementation. Veteran one-to-one groups know that teachers move from novice to expert over a period of three years. Leaders must assure that the training experiences are differentiated for the teachers' unique skills sets. Educators will move along the novice to expert continuum at different speeds.

One-to-one computing generates constructivist, student-centered classrooms. Teachers need techniques to replace conventional teacher-centered strategies. In addition to the training around technology integration, leaders need to develop plans that include 'time' for teachers to learn. Models include a combination of the following: after school and weekend development sessions, teacher release time, retreats, summer-months workshops and online opportunities. Successful leaders also know of the importance and carve out time for teachers to discuss their craft around curriculum, technology resources and best practices.

Leaders also benefit from professional development. They need an understanding of the technology and curricular matters involved in the one-to-one environment. The professional learning plan should span the period of time from pre-launch to when teachers have solidified real integration expertise. Professional growth options must continue beyond that point to complement the rapid pace and increased advances of technology and information. Coaching and mentoring frameworks have been very successful-particularly as teachers move from novice to expert in practice.

An effective process for moving to a one-to-one program is to provide teachers with devices and training for a span of time prior to the students' launch. This scenario gives teachers individual and collaborative opportunities to explore and experience teaching and learning possibilities using technology and related resources. Leaders can set expectations for this period of teachers' professional growth. The goal is to ready teachers to be able to more effectively and efficiently engage the whole classroom, student one-to-one launch.

School culture is dramatically affected in an enhanced technology environment. Training facilitates an understanding of this change. It is important for leaders to provide an environment of 'safety' for teachers to try new ideas and practices without risk.

All stakeholder groups need to benefit from professional development around one-to-one in order to facilitate program success. Groups should include, at a minimum, administrators, teachers, technology personnel, parents/caregivers and community members.

5. **Professional Practice:** Leaders must model the use of technology in their professional work-increasing their own productivity. Continuous growth and development in this regard speaks volumes to the leaders' constituency. Classroom visitations where teachers and students are engaging the one-to-one program is important. Regular communication and discussion among these pioneers will guide progress and program adjustments. The leader builds the environment for success. This usually means challenging the existing culture and norms. Basic to this are establishing lines of communications, systems for input and feedback and efficient problem-solving.

Change, such as that created through one-to-one programs, is systemic. Each system, as part of the whole, must be working in the direction of fostering the transformation. Close attention and alignment is needed among policies, procedures, services, information, and technology engagement. There are not templates for these areas as each will be unique to the school environment. What is needed is ongoing reflection, rethinking, and redesigning among the professional learning community.

Leaders must understand the social, legal and ethical education technology issues. It is important for leaders to model responsible decision-making related to these matters.

6. **Operations:** Leaders must ensure the integration of technology to support overall district systems for learning and administration. As the one-to-one implementations grow and expand, the districts' abilities to respond to the robust technology use will affect teachers' consistent work toward ubiquitous integration. The more that school leaders and officials understand, support and engage the implementation, the greater the chance for project success and growth.
7. **Assessment and Evaluation:** It is important that a system of ongoing and annual evaluations be in place to assess program goal attainment and incremental measures of needs for adjusting the project. The annual summative evaluations provide necessary information regarding overall program success, needs for improvement, and focused areas of response about project efficacy. Research findings should be accessible to stakeholders. It is recommended that evidence of adjusting the program as needed be shared through ongoing communication systems.
8. **Communications:** As with all things that are 'change' in schools, the leaders' ongoing and consistent communications are critical. Sharing the research and knowledge base with district stakeholders is a must. The community will need to share, discuss and understand the project. This includes the good news as well as the challenges. Multiple ways to share and discuss are recommended.

Ideas for communicating are: structuring scheduled meetings to allow for different groups/stakeholders to have concerns heard and addressed; facilitating immediate support where needed; learn from others who have traveled this same path- seek help when needed; be highly visible and available within the project; support the risk-taking pioneers; provide printed or electronic newsletters/updates for constituents.

Repetition of key messages helps. Assert and clarify what is happening with the program through the avenues chosen for communicating. Remind the community of the reasons for the program launch, the focus on student preparation for the future and the shared vision that provided the foundation for the effort.

9. **The Implications of Change:** Leaders must understand and work with the impact of 'change' for individuals involved with the one-to-one project. There are early adopters who will positively engage the project and necessary tasks. There are those for whom this approach will challenge their beliefs and values about education. They will be recalcitrant. A responsive leader must work with the reluctant to help them overcome fears and promote their taking necessary risks. Toward this end, the leader can listen to and recognize differing perspectives; illustrate unfounded reasons for dissension; resolve issues (i.e. battery life, power strips, etc.); arrange for reluctant teachers to visit classrooms where the project is successful; provide skeptics the opportunity to witness the zeal of teachers and students who have embraced the changes; orchestrate scenarios for teacher to teacher problem solving.

Adaptability, flexibility and change-up will be essential for the shared leadership team. Unanticipated situations will occur with even the best laid plans. As students become self-directed learners, teachers' practice will need to become more of a resource, coach and guide. Recognizing when and how to shift will become part of the day to day game plan.

10. **Sustainability:** Funding short and long term education technology goals is part of the vision. Districts cannot count on one-time funding windfalls to subsidize short and long term technology goals. In times of tightened school budgets, technology is often the first area 'hit' by cuts. Real 21st century school vision makes funding for education technology an imperative. With no available silver bullets, leaders must rely on focused and thoughtful funding planning with a collaborative team of district leaders. Using data to drive ed-tech goals, it is important for the district look at its current technology resource allocations, return on investments and total cost of ownership. Resource recapture, cost avoidance and fund reallocation have become staple strategies for districts to find funds once they have made education technology a top priority. Leasing and parent/caregiver purchases through the school/vendor relationship are always avenues that have gotten traction among one-to-one schools over the past two years.

Particulars for the Principal

The principal is the key leader in a one-to-one environment. His or her leadership skills will directly impact the program's success. The following principal leadership activities are recommended.

- Lead the identification of the schools shared vision and purpose for the one-to-one program
- Communicate consistently with all community members-the good news and the challenges
- Facilitate cooperation, unity, trouble-shooting and collaboration among staff
- Create professional learning communities for one-to-one teachers, parents/caregivers
- Build a climate of culture 'shift' and change
- Ensure a 'safe' environment for risk-taking, trial and error and mistakes
- Develop, design and implement consistent content and schedule of professional development
- Provide or facilitate 'just in time' solutions issues
- Respond to individuals' engagement of 'change'
- Visit one-to-one classrooms; interact with students and teachers
- Model use of technology in building operations
- Ensure technology support and process for problem-solving

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