The New Math for Justifying Online Learning

LEVERAGING ROI AND VOI ANALYSIS FOR ED TECH INVESTMENTS

Blackboard K-12

Project Tomorrow

www.tomorrow.org/speakup/

Speak Up

In the traditional model of education, decision-making for policies and programs to support the core mission of the school or district has been based predominantly upon the intrinsic benefits to the students of the suggested program or policy. Justification for large and small decisions, low cost choices as well as high investment initiatives have been articulated with value-add statements such as increased student engagement, enhanced learning opportunities and development of 21st century skills. And while these value statements remain respected and important, conditions in the world outside of the schoolyard, most notably the global economic challenges, are driving a brand new set of discussions in district offices and school board conference rooms around funding decisions.

More and more of our schools and districts are now facing the often incompatible challenges of achieving their core mission of improved student achievement, while at the same time trying to balance an increasingly shrinking budget. These seemingly contradictory goals are propelling many districts to think differently about the use of emerging technologies within learning, and to re-think their traditional approaches to investment decision-making. As a case in point, innovative districts all across the United States are tapping into online learning as an effective and efficient way to expand and enhance learning opportunities for their students as well as their staff. Not surprisingly, this pioneering approach to education delivery is often coupled with a call for new and creative thinking on the decision-making and investment justification process. In this special report, we will address the opportunities that exist for districts today to think anew about how they are justifying online learning initiatives as well as other emerging technology projects. The recommendations, tools and featured projects described in the report are meant to support and enhance the current activities of school and district leaders, whether their district is just starting out with an online learning initiative or they are seasoned experts looking to expand their projects. The report provides these leaders with a new language and process for examining their investment decisions and assisting them as they navigate this new normal where the need to improve is not automatically bolstered by increased funding. Rather, it is expected that education technology investments today will provide a double bottom line with a strong return on investment as well as providing high value to the core mission of the district. This report aims to provide education leaders with a new way of looking for that double bottom line.

It is our goal that this report, "The New Math for Justifying Online Learning," will serve education leaders in three distinct ways:

1. **As a spark for initiating new discussions internally within their districts about investment decisions,**
2. **As a sustainable resource for understanding how other districts are approaching these twin challenges of fiscal responsibility and academic success, and**
3. **As a guidebook for developing a new way to justify education technology investments that is personalized to the unique needs of each district.**

To accomplish these goals, we will address the following key questions:

- **What factors are driving districts to initiate or expand online learning?**
- **What do the terms "Value on Investment" and "Return on Investment" mean in an education setting?**
- **What is the new math for justifying online learning decisions?**
- **How are innovative districts using this new thinking to justify their online learning projects?**
- **How can you use the report's recommendations and tools in your district to evaluate your district's ed tech investments?**

> *The greatest challenge to any thinker is stating the problem in a way that will allow for a solution.*
>
> Bertrand Russell

Increased Demand Driving New District Investments in Online Learning

As noted in this year's *Learning in the 21st Century: Online Learning Trends Report* released by Project Tomorrow, "Online learning enables a greater personalization of the learning process for both students and educators and facilitates opportunities to collaborate with peers and experts, thus empowering a new sense of personal ownership of the learning process." Students, parents and teachers are buying into this new expanded value proposition for online learning and are thus, fueling an exponential growth in the demand for more online courses and opportunities as evidenced by the latest Speak Up national data:

- **Over one-third of students in grades 6-12 would like to take an online class (includes a 62 percent increase in middle school student interest since 2006).**
- **Five times more parents say online classes should be part of the ultimate school than just two years ago.**
- **26 percent of teachers now say that online learning is their preferred method for professional development courses.**

Correspondingly, school and district administrators are responding to this demand by initiating and expanding online learning opportunities for a variety of audiences within their districts with very significant growth in just the past two years.

FIGURE 1: WHO IS YOUR PRIMARY AUDIENCE FOR ONLINE CLASSES IN YOUR SCHOOL OR DISTRICT?

Audience	2008	2010
Administrators	21%	36%
Teachers	49%	53%
Traditional students	24%	40%
Home-schooled students	5%	13%
Students in continuation schools	3%	18%
At risk students	10%	16%

Given that teachers are the #1 audience for online learning according to most administrators, it is instructive to understand what is driving new online professional development initiatives in particular. Based upon our interviews with the district leaders, there are three key factors that are motivating this higher level of online learning interest. First, many districts are turning to online professional development to solve the perplexing problems of staff training logistics. Polk County Public Schools in Florida covers a geography that is larger than the state of Delaware and thus, centralized training for their teachers is not a practical consideration. To avoid not only travel time for their staff but also the costs associated with extensive travel, Polk County facilitates staff development online and has been doing so successfully for the past seven years. Jefferson County Public Schools in Colorado has also widely adopted online professional development for their teachers to address some logistical issues. With over 5,000 teachers, it is difficult to find a location that can accommodate their staff. Additionally, as Jill Montoya, Online Professional Development Coordinator, aptly pointed out, four o'clock in the afternoon is not the best time for teachers to receive training after being in the classroom all day. Jeffco's Academic Portal provides a one-stop shop for teacher resources and facilitates online access to just-in-time professional development that can be part of every teacher's day, all day long.

The second driver for online staff training is often compliance. Given new requirements for re-certification, the need to accommodate new legislative policies and programs, and/or to ensure consistency across the teaching staff, many districts are leveraging online courses to provide more effective and cost-efficient staff professional development. School districts in Florida provide an excellent case in point on this. In addition to current certification requirements, Florida teachers who instruct secondary students in reading are required to earn additional college credits or 300 hours of specialized in-service training by June 30th of each year. This endorsement add-on (mandated by both state and federal policies) created an opportunity for Marion County Public Schools to think differently about their professional development model. Their solution was to provide their teachers with the required 300 hours of in-service training online. The online solution proved to be a better use of their limited internal resources and was a less expensive alternative to providing face-to-face training. And it provided an excellent opportunity for the district to "test drive" online learning as a professional development model. As explained by Dr. Marilyn Underwood, Executive Director, Staff Development, the "sit and get sessions" just don't make sense anymore in 2011.

There are actually several more cost efficiencies driving districts' interest in online professional development. Online professional development courses can accommodate more teachers per instructor than traditional face-to-face courses. The online courses can be used over and over again without re-investment and provide the bonus benefit of greater content consistency with a larger group of teachers sharing the same experiential learning base. By not pulling teachers out of class during the school day, districts are saving the costs of substitute teachers. Online curriculum guides are decreasing or even eliminating hefty paper and copying budgets. And new online collaboration tools are increasing the cost-efficiency of even small group meetings. In a novel twist, some districts are creating new revenue streams for themselves by selling their online PD courses as well. All of this adds up to not only the increased efficiency of the learning process for their teachers, but also significant cost savings or revenue gains that can be re-invested in other programs or used to expand the online learning opportunities for both teachers and students. As an example, to reduce printing costs, Baltimore City Public Schools imbedded their curriculum guides into Blackboard. According to Bert Ross, Manager of the Teacher Support System, with over 234,000 visits to the curriculum guides in this past school year, the district saves enough money in reduced publication costs to more than offset the annual investment in their LMS. This is the new math of justifying online learning at work.

Using the success of their initial online learning initiatives as the foundation, many districts are now venturing into new digital learning arenas to achieve further goals in a cost effective manner. Some districts that started with teacher professional development are leveraging their teachers' good experiences by providing blended learning environments for their students. Others have explored leveraging online learning platforms as a meaningful tool for parent communications, teacher-parent conferences and community engagement. More and more administrators' professional development is now being provided through online courses, also. Polk County Public Schools used their online learning platform to facilitate an employee wellness campaign that included a content wiki and a way to not only locate a local gym, but also find a carpool buddy. Given the national statistics on the costs associated with employee health, this is an innovative initiative that will surely prove to be a positive financial return for Polk County. According to Bill Bucklew, Senior Online Training Coordinator, user participation is much higher than expected!

The New Math: Return on Investment and Value of Investment Analysis

Despite the increased demand for online learning from students as well as staff, and the strong interest of administrators in leveraging online learning for multiple benefits, the harsh economic realities continue to wreck havoc on district balance sheets and impact district investments in online learning. Decreased state and local funding has created serious budget challenges for schools and districts nationwide with no signs on the horizon of a quick fix or easy solution. Specifically for online learning, limited state funding is the most significant barrier that administrators say is hampering their plans to initiate or expand an online learning initiative. Not surprisingly, district administrators, therefore, are increasingly being asked to complete a more detailed financial analysis for their online learning initiative that goes beyond the value-added student or teacher benefits and focuses tightly on a tangible, profit and loss oriented return on investment perspective.

This is a daunting task for many districts for several reasons. First, there is little precedent in the education sector for this kind of analysis. In fact, only 18 percent of the district administrators who have online learning projects currently in place stated that they had to complete a return on investment analysis to win approval for their project originally. For many this idea of making a decision about an education program based upon a strict dollars-and-cents analysis seems like an anathema. Even within our interviews, the more comfortable position about justifying an online learning project was around those intangible benefits to the students and teachers such as increased engagement, greater motivation and teacher effectiveness. The level of knowledge regarding how to do a financially oriented decision analysis is also highly limited. A majority of district administrators (56 percent) who participated in our mini poll on this subject admitted that they have limited or no familiarity with the concept of "Return on Investment." Finally, due to the complex structure of school and district finances, it is often very difficult to extract the financial numbers needed to do a comprehensive fiscal analysis on an online learning project. Mike Foland, Coordinator, Student Systems from Fairfax County Public Schools (VA) advises that this kind of analysis requires involvement of all stakeholders – IT, the instructional community, professional development and other support partners – so that you can evaluate a total cost of ownership over the life of the project. The scope of the initial implementation and plans for expansion will drive the cost comparison effort and should have a strategic plan as its foundation. As Mr. Foland explains, the savings expected from the online implementation need to be realistically offset by the entire array of costs including those associated with infrastructure or hosting, support costs, development and ongoing modification, maintenance of online class content and, if hybrid use is included, costs for district-wide training and management processes. For organizations new to planning for online environments identifying these costs can be difficult and tapping into the proven expertise of other districts that have already been through this process can be invaluable.

So, what do we really mean by the terms "return on investment" or "value of investment" from an analysis and decision-making perspective? And how is that currently playing out with online learning projects in real districts?

Return on Investment (ROI) analysis is a key accounting concept and simply put, it is calculated as the earnings generated per dollar of investment. An ROI evaluation therefore compares solution costs to the monetary benefits derived from those solutions. The difference between the solution costs and the monetary benefits may be derived from savings (such as from expenses that are eliminated or reduced) or from new revenue sources (such as from fees or product sales) that result from the investment. From a decision-making standpoint, an ROI evaluation allows the organizational leadership to compare like investments by providing an impartial, financially focused assessment. Unless you can calculate the financial impact of meeting a particular learning outcome, those intangible benefits to students and teachers that are such a core component of the education mission, therefore, are generally not part of the ROI equation.[5]

Value of Investment (VOI) analysis, however, looks at how well a particular investment achieves the core mission for an organization. To be successful with a VOI analysis, it is critical that the organization have clear-cut objectives for their investment project. Those objectives can include both interim as well as end outcomes and should include discrete parameters to measure successful accomplishment or achievement. Using a VOI analysis does provide opportunities for organizational leadership to compare investments though it is difficult unless the program goals are similar.[6]

In the mini poll, 85 percent of the district administrators said it was likely that they would use a set of ROI tools that was developed specifically for evaluating current and future online learning initiatives, as presented in this report.

District Example

Mooresville Graded School District (NC)

For Mooresville Graded School District (NC), the use of the learning management system was the underpinning for the district's "digital conversion." The district's goals were to transform the learning and teaching process district wide through the integration of a wide range of different technologies. To make the investments necessary to achieve those goals, the district leadership examined their traditional budgets with a new eye, and made decisions to spend their existing dollars in different ways. For example, print textbook funds were repurposed since digital content could provide those resources. Investment decisions were, therefore, based upon the broader end goals of the digital conversion. The intent was to be cost neutral to the bottom line and at the same time to provide a much more appropriate education environment for their students. According to Dr. Scott Smith, Chief Technology Officer, "the LMS makes the digital conversion possible. It is the glue that holds this all together for our district." In the case of Mooresville, therefore, a VOI analysis based upon the value-added benefits to the district and their students was the ultimate driver for their investment decisions.

District Example

Marion County Public Schools (FL)

Contrastingly, in Marion County Public Schools (FL), the catalyst for an online professional development program was primarily financial and the district employed an ROI type analysis to support that initiative. By contractual agreement, the school district was required to pay their teachers $15/hour to attend professional development outside of school hours. With new Florida Reading Endorsement legislation, the district needed to provide approximately 100 teachers with 300 hours of required training before the end of the school year to keep in compliance with state policy. The cost of the teacher stipends to conduct that training after school hours would be at least $45,000. Additional costs would include facility use and supplemental instructors. These were costs that the district could simply not afford. Given the realities of the budget and the need to be compliant, Marion County embarked on their first online learning initiative to provide this required course to their teachers. With the online course, the district did not have to pay the hourly stipend, did not need to rent training facilities and did not need to bring in supplemental instructors. Though the fiscal concerns were the initiators of this project, the project also provided an opportunity for the district to learn about best practices for implementing online professional development. From that first experience, the district has subsequently expanded their online courses for teachers and created a new environment for professional development in the district.

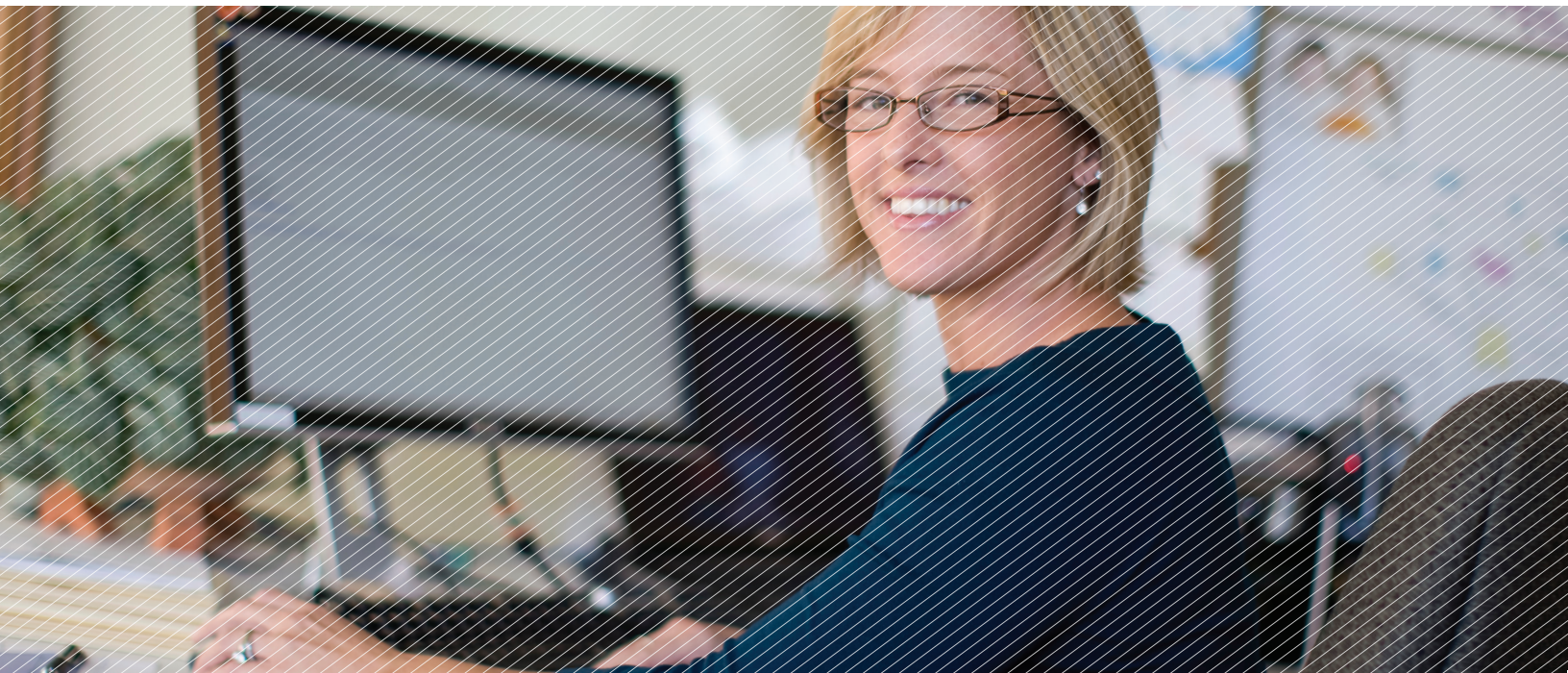
Yet, despite these inherent challenges to a Return on Investment (ROI) type analysis, there is a new heightened interest in how to leverage a more quantitative analysis perspective for online learning decision-making. In the mini poll, 85 percent of the district administrators said it was likely that they would use a set of ROI tools that was developed specifically for evaluating current and future online learning initiatives, as presented in this report. Additionally, almost three-quarters of those administrators noted that they would repurpose these same tools to help them justify the investments in other education technology initiatives as well such as mobile learning projects, digital textbooks and parent information systems.

The translation of the theoretical descriptions of ROI and VOI into educational practice, especially in terms of justifying investments of both money and time in online learning, is at the heart of this report. Additionally, the insights of the district administrators that participated in the research project are most impactful. For some of the administrators, the initial driver for their online learning projects was the benefits from the investment, rather than the financial return. In some cases, a return on investment type analysis was required to gain initial approval of the project, to sustain or expand the existing program, or to develop a companion program for a new audience. And in a few cases, the financial return from the online learning investment was an unintended, yet very positive consequence of the online learning initiative.

There is no right or wrong way to approach justifying an online learning project. What may be required to win approval within one district may not be essential in another district. However, given the new realities of district and state budgets, it is vitally important today more than ever that the investment decision-making process be strategic with a clear eye on the goals of the project and how the proposed set of solutions will meet the needs of a particular audience within the district. To support school and district leaders with this process, we have developed the Online Learning Justification Ladder, a series of strategic steps to support the review of any online learning project (or any education technology project for that matter) from the perspective of an ROI or a VOI analysis. The Ladder provides a structured format for collecting key data to support a decision process, to be the foundation for internal district discussions, and/or to share information externally with community stakeholders about strategic initiatives. The Ladder facilitates a new language, a new process and a new strategic approach to district decision-making and investment justifications – just at the time when our districts need it the most.

A New Tool for District Leaders: The Online Learning Justification Ladder

The Online Learning Justification Ladder (the "Ladder") consists of six steps that ask the essential questions required to establish the foundation for an ROI and/or VOI analysis for an online learning project. In this section we will examine each of those essential questions and provide real world examples provided by the district leaders who participated in the research phase for this report. Additionally, the Appendix of this report includes three case studies where the Ladder is used



to understand the justification process for a particular online learning project in a real district. The Appendix also includes the Ladder in a worksheet format for our readers to use within their own district planning for justifying the startup and/or expansion of online learning initiatives.

Ladder Step 1: How?

On this first step, it is important to identify how you want to approach the justification process with either an ROI or a VOI analysis. Increasingly in some districts, that decision is pre-determined; a return on investment analysis is absolutely required for budget approval. In some districts, it is important to address both the financial investment criteria as well as the intangible benefits of the project. Understanding what kind of analysis is needed for both initial start-up funding as well as sustained support is the critical key to this question. Upon determination of the justification approach, the next step is to determine the benchmark criteria for the analysis. In other words, is there a financial or value-add goal that must be achieved with this project to satisfy the justification process? Those goals must be clearly articulated to be able to move on to Step 2 on the Ladder as they determine how to respond to the following questions.

For example, when Jefferson County Public Schools (CO) started their Virtual Academy in 2007, there were several VOI objectives that were of paramount importance to the district. According to Judy Bauernschmidt, Director of Student Learning, those value objectives included addressing the needs of homebound students and athletes, providing an alternative learning path for at risk students to support greater graduation rates and to help all students develop strong 21st century skills and habits of lifelong learning. The district developed a master plan to create their own virtual school to accomplish these goals and hired a very seasoned staff that had proven experiences with online learning to jumpstart the effort. In addition to the VOI objectives noted above, however, the district also mandated a financial objective. The new Virtual Academy could borrow money for start-up funding, but it needed to be 100% profitable and self-sustaining by year 3 of operations. Thus, for Jeffco, the investment justification at the district level for the new Virtual Academy included, in reality, both an ROI and a VOI objective.

Ladder Step 2: Who?

For any strategic process, it is advisable to start with a problem or challenge and work backwards to a solution. For this step, it is recommended that districts identify a particular audience or stakeholder group that has a need that may be best addressed through an online learning solution. With an ROI analysis, the costs associated with providing a traditional solution should also be calculated. With a VOI analysis, the additional benefits that will be derived for this audience (or the district in general) should be identified. There are significant advantages to keeping the focus, especially for a startup online learning initiative, on a particular audience with a well-defined need.

Within our interview cohort, there were several examples of audiences with well-defined needs. For Fairfax County Public Schools (VA) and Lubbock Independent School District (TX), online summer school programs met a well defined need for a cohort of students who either needed remediation or advanced classes. Polk County Public Schools (FL) identified a need for an Assistant Principal training class where these novice administrators could track their own progress and build a virtual network of peers for support. And in Marion County Public Schools, as noted in an earlier section, a group of their teachers needed to take 300 hours of required training. In that case, the district was able to not only identify a targeted population for their online learning project, but they were also able to very clearly articulate the comparative costs of a traditional training approach to the online solution. It should also be noted that some districts have very effectively built a justification case for their online learning project by identifying students or teachers from outside their district as a key audience.

Ladder Step 3: What?

With the "what" step, the deliverable of the online learning project is defined and how that deliverable meets the specific need of the intended audience is articulated. The deliverable may be online classes for students or professional development for staff or a new way to conduct parent-teacher conferences. Within an ROI analysis, the types of costs that may be identified include the cost of running a virtual school or developing the courses. The types of supplemental revenue that can be derived from the project are also identified here. The VOI analysis inputs may include, for example, the value to a student who

finishes high school through online classes instead of dropping out. Most importantly, the development of the project deliverables should be in alignment with the objectives of the project and the needs of the targeted audience.

The variety of online learning projects within our small research cohort was impressive. Equally impressive was how well the course offerings met the unique needs of the targeted audiences. For example, Clay County's Home Connections Program provides a way for hospital homebound students to receive high quality instruction through online classes. As articulated by Alisa Jones, Supervisor of Instuctional Support Service, the program provides far more to these students than just academic support. It also provides a way for the homebound students to stay connected to their classmates and feel less isolated through class discussion boards, web conferencing and virtual field trips.

Ladder Step 4: When?

The discussion of when the students or teachers access the online courses or online learning environment is important for both the ROI and the VOI analysis process. From an ROI standpoint, the "when" question provides a window into specific costs. On the VOI side, it directly addresses the key components of the online learning value proposition such as time convenience and the desire to work at one's own pace.

One of the drivers for Jefferson County's online teacher professional development was the realization that late afternoon was not the best time for teachers to receive training. The idea that PD does not need to be limited to after school time or even Friday staff meetings provided a good impetus for re-thinking the entire delivery process for professional development. For the teachers in Lubbock ISD, it was not just about the convenience of doing their professional development while in pajamas on a Saturday morning that was appealing, it was also that the courses could be self-paced and segmented as needed. Tracy Clanton-Smith, LISD Online Coordinator, summarized the real benefit perfectly: No more sitting for 3 hours in an uncomfortable multi-purpose room chair! From a financial analysis standpoint, the examples of online summer school programs are especially instructive. By providing online summer school for advancement, Lubbock ISD was not only addressing the needs of their students to take required courses such as health and government, but also identified a way to generate revenue to cover the costs of the online program all year long.

Ladder Step 5: Where?

Like "when," this question gets to the heart of the online learning project deliverable and also provides new opportunities to understand yet unspoken needs of the intended audience, and areas for potential future expansion of the project.

Within Mooresville's digital conversion initiative, parents have access to information about their child's academic achievement and also can receive alerts about activities or events. By facilitating these connections through the district's LMS, the traditional paradigm of parents receiving information at home through their child's backpack or at the annual open house night at the school is forever changed. Parents may now access information about their child's grades and attendance while sitting at their desk at their work location or even conceptually through a wifi connected mobile device while at a ballgame. Fairfax County's online academic portal is accessed 24 hours a day with heavy traffic from 6 am until 10:30 pm almost every day. Considering that students and teachers are only in school a fraction of that window of time, most likely they are at home when they are using that site. Fairfax had further proof of the power of home access to their online portal this winter when during several snow days some teachers and their students were still hard at work accessing wikis, discussion boards and content. Mooresville has noticed that same use of their LMS during snow days as well.

Ladder Step 6: Why?

The data collection and analysis process culminates with this step and the critical question, "Why is this online learning project a good investment of your district's time and resources?" Using data collected and analyzed on the other steps of the ladder and depending upon the objectives and goals of the district, this step involves developing the ROI or VOI justification statement.

As discussed previously, the ROI justification can be based upon either a reduction in expenses or the development of new revenue sources. The following budget expense line items may be applicable to this process:

- **Costs associated with travel for training or meetings**
- **Meeting site costs – training rooms and refreshments**
- **Printing for training materials or curriculum guides**
- **Substitute teacher fees or training stipends**
- **Textbooks or other curriculum materials**
- **Software licenses for redundant products**
- **Costs for printing and mailing information to parents**
- **Transportation costs for field trips**

Additionally, some online learning projects provide opportunities for new revenue to be generated in the following areas:

- **Fees for professional development courses for internal and external staff**
- **Fees for summer school courses for students**
- **Revenue from selling in-district developed courses**
- **Revenue from operating a virtual school for another district**

For a VOI justification, the valued-add benefits of the project must be clearly defined and meet specific needs of the targeted audience and/or the district. A sampling of such benefits that would help to justify an online learning project may include:

- **Course expansion and credit recovery**
- **Student engagement, achievement, productivity**
- **Teacher productivity**
- **Increased participation in professional development**
- **Parental/community interactions**
- **Curriculum alignment and consistency across the district**
- **"Greener" approach to operations**
- **Increased staff morale and motivation**
- **Competitive edge when competing with private providers**
- **Reputation as an innovation leader**

To model the use of the Ladder as a self-assessment and strategic planning tool, the appendix includes profiles of how three different districts (Lubbock Independent School District, Jefferson County Public Schools and School District of Clay County) are leveraging ROI and/or VOI analysis to justify their online learning projects.

Ending Thoughts: Recommendations from the Field

All across the globe, education leaders are having new discussions about the value of investing in online learning to transform teaching and learning. These conversations are heralded by students who are eager to leverage emerging technologies within their learning lives, and by their parents who see online learning as a way to create more student-centric classrooms. Teachers are also increasingly enthusiastic about the potential of online learning for their own professional development needs for similar reasons. And many school and district administrators see online learning as the linchpin in their strategic plan for creating new digital learning environments that more appropriately prepare their students for the global workplace and community.

Despite the increased demand for online learning and the strong value proposition that is emerging for all stakeholders, districts still struggle with how to quantify the return on the investment in online learning. In today's economy, that ability to present a financial case for an investment in online learning is as important as articulating the mission-supportive goals of a project or initiative. In this report, we have provided education leaders with a new set of tools, processes and language for examining their investment decisions, specifically with an eye on that double bottom line of both financial and value return. This new math for justifying online learning is bolstered by the real world examples of how innovative leaders from a range of different districts are tapping into this new strategic thinking approach to not only justify their projects, but also uncover new opportunities for increasing value for their district. The experiences and lessons learned by these leaders are a treasure trove of wisdom and serve as a guide for the continuing evolution of this important discussion around ROI and VOI analysis for online learning. The following recommendations represent a distillation of some of those experiential insights and hopefully, can enlighten and inform your district's strategic thinking as well.

RECOMMENDATIONS ON LEVERAGING ROI AND VOI ANALYSIS FOR ONLINE LEARNING PROJECTS

1. Know what kind of justification is required for your project to be approved initially and to be supported in the long term. If you need to demonstrate a financial return on investment, be prepared to do so. And when preparing a value on investment justification, include tangible benefits and financial return data in your justification plan. You may need it in the future!

2. Create a comprehensive plan for your online learning project that looks at all operational elements. Understand the needs of your targeted audience and ensure that your online learning project directly addresses those needs. This approach will help you identify specific areas that demonstrate either a financial or value-add return on that investment. The best online learning projects are most often the underpinnings for a comprehensive district strategic plan for more engaged and empowered learning.

3. Don't overreach on your online learning projects. Focus on a project with a high profile need, a well-defined audience and a set of measurable goals to get started or to jumpstart an expansion of online learning in your district. A good place to start is often a compliance driven project such as providing an online professional development course that teachers need for re-certification. Start with a pilot and grow strategically as you can demonstrate success.

4. There really is no such thing as a free lunch. Understand what are the real costs associated with your online learning project and how the costs of your online project compare with the costs of a more traditional solution. An important component of an ROI or VOI justification is how the new solution compares to other alternatives.

5. Don't be afraid of ROI. Examine your potential cost savings from every angle. Think creatively about how your online learning project could also generate fees or revenue. This unintended income can often offset your project's costs and provide additional financial benefits to the district. This creates long-term sustainability for your project.

6. Engage your stakeholders in the justification process. You will be surprised how the unique perspectives of students, teachers, parents and community members can illuminate new areas of savings or value. Also be transparent in your planning and the justification process. To get community buy-in, transparency is not only politically important, but vital for success.

7. As your online learning projects mature and become more metabolized within your districts, the term "project" is no longer applicable. Online learning is then fully integrated into every aspect of your school or district's operations, philosophies and mission and it is impossible to see where your former project starts and stops. The ROI or VOI for your project is now part of the investment analysis of every district decision.

8. You can do this! Whether you are starting with one online professional development course or implementing blended learning throughout your district, it is possible to justify that investment with an ROI and/or VOI analysis. Get started – become a New Math expert! You may find that you can use these same skills to justify other emerging technology projects as well.

Profile: Jefferson County Public Schools (CO)
Project: Online Teacher Professional Development
Administrator: Jill Montoya, Online Professional Development Coordinator

About Jeffco:	Jefferson County Public Schools (Jeffco) is a large suburban school district in the greater Denver area covering 476 square miles. Jeffco services 85,946 students with 5,000 teachers.
Ladder Steps for:	Jeffco Teacher Professional Development
HOW? Identify how you are approaching the justification of your online learning project. Are you using an ROI or a VOI analysis?	To accomplish Jeffco's goal of creating online learning options for our students, it was imperative that we train our teachers accordingly. A specific teacher professional development course was created so that the teachers could have a first-hand experience of learning in an online environment while they also gain the knowledge of best practices and instructional strategies to use when teaching online. From a value on investment standpoint, creating this training in an online environment allowed us to build capacity and train multiple teachers without the boundaries of time and space. We had met with our PD departments and we knew traditional methods were not working due to a plethora of reasons: • Not time sensitive: We needed some options for "just in time" learning • Sustainability: We needed to reach more teachers with less facilitators/experts. We have only about 100 Division of Instruction support staff to train 5000 teachers in our district. • Geographically challenged: Our district is too large for after school trainings. • Sub costs: Too high for our traditional training model especially given recent budget cuts.
WHO? Identify a targeted audience for your online learning project.	The course name is "Teaching Students in a Hybrid Environment." This course is designed for middle school or high school teachers who are planning on teaching an online course and/or all teachers who are looking to add online elements and hybrid components to their regular classroom. This includes credit recovery, fully online course options, hybrid/blended options, and online enhanced environments. Completion of this course is required in order to teach a hybrid/online class. We currently offer 75 online PD courses and filled 1900 seats last year. The fee for most of our courses is $50 for our teachers; $100 for other teachers.
WHAT? Describe the specific online learning project that supports the needs of your intended audience.	During this class, participants learn best online instructional practices, increase their understanding of the instructional model as well as become well versed in how to function as a teacher within Blackboard. During this class, teachers learn how to add online enhancements such as discussion boards, wikis, online assignments and tests, and more! This course contains mandatory face to face meetings as well as the online component.
WHEN? Describe when your participants access your online courses.	The course is a six week online course which involves both synchronous and asynchronous activities. Teachers meet for one four hour face-to-face meeting, then complete three weeks online. This is followed by one eight hour meeting and then three more weeks online. The course closes with one more four hour face-to-face meeting.
WHERE? Describe where your participants will access your online courses.	Online portions are done at home or in their work locations. The face-to-face meetings take place at our central admin offices or at a local school.
WHY? Why is this project a justifiable decision by ROI and/or VOI standards? Why should this investment be made?	We know that the move to training in the online environment vs. the traditional face-to-face environment has benefitted the district in many ways both from an ROI and a VOI standpoint. • Savings by eliminating the costs of substitutes. Our sub fee per day is $120 plus benefits. Therefore, the online PD course saves the district $3,000 for a one day training with 25 teachers. Plus from a value-added perspective, we always prefer the students' regular classroom teacher be the one in front of them each day. • Printing costs in the district have decreased. This is directly related to the fact that even during our traditional trainings we now push our documents through the digital PLC or course/learning space. • We are selling our PD courses to other districts and using the funds to support the internal development of new PD courses for our teachers. • Most importantly, we are seeing an increase in the number of teachers who are taking advantage of our optional trainings and the quality of the training interaction is greatly enhanced.

Profile: School District of Clay County (FL)
Project: Home Connections Program – Hospital Homebound Students
Administrator: Alisa Jones, Supervisor of Instructional Support Services, Clay Virtual Academy

About Clay County School District:	Clay County is a suburban public school district located in the Greater Jacksonville Metropolitan area of Florida serving 35,949 students with 2,772 teachers.
Ladder Steps for:	Clay County Home Connections Program
HOW? Identify how you are approaching the justification of your online learning project. Are you using an ROI or a VOI analysis?	Clay County started using Blackboard in 2001 with a $5000 investment providing online professional development to teachers and used an ROI type analysis to uncover significant savings in time and travel. With the decrease in budgets, it has become more important to justify the expenses associated with expanding online learning in Clay County. For this specific program, the Home Connections Program, an ROI approach was the original precipitator – we needed to be able to cut our overall expenses of providing education services to our Hospital Homebound students.
WHO? Identify a targeted audience for your online learning project.	Our Home Connections program serves a variety of students from difficult pregnancies to severe medical issues, i.e. cancer, heart/lung disease, even severe broken bones and mental conditions. The biggest issue with these students is juggling doctor appointments or therapy sessions with traditional schooling. Often times these students are medicated and need sleep or rest during different times of the day. Students capable of digital learning are staffed as full-time students, short-term students, or intermittent. Prior to virtual delivery, short-term and intermittent students placed a hardship on the classroom teacher who was responsible for providing assignments for the Hospital Homebound teacher to deliver to students.
WHAT? Describe the specific online learning project that supports the needs of your intended audience.	Instructor based online courses in the areas of Math, Science, Social Studies, English and Reading were created for 9-12th grade Hospital Homebound students. The courses were personalized according to the length of time students would need the Hospital/Homebound services. The courses were developed inside Blackboard. The Wimba Virtual Classrooms offered the Hospital/Homebound students the ability to communicate live with their instructors on a daily basis.
WHEN? Describe when your participants access your online courses.	The Hospital/Homebound students access their courses anytime and from anywhere. Students attend online classes and complete work daily. They have the flexibility to work morning, noon and night. This is important with those students that are frequently medicated or attending doctor's appointments at a variety of times. The students are able to watch an archive of the courses they were unable to attend live.
WHERE? Describe where your participants will access your online courses.	Students have been able to attend online classes and complete work from their hospital bed, their own home, and even hundreds of miles away from Clay County, Florida.
WHY? Why is this project a justifiable decision by ROI and/or VOI standards? Why should this investment be made?	Our traditional Hospital/Homebound program involved four full-time teachers traveling across the county to serve six to eight students each. Once we began our virtual program the teachers were based out of the county office and traveled virtually into the homes of students. Travel costs were cut 100%. Formerly, the district paid the Hospital/Homebound teachers a mileage reimbursement for traveling to the hospital or the homes of the students. Given an average of a 15 mile travel trip, the savings to the district for 100 students is approximately $55,000 each year. Additionally, our four full-time teachers are now able to serve many more additional students through the virtual program than before. The Home Connections Program was born out of the need to cut costs in the Hospital/Homebound Program, but so much more than a monetary gain was made. When a student is placed in the Hospital/Homebound program, students are generally facing a real health crisis. Schooling is the last thing on the minds of these families. Our goal has always been to maintain as normal of a routine as possible without sacrificing that students education. In our more traditional model these students are pulled away from both teacher and peer interaction. This has not been the case with our virtual Home Connections Program. We have found that children and their families have discovered a real classroom connection despite the student's current situation.

Profile: Lubbock Independent School District (TX)
Project: Online Summer School for Advancement
Administrator: Tracy Clanton-Smith, LISD-TV & Online School Coordinator

About Lubbock ISD	Lubbock ISD is a suburban public school district located in the Lubbock Metropolitan area of Texas serving 28,970 students with 2,025 teachers.
Ladder Steps for:	Lubbock ISD Online School
HOW? Identify how you are approaching the justification of your online learning project. Are you using an ROI or a VOI analysis?	We approached the Online Summer School program as one that needed to be self-sustaining from the start. We knew that it would take some time to build the program, but we wanted to make sure that the steps that we took were always ones that justified the expense with a return on our investment. We also approached our Online School program from the standpoint that we wanted to offer our students the opportunity to take an online course so that they would have the online or virtual course experience before they attended college or a university. We felt strongly that the online experience would be beneficial to our students that continued on with their education after high school.
WHO? Identify a targeted audience for your online learning project.	Our Online School for Advancement students are 9-12th grade students that are looking to take an online course so that they may then take more AP or IB courses in the regular classroom during the school year. This also helps our athletes or students that are involved in courses that take up a "block of classes" in their schedule (such as a Cosmetology student). The majority of our students are students within our own district. We do serve students that attend our neighboring school districts. Typically, 85-90% of our students are "in-district" students while 10-15% of our students are from other districts. A typical Summer School has approximately 600 students with 60 of those students being out-of-district students.
WHAT? Describe the specific online learning project that supports the needs of your intended audience.	All of our online courses are self-paced courses with guidelines for our students so that they may finish within the session that they are enrolled. If students complete all of their coursework before the end of the session, then they are allowed to request the final exam password so that they may go ahead and finish up their course. Our courses also contain instructors that provide assistance and feedback via email to students on activities as students submit their activities. Our most popular online courses are the Health, Speech, Government, Economics, and P.E. courses. In summer 2010, we had 532 courses completed for credit with 473 of those courses being taken by LISD students; 59 by out-of-district students.
WHEN? Describe when your participants access your online courses.	Our students usually access their courses after school, evenings, and on weekends. Their online interaction is higher towards the end of the week and over the weekend than any other time of the week. Time periods that we have found our students to be online include evenings and late at night.
WHERE? Describe where your participants will access your online courses.	Most of our students access their online courses from home. We do provide a computer lab at our Advanced Technology Center for students that need to use a computer that do not have Internet access. Our tests are timed exams that must be completed within a one hour time limit. Our exams will not allow for students to copy/paste or print any questions/information from the exam for security purposes.
WHY? Why is this project a justifiable decision by ROI and/or VOI standards? Why should this investment be made?	The LISD Online Summer School program has shown that it can be self-sufficient and even make a profit from one year to the next. We run 3 online sessions per year in fall, spring and summer with the largest overall enrollment being in our summer session. Our program is a fee based program. LISD students pay $150 per semester course; Out-of-District students pay $250 per semester course. For our students on free/reduced lunch, we charge a smaller fee of $50 per semester course. Our 2010/11 Online School earned over $100,000 from fees – with 75% of that overall amount coming from our Summer Session. That income pays for our Blackboard license to cover 5,000 users and any other licenses that are involved with our courses and to pay our teachers for each student that completes their course in a session. Additional excess funds are rolled back into the Online School program. The program provides additional value-add beyond the financials however. We offer the opportunity for our students through this program to take some of their basic courses online so that they can have the "online course" experience that they will encounter in their College/University experience. This opportunity also helps our students have choices in how and what they take and when they take it. For many of our students, it then allows for them to dive deeper into the types of courses that are of interest to them or to take more AP courses in the regular classroom.

WORKSHEET

The Online Learning Justification Ladder:

A new district self-assessment and strategic planning tool for ROI and/or VOI analysis

Step 1: HOW? Identify how you are approaching the justification of your online learning project. Is an ROI analysis required to gain approval or the investment dollars to proceed? Or is it more important to be able to articulate the benefits of the project through a VOI analysis?	▸ Using an ROI Analysis ▸ Using a VOI Analysis ▸ Using both ROI and VOI ▸ Explain:
Step 2: WHO? Identify a targeted audience for your online learning project. What are the needs of this audience? What are the current and future costs associated with meeting those needs? Why is an online learning solution the best solution for this audience?	▸ Students (what grades, what needs?) ▸ Teachers ▸ Administrators ▸ Non-credentialed staff / other employees ▸ Parents ▸ Explain the characteristics of your targeted audience:
Step 3: WHAT? Describe the specific online learning project that supports the needs of your intended audience. What online courses or learning environments are you providing to meet the needs of your participants?	▸ Describe your project and the specific course offerings or environment that it provides:
Step 4: WHEN? Describe when your participants will access the online courses or learning environments provided by your project.	▸ Describe when the participants access the course offerings: during the school day, after school, in the evenings, during the summer, etc.
Step 5: WHERE? Describe where your participants will access the online courses or learning environments provided by your project.	▸ Describe your participants' location when they are online for your project: at home, in the classroom, in a computer center, at the library, etc.
Step 6: WHY? Explain why your online learning project is a justifiable decision by either ROI or VOI standards. If your approach is an ROI analysis, identify tangible cost savings and/or earned revenue derived from the project. If your approach is a VOI analysis, clearly describe the benefits of this project to your intended audience or your district and how this project meets the needs of that audience. **Answer this critical question: Why is this online learning project a good investment of your district's time and resources?**	For an ROI analysis, identify the cost savings or earned revenue in budget line items such as: ▸ Travel and meeting costs ▸ Printing for training materials or curriculum guides ▸ Substitute teacher fees or training stipends ▸ Textbooks ▸ Software licenses for redundant products ▸ Course fees including online summer school For a VOI analysis, describe the benefits of your project in areas such as: ▸ Course expansion and credit recovery ▸ Student engagement, achievement, productivity ▸ Teacher productivity ▸ Parental/community interactions ▸ Curriculum alignment and consistency ▸ "Greener" approach to operations

Report Methodology

This report is the result of a national research project undertaken by Project Tomorrow® at the request of Blackboard, Inc. The project involved first a comprehensive literature review on how to justify investments in education technology, and online learning, in particular. The Project Tomorrow team conducted extensive interviews with ten district leaders from a variety of school districts nationwide about their online learning implementations, the decision-making process that led to that implementation, and how their district approaches investment justifications. Additional follow-on research was undertaken on state policies, district demographics and how other industries and sectors were addressing technology investment analyses. As a result of the research and the interviews, three featured case studies profiling specific online learning projects within districts were created for inclusion in the report. An additional 34 district administrators participated in a specially developed online survey about their current online learning implementations and their process for investment justification. Speak Up 2010 national data findings provided background data for the interview process, the development of the justification tools and the report narrative. More information about the Speak Up National Research Project and the 2010 National Findings are available at www.tomorrow.org.

Though many experts provided valuable input to this project, Project Tomorrow and Blackboard, Inc. would like to especially thank the following district leaders for sharing their unique insights, proven wisdom and real world experiences with us:

Judy Bauernschmidt, *Jefferson County Public Schools (CO)*
Bill Bucklew, *Polk County Public Schools (FL)*
Allison Calderon, *Fairfax County Public Schools (VA)*
Tracy Clanton-Smith, *Lubbock Independent School District (TX)*
Mike Foland, *Fairfax County Public Schools (VA)*
Alisa Jones, *School District of Clay County (FL)*
Jill Montoya, *Jefferson County Public Schools (CO)*
Bert Ross, *Baltimore City Public Schools (MD)*
Scott Smith, *Mooresville Graded School District (NC)*
Marilyn Underwood, *Marion County Public Schools (FL)*

Selected Resources for Further Review

"20/20 – Costs and Funding of Virtual Schools." *Augenblick, Palaich & Associates for BellSouth Foundation.* 2006.
"5 Ways for School Districts to Do More with Less." *Blackboard, Inc.* 2009.
"The Case for Online Professional Development." *Elluminate, Inc.* 2009.
"Cost Guidelines for State Virtual Schools – Development, Implementation and Sustainability." *Southern Regional Education Board*. 2006.
"Doing More with Less: Strategies for Success." *Blackboard, Inc.* 2008.
"The Glue for One District's Digital Success Story." *Blackboard, Inc.* 2010.
"Learning in the 21st Century: Online Learning Trends Report 2011." *Project Tomorrow.* 2011.
"Measuring Social Value." *Stanford Social Innovation Review.* 2010.
"Measuring ROI in E-Learning." *ROI Institute, Inc.* 2009.
"Planning Guide for Online Learning." *Blackboard, Inc.* 2010 http://www.blackboard.com/sites/k12onlineassessmenttool/index.html
"Polk County Public Schools." *Blackboard, Inc.* 2009.
"Research Highlights – Cost Effectiveness of Online Education." *The Sloan Consortium*. 2006.
"The Value of Teaching and Learning Technology: Beyond ROI." *EDUCAUSE Quarterly.* 2006.
"What Return on Investment Does E-Learning Provide?" *SkillsSoft, Inc.* 2010.

Endnotes

Speak Up 2010 National Data Findings. *Project Tomorrow.* 2011. (www.tomorrow.org)
Florida Reading Endorsement. *Schultz Center for Teaching and Leadership*. 2011. (www.schultzcenter.org/endorsement.shtml)
Speak Up 2010 National Data Findings. *Project Tomorrow.* 2011. (www.tomorrow.org)
Online mini poll conducted with selected district administrators in April 2011. *Project Tomorrow.* 2011.
"What Return on Investment Does E-Learning Provide?" *SkillsSoft, Inc.* 2010.
"The Value of Teaching and Learning Technology: Beyond ROI." *EDUCAUSE Quarterly.* 2006.

Blackboard K-12
650 Massachusetts Avenue, NW 6th Floor
Washington, DC 20001
1-800-424-9299, ext. 2427

15707 Rockfield Blvd
Suite 250
Irvine, CA 92618
949 609-4660 ext 17

PROJECT TOMORROW