

# Virgin Islands DOE 2011 – 2013 Plan Addendum

The 2011 – 2013 VIDE Technology Plan is organized around six basic goals. Each goal then has a related action plan that details objectives and actions necessary to achieve the goal within the three year scope of the current plan. The six goals were developed to build upon previous VIDE strategic technology plans and to fulfill the Territory’s need to create an E-Rate approvable technology plan. Nevertheless, the 2011 – 2013 plan is fully intended to address the findings of the Territory’s 2010 Territory-wide evaluation of instructional technology. This evaluation developed findings and recommendations related to four categories – Technology Integration, Access, Professional Development, and Literacy and Standards. The following Addendum to the 2011 – 2013 plan crosswalks the evaluation findings and recommendations to the plan’s goals and actions. In addition, this Addendum highlights VIDE’s plans related to annual evaluation and assessment of the plan’s progress. VIDE firmly believes that over the course of the next three years, the Territory and both school districts will make significant progress toward addressing the current evaluation findings/recommendations; and this progress will be formatively and summatively (annually) evaluated via a rigorous evaluation plan.

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# Mapping Plan Goals/Actions to Evaluation Findings/Recommendations

## Technology Integration

### Evaluation Findings

- While teacher use of technology for presentation is widespread, there is very little integration of technology in the sense of students using technology to develop and support higher order thinking skills - also known as 21<sup>st</sup> century learning skills.
- Integration of technology is limited by what is essentially a teacher-centered learning environment. Within this current context, there is not much more that teachers can do other than to use technology for presentation.
- Most student uses of technology are “add-ons” to core curriculum and are not central to the mastery of core curriculum standards and skills

### Evaluator Recommendations

For teachers to start integrating technology in ways that support what research says is “best practice”, there needs to be a shift in how teachers organize their instruction. Given the current practice of teacher-centered instruction, technology is not likely to have impacts beyond what is already occurring. Rather, teachers need to buy into the pedagogical change first and then find the technology tools that support reformed instruction. If that were to happen (in that order), the evaluators suspect that most VI teachers would find that they already have the necessary technology tools at their disposal.

Therefore, the evaluators recommend that VI engage in a serious consideration of what research describes as best practice in the development of 21st century learning skills, and the role that technology can play within a curriculum that emphasizes such skill development. This will - as stated above - require a significant re-evaluation of current pedagogical practices in place in the majority of VI classrooms. As that re-evaluation occurs through curricular and pedagogically-focused professional development - first with administrators and then with teachers - a vision for technology can be cultivated.

The responsibility for organizing and maintaining a vision for technology’s role in a reformed pedagogy that teaches 21st century learning skills is one that rests with leadership at all levels. The opportunity for articulating this vision - and for showing how it connects to initiatives well beyond technology infrastructure - exists in the creation of the VIDE Strategic Technology plan. This plan should be the basis for developing policies and accountability structures which actively engage building administrators in supporting changes in teaching aimed at providing VI students with important 21st century learning skills.

### 2011 – 2013 VIDE Technology Plan Actions

Goal	Action Item – 2011 to 2012	Activity Description
Goal 1	Action Item 1	Develop curriculum map
Goal 1	Action Item 2	Provide PD to districts (Technology and Curriculum

		Coordinators)/Technology Integration Leaders on doing curriculum map activities/units
Goal 1	Action Item 5	Facilitate collaboration with UVI and other stakeholders to integrate technology integration standards in teacher preparation programs
Goal 2	Action Item 1	Territory-wide task force to develop specific technology core competencies for students, teachers, and administrators. Adoption of NETS and documentation of a student skills scope and sequence.
Goal 2	Action Item 2	Provide PD to districts on implementing student technology competencies
Goal 2	Action Item 3	Map NETS-S (Easy-Tech, TechYES) curriculum to core curriculum frameworks.
Goal 3	Action Items 1 – 8	(see plan document for details) All about providing district Technology Integration Leaders, teachers, and administrators PD around technology integration and use of the territory's technology integration curriculum map
Goal 5	Action Item 2	Provide districts and Library Media Specialists with assistance needed to implement new upgraded library automation services
Goal 6	Action Items 5 and 6	Train within districts on the use of Edline and Homework Hotline

While VIDE OIT and C&I will create a framework for technology integration through the above-stated work with developing (and training with) the Technology Integration Curriculum Map, mapping existing technology resources (Easy-Tech and TechYES) to core curriculum, and promulgation of territory wide standards, it is clear that it will be up to districts to carry this work into each and every classroom in the territory. Therefore, district plans include objectives to create the school-base positions of Technology Integration Leaders and to conduct intensive professional development that extend that which is offered by OIT and C&I.

# **Technology Access**

## **Evaluator Findings**

- In general, technology tools and devices, notably Promethean “smart” whiteboards, are widely available in VI schools, classrooms, and labs.
- Technical support is available, but there exists considerable confusion in most schools as to how to effectively access this support.
- Implementation support is very limited and depends upon elementary computer teachers who seldom have time to provide support. There is virtually no implementation support at secondary schools.
- There are some issues regarding insufficient maintenance, and there is a large backlog of uninstalled equipment - especially in the St. Croix district.

## **Evaluator Recommendations**

The evaluators recommend that VI schools continue to maintain the current technology infrastructure. This also implies the need to address deficiencies where they are seen to exist. A prime example of one of these deficiencies is the large amount of broken and uninstalled new equipment found in St. Croix district. It is quite possible that when the new equipment has finally been installed, there will be no infrastructure deficiencies in either district.

As a bottom line, the evaluators recommend that neither VI district make any significant new technology purchases until the existing devices are actually installed and more progress is made in terms of developing the vision for technology integration that is discussed above. Right now, it is quite possible that the effort expended in purchasing equipment misdirects the attention that could be better put to developing an educational vision for how this equipment is best used.

In terms of technical support, the evaluators recommend that both districts and the Territory engage in information campaigns to help administrators understand the technical support systems and then to clarify those procedures among school staff. It appears that in many cases administrators themselves are unclear on support procedures and then only proceed to spread that lack of clarity among their staff. In this case, a top-down approach to creating and disseminating policy information might be successful.

Finally, in terms of integration support, the evaluators recommend that the computer teachers who are found in nearly every elementary school be charged with providing support to classroom teachers as those teachers work to weave meaningful technology experiences into the core/mainstream/classroom curriculum. VI elementary schools are indeed fortunate to have such qualified teachers present in their buildings and should do considerably more to leverage this resource. Of course, this can only happen if the computer teachers are relieved from the burden of conducting “computer class” as a stand-alone subject; and this can only happen when teachers and administrators develop a understanding of technology as truly integrated within a curriculum that emphasizes student-centered learning and the development of 21<sup>st</sup> century learning skills.

## **2011 - 2013 VIDE Technology Plan Actions**

<b>Goal</b>	<b>Action Item</b>	<b>Activity Description</b>
Goal 1	Action Item 3	Territory-wide training and services that provide schools with robust,

		reliable and ubiquitous infrastructure (such as wireless, Edline, Homework Hotline, email, teleconferencing, and the Internet).
Goal 1	Action Item 4	Establish and updating technology standards and policies – including uniform standards for compliant infrastructure devices and services such as software licenses and hardware configurations.
Goal 2	Action Items 4 and 5	Development and promotion of standards related to unified data systems and standards for communication and collaboration
Goal 4	Action Items 1 – 17	All about specifying, installing and training district and school staff on commonly deployed technology infrastructure and support systems.
Goal 5	Action Item 1	Continue to provide districts and Library Media Specialists with assistance needed to support and expand library automation services
Goal 6	Action Items 1 – 6	Training district users in the use of basic infrastructure communication systems (Edline, etc.) and creation of policy that encourages common infrastructure across the territory.

In addition to the detailed action items stated in Plan Goal 4, VIDE will engage in a wide range of on-going infrastructure-related activities intended to upgrade and support territory-wide infrastructure. In 2011 – 2012 these will include:

- Provide training on using network monitoring and reporting tool for daily, weekly, monthly and yearly monitoring and reporting
- Test, document and report ISP total bandwidth availability weekly on 1<sup>st</sup> day of business week
- Setup, document and report daily monitoring and reporting for tracking ISP inbound and outbound bandwidth use via Intermapper
- Setup, collect, document, and report data for WAN usage and availability bandwidth and latency, outage for all schools
- Run defragmentation and complete virus scan once a week
- Continue to maintain adequate UPS/battery backup systems at all site MDF and IDF locations.
- Require all users to access all VIDE resources via authentication to active directory using VIDE issued and managed accounts only
- Require all devices to be joined to the appropriate VIDE domain
- Establish one domain for the VIDE doe.vi or appropriate alternative
- Monitor and enforce use of operating systems that are conducive to network controls and IT policies.
- Special Education Division will provide and customize assistive technology devices for learners who need them.
- Install appropriate assistive technology for teachers and students
- Implement ongoing daily, monthly, annual network documentation, monitoring and reporting system as required to make decisions, improve performance and services and accomplish program goals.
- Use data from network monitoring, assessment, and reporting to make decisions and implement solutions such as generators, UPS, electrical upgrades, HVAC, security, virtualization, imaging, and disaster recovery.
- Update active directory and associated directory resources monthly to reflect changes within the VIDE

Finally, VIDE notes that since the 2010 evaluation, considerable work has occurred within each district to work through the backlog of un-installed and incomplete hardware/software installations noted in the evaluation findings. Monitoring of this on-going work within each district will be one of the objectives of VIDE and will be documented in VIDE's annual evaluations.

## **Technology Professional Development**

### **Findings**

- There is very little technology professional development, and what exists is mostly of the “how-to” variety.
- Teachers could benefit tremendously from professional development that aims to help them reform their pedagogy and create a more student-centered learning environment.
- A substantial barrier to any professional development is the current inability of teachers, principals and district staff to agree on a viable schedule for professional development that meets the needs of all concerned. The general lack of effective communication between parties only exacerbates this situation.

## Recommendations

The evaluators recommend that VI teachers be provided with professional development related to reconceptualizing their pedagogical approaches and rethinking the role of 21st century learning skills within the curriculum. If such professional development existed, the evaluators believe that VI teachers would find natural connections to learn and make use of technology devices within their practice.

When professional development is made available to teachers, careful attention must be paid to offering flexibility in the times and locations of the courses offered. In this regard, improvement could be made in terms of how district administration adjusts the professional development schedule to meet the demands rising from schools. At present, the perception in schools is that district administration pursues its own professional development agenda that is not entirely responsive to teacher and building needs.

Finally, the evaluators recommend that the Territory consider adjusting the school calendar to better accommodate teacher learning needs. The school year could be lengthened to accommodate the large number of holidays and teacher professional days.

## 2011 – 2013 VIDE Technology Plan Actions

Goal	Action Item	Activity Description
Goal 1	Action Item 1	Develop curriculum map
Goal 1	Action Item 2	Provide PD to districts/Technology Integration Leaders on doing curriculum map activities/units
Goal 1	Action Item 3	Edline and Homework Hotline training to district staff/Technology Integration Leaders
Goal 2	Action Item 2	Provide PD to districts on implementing student technology competencies
Goal 3	Action Items 1 – 8	All about providing district technology and content coordinators, Technology Integration Leaders, teachers, and administrators PD around technology integration and use of the territory’s technology integration curriculum map
Goal 5	Action Item 2	Provide assistance to districts and Library Media Specialists needed to implement new automated library information services
Goal 6	Action Items 5 and 6	Train within districts on the use of Edline and Homework Hotline

In addition to action items in the state plan, each district plan also contains a large number of professional development-related action items. At the district level, the creation of the *Technology Integration Leader* position – something that both districts have firmly committed to as part of their Year 1 action plans – is seen as a primary way of creating and supporting building level job-embedded professional development for classroom teachers. The Technology Integration Leader is intended to work as a coach and mentor to classroom teachers in efforts to

integrate technology at the classroom level. The Territory's Technology Integration Curriculum Map will serve as a framework and catalyst for classroom technology integration professional development. Technology Integration Leaders will work with classroom teachers to implement units and activities from the Curriculum Map. In this way, the curriculum map is a major component of the Territory's technology integration professional development.

## **Technology Literacy and Standards**

### **Evaluator Findings**

- Elementary students participate in what is essentially a stand-alone “technology literacy” curriculum that is targeted at their being able to pass a standard technology literacy test.
- There is little evidence that VI students are addressing the current (2007) NETS Student Standards as these standards mainly focus on the use of technology to foster 21<sup>st</sup> century learning skills *within* a student-centered learning environment.

### **Evaluator Recommendations**

The recommendations for technology literacy are consistent with the recommendations for the other three focus areas of this evaluation; namely, that VI teachers develop the vision for how technology supports the development of 21<sup>st</sup> century learning skills within the context of the core curriculum. Key to that vision is the creation of a student-centered pedagogical approach that emphasizes student mastery of critical higher order thinking skills. Within the context of that sort of pedagogy, technology literacy would be a natural outcome. Technology literacy outside of that context is largely irrelevant.

### **2011 – 2013 VIDE Technology Plan Actions**

<b>Goal</b>	<b>Action Item</b>	<b>Activity Description</b>
Goal 1	Action Item 1	Develop Technology Integration Curriculum Map
Goal 1	Action Item 2	Provide PD to districts/Technology Integration Leaders on doing curriculum map activities/units
Goal 2	Action Items 1 - 5	Goal 2, and its related activities, is all about developing, clarifying, and promoting standards for student, teacher, and administrator technology skills, and 21 <sup>st</sup> century, literacies.
Goal 3	Action Item 1	VIDE will facilitate the training of district-based Technology Integration Leaders who will work (utilizing the Technology Integration Curriculum Map) to implement technology literacy standards within the curriculum, at the classroom level, in collaboration with classroom teachers.



# Annual Evaluation and Assessment

Evaluation and assessment are critical elements of the VIDE technology plan. Just as the 2011 – 2013 plan is based on evaluation data, the plan states that evaluation will be conducted annually. This schedule of evaluation activities is stated as follows:

Date		Activity	Responsibility	Product/Outcome
2010	Fall (October/November)	Review data collection instruments with VIDE and districts	Outside Evaluator VIDE OIT	Data collection instruments properly mapped to technology plan indicators and other VIDE OIT initiatives as necessary
2011	Spring (March)	Data Review (2010 data) with schools	District Staff	Updated technology-related goals/actions for April 2011 School Improvement Plans
	Spring (May/June)	Data Collection – Surveys, Focus Groups, Observations	Outside Evaluator	
	Summer	Data Analysis and Reporting	Outside Evaluator VIDE OIT District Staff	Data reports and data review meeting with VIDE OIT and District Staff
	Fall	Technology Plan Update	VIDE OIT District Staff	Updated Territory Plan and Updated District Technology Plans
2012	Spring (March)	Data Review (2011 data) with schools	District Staff	Updated technology-related goals/actions for April, 2012 School Improvement Plans
	Spring (May/June)	Data Collection – Surveys, Focus Groups, Observations	Outside Evaluator	
	Summer	Data Analysis and Reporting	Outside Evaluator VIDE OIT District Staff	Data reports and data review meeting with VIDE OIT and District Staff
	Fall	Technology Plan Update	VIDE OIT District Staff	Updated Territory Plan and Updated District Technology Plans
2013	Spring (March)	Data Review (2012 data) with schools	District Technology Committee	Updated technology-related goals/actions for April, 2013 School Improvement Plans
	Spring (May/June)	Data Collection – Surveys, Focus Groups, Observations	Outside Evaluator	
	Summer	Data Analysis and Reporting	Outside Evaluator VIDE OIT District Staff	Data reports and data review meeting with VIDE OIT and District Staff
	Fall	Technology Plan Revision	VIDE OIT District Staff	Revised Territory Plan (2014 – 2016) and Updated District Technology Plans

It is noted that both district plans have adopted this same evaluation plan and it is incorporated into their 2011 – 2013 technology plans.

In summary, this evaluation plan calls for data collection to occur each spring for the duration of the plan, and data analysis (with subsequent reporting of findings and adjustment of state and local plan action items) each summer. Evaluation will be an active and on-going concern of state and local technology plans.