**An Analysis of School District #35 - Langley’s Technology Plan**

**Executive Summary**

Langley School District’s (SD35) technology plan is a Prezi that walks visitors through an infographic. Through conversations with various administrators in the district, this appears to be the only technology plan. As such, inferences will be made throughout this summary based off previous experiences as digital literacy coach in the district, and as a team leader and teacher at Yorkson Creek Middle School. Further conversations with key stakeholders / leaders in the district, led to information about the fact that a new technology plan is currently in the works to supplement and extend the Prezi and infographic.

The Prezi is a presentation to the school board of Langley’s plan for technology in May 2017. It begins by referencing the districts ‘why’ with an unlocatable rationale. The key words at this stage are ‘enhance, accelerate, and empower’, which one can infer directly connect to the rationale. The next portion of the Prezi references the district’s vision of creating an ‘inclusive and accepting culture’ where students are ‘socially responsible’ and ‘respectful of student differences’. Cue a direct link to Apple’s accessibility website, where one can conclude that Langley’s technology plan intends to utilize Apple products to help student become ‘socially responsible’ while respecting student differences through the wide range of applications Apple now offers.

The infographic outlines the first stages of the plan, which includes infrastructure pieces, including bandwidth, network capabilities and projectors in all classroom. It also addresses the need to update leased teacher technology with new iPad’s and Dell computers. Administration’s technology will also be updated to MacBook Air or Dell Book equivalent and iPad Pro 12.9” or Dell equivalent of Surface Pro.

Inspiration for the plan includes Toronto School District, Edmonton Public School District and Hamilton Wentworth School District. Therefore, parts of the roll out and implementation of their plan to purchase iPad technology is based off the implementation plans in these districts. All these districts have implemented a minimum of 5 iPads in all elementary classrooms. As well, Hamilton Wentworth School District has adopted 1-1 implementation in over 5 schools.

Partners in Langley’s technology plan are Apple, Dell, and Microsoft for hardware and Adobe, Office 365, and One Drive as key software platforms.

In elementary schools, the goal of the plan is that by 2020, all K-5 rooms with have 6 iPads each. The goal is to make technologically rich classrooms normal. iPad technology provides opportunities for students to access learning opportunities throughout the day. Having iPads in the classroom allows for opportunities for teachers to utilize technology to help enhance the learning experiences for all the districts students. Wave 1 will consist of purchasing 600 student iPads and 100 teacher iPads in 12 schools. Wave 2 will result in 720 student iPads and 150 teacher iPads being purchased for 10 schools. Wave 3 will be the remaining K-5 classrooms which will require purchasing 900 iPads. Support through the roll out process will be provided by Instructional Coaches and Digital Literacy Coaches.

In middle and high schools, there are initial plans for 5 leased high-end labs in 5 schools, with more being added in future years. Two middle schools (HDSMS and BGMS) will be given 60 iPads, and 30 iPads will be given to one high school (DWP) for beta testing. The implementation of these will be with full support from Instructional Services.

The technology plan is in partnership with the Langley Teacher’s Association. Part of this plan involves the creation of the following groups: Technology Steering Group, Office 365 Working Group, and Modernization Working Group.

**Analysis**

**Alignment with District and Provincial Vision**

The plan clearly outlines ambitions to get more technology in the hands of students. In the last 5 years, the district’s educational goals around technology have been based on the province’s Digital Literacy Framework, developed around 2013. The Digital Literacy Framework was created by B.C. educational leaders at the time, and the philosophy was based on the National Educations Technology Standards for Students developed by the International Society for Technology in Education (ISTE). The document outlines six key characteristics, knowledge, and skills learners need to be successful in the 21st century. These standards and the Digital Literacy Framework have become a basis for the implementation of the Digital Literacy Coaching role in Langley, as well as a rationale for technology implementation in Langley. Several of these characteristics are directly tied to Langley’s vision to create an ‘innovative and inspiring and unified learning community,’ where students are ‘knowledgeable, skilled and innovative’ and have access to learning ‘through flexible, connected environments’. B.C.’s curriculum, particularly the new ADST curriculum explicitly contains content from grade 4 and up that includes a digital literacy component, where students then need access to technologies that allow them to practice these skills. In addition, other content components of the ADST curriculum require access to a wide variety of technologies to support these opportunities.

Inspiration for the plan, according to the infographic, is from three school districts: Toronto Public School District, Edmonton Public School District, and Hamilton Wentworth School District. All three districts have initiatives to get more iPads in the hands of elementary students. All three districts reference ITSE and the student characteristic profile of a 21st Century digital learner. In addition, all three districts reference the SAMR model as a tool to help teachers implement iPad technology effectively into their classroom. Therefore, one can infer, that the ITSE profiles of a digital learner and SAMR are still key components of the vision for implementation of technology in Langley.

**Pros**

The pros of the plan include an increased access to iPad technology for K-5 classrooms, joint district union steering committees, and the support availability from Instructional Services.

iPad’s make learning more accessible for a diverse learning population. For example, voice to text technology assists students with written output issues, or if a student breaks their arm, they now how the ability to still produce work using technology as an aide. Access to classroom iPads also allows teachers to rethink how students represent their learning. Students can report from the moon using green screen technology, explain their learning using Explain Everything, or create interactive books using Book Creator. iPad’s also have great potential to allow teachers to help personalize student’s independent learning journeys, a key piece of the vision for Langley and the province.

The creation of joint steering committees with the union creates an environment where teachers feel that they have some voice and choice. The Technology Steering Group provides an opportunity for teachers to voice what works and really doesn’t work in the classroom. Often the ‘big ideas’ at the top don’t work in a practical sense; therefore, having teachers provide insight and input makes the spending of money on new technologies more practical. The Modernization Working Group looks at the future sustainability of the plan and what other technologies we should be looking at and investing in. Once again, having teachers at the table, makes the process more transparent and allows interested teachers to have a voice in the future direction of the district.

Finally, built into the plan is the access to Instructional Services. In elementary schools, this includes the utilization of Digital Literacy Coaches and District Instructional Coaches. The people in these roles are available to help teachers feel comfortable with introducing and utilizing the technologies in their classroom. Training has been given to many of them directly from Apple and from leaders around the province in technological initiatives. These coaches are great sources of ideas and support for those teachers who choose to access the opportunities. At the middle and high school levels, Instructional Services will provide support, often through the subject area personal. Therefore, a math teacher can access the Math Instructional Services teacher who can come in and support teachers with integrating technology into Math curriculum. Teachers need to feel supported in taking risks and trying new technologies, and it is excellent to see this as in integral portion of Langley’s technology plan.

**Cons**

The greatest con to Langley’s plan is that it appears to be impossible to locate information about the plan beyond the Prezi, the infographic, and through conversations with key stakeholders. Therefore, to teachers and other school districts, it appears that Langley currently has no real technology plan. It speaks to the fact that finding a unified goal in Langley has proven difficult. Furthermore, without seeing the overall budgetary considerations, it makes it difficult to see the scope of the plan and whether it can realistically be implemented.

First, yes, they have included a multi-year plan to implement iPad’s in K-5 schools, but the exact implementation supports beyond access to coaches is unclear. Furthermore, what accountability do teachers have towards the utilization of the new technology. Teachers can, and may, very well choose to just use them in a math center to play math games; therefore, not really aligning with Langley’s vision statement and the province’s Digital Literacy Framework for 21st Century learners.

Another major flaw with the plan is the unfair distribution of technology tools to administrators versus teachers. Teachers have been given a cheaper iPad or lower end Dell to use in their classrooms, whereas Administrators are being given MacBook Air or high-end Dell equivalents as well as iPad Pro or Surface Pro equivalents. This creates an us vs them dichotomy within the school settings, where many teachers are finding their new technologies do not allow them to do their job the same as before. Furthermore, teachers know they could offer more amazing experiences for their students if they had access to the same technology tools as administrators do.

In the current plan, several middle schools and high schools are not even mentioned. This is problematic, because what is the long-term plan for implementation of new technologies in these buildings? Does the district already feel that they have sufficient technology? If so, state this somewhere, provide a rationale for leaving some schools out of the already minimalistic plan.

Finally, the lock-in of certain technology platforms is troubling for long term planning for new technologies and potential changes in readily available current platforms. Langley has made a firm stance on its adoption of Office 365 and One Drive as the only acceptable and approved platforms for students and teachers. It is interesting that the plan references three districts as inspiration for the current Langley plan, and two of these three districts are GSuite schools. Langley is adamantly opposed to the utilization of Google tools in classrooms, yet they are an integral piece of the plans for two of these ‘inspirational’ districts. Furthermore, the access to iPad apps is a rigid, difficult process in Langley. Teachers are very limited by the apps they can install on the 6 iPads they have been given. This creates frustration for staff, as they see the potential for an app’s usage in their room, yet they are met with district level roadblocks. This strict, prescriptive approach to allowed technology tools leaves many teachers, including innovative ones, choosing to just put the technology away and not using it at all. In talking to some technology leaders in the district, there seems to be a crossroads where FOIPPA has had a paralyzing effect on the district, leading to very little vision beyond the small list of prescribed tools. Without full access to the tools, that can be used to innovate learning, teachers are left feeling disenfranchised and frustrated.

**Recommendations for Improvements**

The secrecy and lack of access to a full plan is fundamentally problematic. It speaks to a greater sense of disfunction, and it is unsettling that there is no clear technology vision in Langley. Langley School District needs to create and implement a coherent plan for technology in the district, that brings together all key stakeholders. A strategic plan is necessary that is both detailed and transparent, so that all stakeholders can feel confident that there is a clear direction for the district. Ultimately, the gaping holes that appear in this plan can clearly be addressed through an accessible, well-thought out plan.