School Evaluation Summary: Darryan Memorial High School

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EdTech 501: Introduction to Educational Technology

DARRYAN MEMORIAL HIGH SCHOOL DEMOGRAPHIC SUMMARY

Darryan Memorial High School is located in a large metropolitan area in the province of Alberta. The Board of Education (BOE) is the largest in western Canada. Darryan Memorial is one of 227 schools in the BOE. The table below shows a breakdown of the number of schools in the BOE.

Number of Schools	227
Elementary	132
Elementary / Middle / Junior High	34
Junior High	20
Junior / Senior High	7
El / Jr / Sr (Home Education)	1
Senior High	17
Outreach Programs	15
Career and Technology Centre	1

The Career and Technology Centre is state-of-the-art. It changes the way people think about high school. Students enrolled in the CT Centre take courses at their designated high schools for part of the day - which gives the student the ability to still graduate with their friends - but also access the Centre to enhance their learning through credentialed programs. This program provides students with access to technical curriculum in preparation for further education and careers in high-skill, high-demand occupations. Technology usage at this school is top notch, and would be rated "intelligent" using the *Maturity Model Benchmarks.*

The enrollment of the BOE is continuously growing. There are now more 110,763 students from kindergarten to Grade 12 - including Learning Services and Learn Online.

Below is a breakdown of the number of students and at which level they are enrolled. Notice the increasing numbers and the two new sections at the bottom of the chart. More and more students are taking either blended or online course.

|	Sept. 30, 2012	Sept. 30, 2013
Pre-kindergarten	81	145
Kindergarten	8,238	8,936
Grades 1-3	24,441	25,959
Grades 4-6	21,333	22,552
Grades 7-9	21,645	21,751
Grades 10-12	25,918	26,270
Sub-total	101,656	105,613
Home Education	247	297
Outreach		1129
Online Learning Services		2515

The BOE is organized into five administrative area, Kindergarten to Grade 12, of 31-46 schools each. Each Area is an inclusive community in which parents are well represented, as are staff and students.

Darryan Memorial High School is located in the northeast section - Area III. It serves five communities and has four Junior High feeder schools. It is also the destination high school for all French Immersion and International Baccalaureate students in Area III.

The school houses 1615 students with 82 full-time equivalent teachers, one principal, three assistant principals, four counsellors and 20 support staff. The pie chart below shows the percentage breakdown of the staff at the school.

Percentage of Staff
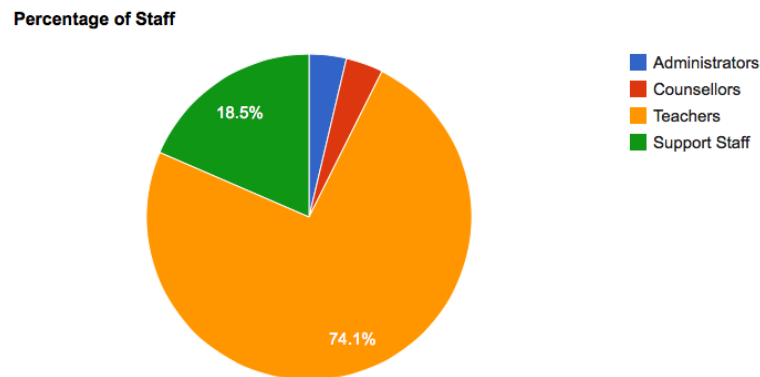
The demographic of students is very diverse. The *cultural mosaic* known as Canada is very evident in the school. The students are made up of different cultures, religions and speak many languages as their native tongue. In all, the school is made up of students from over 72 countries around the world.   Along with the traditional core subjects, the school offers programs such as International Baccalaureate, language programs including French Immersion and Punjabi and Career and Technology Studies. Mainly, the school is made up of lower socioeconomic families however, the funding for all schools in the province is equal so students have the same resources as the more wealthy areas of the province.

The teachers come from a variety of cultures and religions as well. Of the over 100 staff members, there are 25 countries represented from around the world. All speak English, but many as their second language. This is a great resource as some of the students' parents need a translator to talk to teachers about their child's learning. The school has a unique feature for collaboration of its teachers. There is a staff planning lounge where each teacher has a desk (working area) in a pod of four to six stations. Each pod is made up of teachers from different departments. The idea is to collaborate with teachers who have different expertise, training and experiences from different departments in the school.

As far as technology, there are 350 workstation network and other learning technologies including laptop carts, SMARTBoards with projectors, industry standard software and two networks designed for BYODs. These are unsecure networks that can be used for student personal use and teacher led learning. No personal devices are allowed on the secure network.

From the outside, It does appear that the school has sufficient technological devices for its students. This is not the case. A major problem is that most of the workstations are in scheduled classrooms so there is little or no chance to book out a lab.

DARRYAN MEMORIAL HIGH SCHOOL TECHNOLOGY USE EVALUATION

ADMINISTRATIVE

Policy
Behavioral: Intelligent
Resource/Infrastructure: Intelligent
Comments: The school has a digital citizenship plan. The plan is developed by teachers, students and the BOE and is signed off by staff and students in each school. The plan is updated each year to address new technologies, laws, and emerging needs. The document deals with safety online, integrating digital citizenship into student learning, professional learning for staff, BYOD (including the use of cellphone) and parent engagement. In order to use any of the computers or laptops at the school, all users - including staff - must sign the proper documentation. All users are aware of the usage policy and must abide by these policies or lose their privileges.

Planning
Behavioral: Islands
Resource/Infrastructure: Integrated
Comments: The Learning and Technology Policy Framework is a provincial document developed **collaboratively by teachers, school boards and the Alberta Education**. It is a very in-depth look at how technology will be used in the province. No school plan exists on its own and it is expected that each school align its planning with the provincial framework.

Budget
Behavioral: Islands
Resource/Infrastructure: Integrated
Comments: Resources are filtered down from the province to school boards to individual schools. The school board and individual schools can use resources as they see fit. All funding for resources are based on a funding formula which, from the school's point of view, is usually underfunded. School budgets try to look at three year educational plans but mostly fund technology on a yearly budget. More long term planning is needed.

Administrative Information
Behavioral: Integrated
Resource/Infrastructure: Intelligent
Comments: All teachers are required to use marks program, digital attendance, digital IPP's and digital SLP's. The name of the software is called SIRS. HomeLogic - a online marks program which shows parents and students summative marks in real time. The use of an assignment drive for student submission and evaluation causes much less paper usage.

CURRICULAR

Electronic Information
Behavioral: Integrated
Resource/Infrastructure: Integrated
Comments: Marks are available at home via HomeLogic - an internet based marks program. Web-based platform similar to Moodle called D2L is also used by the BOE and our school. Courses can be put completely on this platform which allows for blended, online and/or traditional learning to occur. There are only a limited number of teachers setting up their classes on D2L.

All students and staff use email. Internet is school wide with three networks. Two of these networks can accept student's own devices (BYOD). The other is secure for only BOE devices. The technology is present but there are not enough devices to go around. Teacher apathy is a problem but mainly because of frustration of consistent availability of needed devices.

Assessment
Behavioral: Islands
Resource/Infrastructure: Integrated
Comments: HomeLogic, a type of assessment technology, is mostly used for reporting - summative assessment. There are a limited number of classes using devices to help with formative assessment. The use of cloud computing and traditional software is used by some teaches to have students formally assess peer work. New technology in the school includes software to allow for formative assessment, however, very few teachers use this technology.

Curriculum Integration
Behavioral: Integrated
Resource/Infrastructure: Islands
Comments: Technology may be used but it is quite often used as an aid for doing traditional assignments. An example would be to use the word processor to type an essay. Certain departments in the school - Career and Technology Studies - would actually have an "intelligent rating" because of the availability of devices and the

software to administer these classes. There are too many departments that do not use any technology. The lack of consistent availability of computers or laptops is a real concern to the school.

Teacher Use

Behavioral: Integrated

Resource/Infrastructure: Integrated

Comments: All teachers are given a laptop for teaching and personal use. They also have access to the internet and school and BOE network servers.   The majority of teachers find these tools necessary to complete daily work. A number of classrooms have a SMARTBoard with an attached projector. There is also a teacher lounge area equipped with extra computers for teachers to collaborate with other teachers on their work. Some teachers want to use the technology but, again, it is not always available.

Student Use

Behavioral: Integrated

Resource/Infrastructure: Islands

Comments: Students have access to the Media Centre (library) if classes have not already booked out computer labs. All computer labs are now assigned classrooms so there is not much availability for student use. Classes can also book out laptop carts but there are only two carts of 20 computers for the whole school.

Students use the internet in common areas with BYOD. These devices are not allowed on the secure network but their use is encouraged on the other two networks. Too many teachers frown upon smartphone usage in the classroom because of the constant struggle with inappropriate texting.

SUPPORT

Stakeholder Involvement

Behavioral: Islands

Resource/Infrastructure: Islands

Comments: Teachers, students and parents are all involved in the designing of a digital citizenship plan. The planning for the implementation of school technology is completed by administration - with the help of a few teachers. Not all teachers want to be involved, but the one who do, sometimes feel "out of the loop."

Administrative Support

Behavioral: Islands

Resource/Infrastructure: Integrated

Comments: The school employs a full-time ICT specialist and a half-time online learning expert. Technical support is expected, however, very little PD actually exists

(some of this is because of teacher apathy to new technology). There is also very little release time given when planning and implementing these new technologies.

Training

Behavioral: Islands

Resource/Infrastructure: Integrated

Comments: Teacher apathy is still a concern. The use of NID days (Non Instructional Days) for PD is not always an option. Teachers with experience are expected to mentor others with little experience or knowledge. When PD does appear, many teachers do not want to get involved. There could be much more PD, especially since the school has a full time ICT specialist.

Technical/Infrastructure Support

Behavioral: Islands

Resource/Infrastructure: Integrated

Comments: For the most part, both technical and infrasture support is available in the school. There are both an ICT specialist and an online learning expert. As well, there are many teacher experts in the use of technology that are willing to help. There are too many teachers either not interested in the new technology or not wanting to put in the time to learn it. The specialists and mentors in the school are willing to help but some teachers do not engage.

CONNECTIVITY

Local Area Networking (LAN)

Behavioral: Intelligent

Resource/Infrastructure: Intelligent

Comments: The staff and students have access to their own private server space. The server is located directly in the school and taken care of by the school ICT specialist. Each student receives one gig of memory for school based information. Personal information (personal picture, personal videos and personal music) is not to be saved on school server. The teachers have access to a K - share drive (read only) to design assignments to relay to students. There is also an assignment drive that is used to accept students' assignments digitally thus cutting down on the use of paper.

District Area Networking (WAN)

Behavioral: Intelligent

Resource/Infrastructure: Intelligent

Comments: BOE network files can be accessed from anywhere in the district as long as they are BOE owned devices. Internet access is available in all district locations through both wired and wireless connections.

Internet Access

Behavioral: Integrated

Resource/Infrastructure: Integrated

Comments: The school has broadband internet capable of audio and video streaming. The internet is accessible in every part of the building but there are some trouble spots. Some of the access points in the common areas are overused and therefore, quite slow at times. There is also some interference with building structures as it is a steel and cement building.

Curriculum integration with this technology is scarce at best. Students want to use this technology but the BOE's policy on BYOD is far behind. There are not enough BOE devices in our school to accommodate all of the classes who want to use this technology.

Communication Systems

Behavioral: Intelligent

Resource/Infrastructure: Intelligent

Comments: All staff and students have a BOE email account. All staff use MS Outlook which also gives email access at home. Email is used as the main communication apparatus to all stakeholders in the district - including parents. It is also used for other administrative duties such as bookings (computer rooms, laptop carts, audio-visual equipment and even parent-teacher interview times) and access to the school calendar. Student email accounts have just recently changed to Gmail.

The school also uses a Moodle like platform called D2L. The entire student course can be put on this platform which students can share with their parents. Another communication device is HomeLogic. This has been explained earlier in this summary.

INNOVATION

New Technologies

Behavioral: Integrated

Resource/Infrastructure: Integrated

Comments: New technologies are constantly being introduced. Most teachers would like to learn more about these technologies and maybe use them in the classroom but the PD is lacking. Teachers also get frustrated with the availability of this technology when designing and creating lessons.

The classes that do get to use the technology are always filled to capacity. Student learning seems to go up as technology is introduced.

Comprehensive Technologies

Behavioral: Integrated

Resource/Infrastructure: Integrated

Comments: The school is moving toward a rating of *intelligent*. The school has voice recognition software, industry standard design software, iPads, video conferencing equipment and audiovisual technology. The school even has a 3-D printer. However, the technology is spread out throughout the school and is still lacking in many areas of school.

Teachers do not use new technologies that are available. There is far too much technology sitting and not being used. The lack of PD and the lack of the devices being consistently available are the main reason. Teacher apathy still exists as well.

SUMMARY

Overall Score: Integrated

Darryan Memorial High School, for the most part, does an very good job of integrating technology into the learning environment. It should be noted that in some areas of the school - especially Career and Technology Studies - the overall Technology Maturity Benchmark score is much closer to the i*ntelligent* rating. In other departments, however, the rating is much closer to *islands.*

Using a modified scoring system, I gave one to four points for each of the five filters inside the benchmark rubric. I did this for both behavioural and resource/infrastructure integration. There were 19 topics inside the five filters. A perfect score would have been 76 points. Darryan Memorial hit a total of 54 for the behavioural (an average of 2.84 out of 4) and the resource/infrastructure came to 59 (an average of 3.11 out of 4). I based the overall score on this point system.

The behavioural score was much lower than the resource/infrastructure. This shows that there is still a long way to go to extinguish teacher apathy and to increase the use of new teaching pedagogy when it comes to technology. If the teachers can get on board with the technology advancements in the school, the students will be the real winners as they will get to experience how these new technologies enhance learning.

Overall, the school has many of the current new technologies available for schools to enhance student learning. The school has the up-to-date industry standard software, the newest computers - both PCs and Macs - voice recognition software, SMARTBoards, video editing,

laptop carts, iPads and even a 3-D printer. The school also has a network system that allows for BYOD initiatives. As well, the school has many communication devices which keep parents abreast of their child's development and an online platform which can be used for blended or online teaching.

A major problem in the school is the lack of consistency as far as the availability of these technologies.   The school was originally designed for 1200 students. At this enrollment, the computer labs would be available for all classes to book and experiment with the new technologies. However, with the overcrowding of the school (2013 enrollment was 1615 students) it is impossible to book a computer lab as these rooms are now filled with scheduled classes. A second problem is teacher apathy towards technology. It could be the frustration of not having consistent access to the technology or it could be fear of the new technology. There needs to be better professional development and a better policy relating to release time for teachers.

Darryan Memorial High School had an exceptional high rating in the *Connectivity Filter*. All of the areas scored very high. Another exceptional area for the school was in the *Administrative Filter* - especially pertaining to policies relating to computer usage. The school has an exceptional digital citizenship policy which is done collaboratively with teachers, students, board members and parents.

The *Support Filter* is one the school must improve upon. Behavioural integration only had a rating of Islands. Not good enough, especially with the fact that the school has a full-time ICT specialist and a half-time online learning expert. Training and release time are definitely two aspects that must improve to help teachers move ahead with this technology.

Students must have increased access to technology. For this to happen, teachers must learn the skills and resources to take advantage of the available technological tools. The BOE is continuously trying to bring in the newest technology but has neglected the training needed. It will be up to the school - ICT specialists, teacher mentors, students and and even parents to all work together to bring an end to the apathy that is present in the school.

REFERENCES

Please contact author for references to preserve anonymity for evaluated school and district.