Major Inquiry Project: Creating your own Blended Learning Program OLTD 511-Brigitte Atwood December 2018

Inquiry Question: How do you create a model blended learning program for your learning environment?

School District 91 is a supporter of 21st century learning in schools. It is home to the oldest DL program in BC and is a leader in innovation and technology. We are a district of many communities who welcomes diversity, and supports inclusion. We are always trying to find ways to reach all learners and to have them be successful in school. I believe that in order to make these goals a reality, we need to shift our teaching and implement Blended Learning structures in our schools in order to better meet the needs of our learners.



Figure 1 (Credit W.L. McLeod Elementary School Website)
(https://wlm.sd91.bc.ca/Resources/Pages/default.aspx)

My proposal is to implement a Blended Learning program focussed in the 4 intermediate classrooms of grades 5/6, at Ecole W.L. McLeod Elementary School in Vanderhoof. Many of our 100 students are involved in a variety of extra-curricular programs during school time, they participate in activities at the school or are frequently absent from school. Other students need supports that the traditional school model is not able to meet.

In their book *Blended*, Horn and Staker (2015) state that "...students are entering a world in which they need a student-centered learning system." The authors continue to specify that students need personalized learning or individualized learning as well as competency based learning. Personalized learning is customized to individual needs. Competency based learning offers levels of learning. Students progress with application, creations and develop skills. This prevents holes in learning. (p. xxvi)

"Blended Learning is the engine that can power personalized and competency based-learning." (Horn and Staker, 2015, p. xxvi)

What is Blended Learning?

According to Clayton Christensen Institute (2018), "**blended learning** is a formal education program in which a student learns:

- 1. at least in part through online learning, with some element of student control over time, place, path, and/or pace;
- 2. at least in part in a supervised brick-and-mortar location away from home;
- 3. and the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience."

What problem are you trying to solve?

Our school is housed in a traditional building with traditional divisions we call classrooms. However, our school day is not traditional. We have many students who are not present in class because of the multitude of activities which happen during the school hours, or because of absenteeism from school. Teachers are trying to deliver 21st century curriculum to classrooms of 25-30 students who have very different needs with the help of a Learning Support Workers (LSW) as well as other support systems.

Teachers are struggling to keep up with the flexible school day, with students being absent from the classroom as well as reteach to those who miss out on the lessons. By providing a blended learning environment, students will have more individualized as well as personalized learning. Students who are involved in other activities during the day,

which causes them to be absent, will not be affected as much because of the flexible benefits a Blended Learning model provides.

Teachers are trying to free themselves to meet the various needs of the their students. This will encourage those who can and want to work more independently. Groups will be formed to target instruction and teachers will be freed up to work with those who need the most support as well as those who need to be caught up.

Who are you catering to?

Teachers are constantly trying to provide rich learning opportunities but are lacking time because of student absenteeism from their classrooms. There is also a large group of students who need accommodations and/or adaptations because they have a special designation. Some students don't function well in the regular classroom and need other places to work. Others suffer from anxiety and trauma. We need to do a better job at meeting individual needs in our building with the time we are provided. We need to "do" school in a different way.

Our core problem involves meeting the needs of the mainstream students using a sustaining Station Rotation model. This model meets the needs of the students who are at school daily and are in the classroom. (Horn and Staker, 2015, p. 223). The authors also state one of our non-consumption problem. We need to consider reducing the learning loss because of student absenteeism from the classroom. Here we will use a disruptive model in the form of Individual Rotation to meet the needs of those students. Listed below are details of our consumption and non consumption groups.



Figure 2 (Credit W.L. McLeod Website) (https://wlm.sd91.bc.ca/Resources/Pages/default.aspx)

Who will be involved?

- -We have 100 students in the grades 5 and 6 classrooms.
- -4 teachers, 1 special ed teacher, 1 learning resource teacher, 1 teacher librarian (0.5),
- 1 learning and inquiry team support teacher (0.5) and 7 LSWs (Learning Support Workers)
- -26 students on Individualized Education Plans (IEPs)
- -3 students only attend school half days or part day
- -16 students have special services and are absent from class at different times during the day to work with special ed teacher, resource teacher or counselor, or community worker
- -10 go to hockey academy 4 hours a week (Monday 1-3 and Wednesday 1-3)
- -24 gr.5 students participate in band class 2 hours a week (Mondays and Wednesdays)
- -21 gr. 6 students participate in band class 2 hours a week (Thursday mornings)
- -Grade 6 girls have girls group 1 hour a week for 14 weeks (Tuesdays from 9-10)
- -Grade 6 boys have boys group 1 hour a week for 14 weeks (Fridays from 9-10)
- -Grade 5 DARE program happens over 14 weeks for 1 hour. (Tuesdays from 11:00-12:00)
- -Some students work in the kitchen on certain days
- -Different groups of students are involved in xmas concert practices from mid-November to concert night (December 21st) during class time
- -Many special days, presentations, performances happen during the year when we are not in class
- -Many students are absent on Mondays and Fridays as families travel to sports events in different parts of the province.
- 394 absences between September 4th and December 7th, 2018
- 63.5 days in session between September 4th and December 7th, 2018

Establishing a Blended Learning model at our intermediate grades will give students a chance to work at their own pace as well as to receive individualized learning. The following video gives you a glimpse into this possibility.

Why should we do blended learning (3min 20sec)

Scaling Student-Centered Instruction: The Power of Blended Learning



Video 1 (Credit to https://www.youtube.com/watch?v=OSkZ_DY1nns)

The team

We will need a Autonomous Blended-Learning Team to make this program work. This type of team is required as we are replacing the traditional classroom with an entirely new education model. "...an autonomous team which has the freedom to rebuild the budget, staffing plan, facilities design, and curriculum from the ground up." (Horn & Staker, 2015, p. 126) Because we are implementing 2 different models, one being sustaining, the Station Rotation and the other disruptive, the Individual Rotation, this type of team is required.

The people who will be involved are the principal, the 4 classroom teachers, the special ed teacher, the learning support teacher, the learning and inquiry team support teacher, the teacher librarian, LSWs, parents and students.

The principal is our cheerleader. Always ready to support kids and learning, she will be able to look at the schedule to adjust PE prep classes, library time, computer lab time as well as advocate for the change to parents and community. She will also be able to manage the financial support and to support training, in order to make sure the change from traditional model to the blended model is properly supported.

Schedules will need to be built so that all classrooms are practicing Blended Learning at the same time during the day to enable teachers to create groups of students between rooms. Teachers will need inservices and classrooms will need technology and spaces to implement the program. The principal needs to be aware of all those changes in order to support the rest of the team.

The classroom teachers and the other teachers on the team will be deciding what needs to be taught, how assessments are going to be managed, as well as what programs and tools the students will need to use. Also, there will be conversations around how the rooms will be physically modified to accommodate the different learning spaces needed for a Blended Learning environment. There will be conversations around scheduling and group sizes as well as making sure the culture of the blended learning environment is addressed and considered from the beginning. Technology has its place in the blended program but much needs to be organized and reviewed before the technology is discussed.

The special ed teacher, the learning support teacher, the learning and inquiry team support teacher and the teacher librarian will be there to brainstorm how, when and where they can support the students who they are currently supporting with their education plan and to support others. They will need to consider the new blended environment, while providing a playlist of activities for the students following the Individual Rotation model.

The LSWs will learn what their roles will look like in terms of supporting students by supervising small groups in different areas of the school.

The whole team will need to look at the Station Rotation and at the Individual Rotation model to understand what students will be doing as well as their role during the process. Parents and students will be informed and surveyed at different time during the process to make sure everyone is on the right track to inform the team of adjustments to be considered.

What experience would you like to provide to students

As stated in Horn and Staker (2015), "The first task for blended learning teams is therefore is to understand the student perspective and to design with students motivation as a guiding star." (p.134) The authors continue to explain that "schools must

create an experience that is intrinsically motivating for students."(p.143) Also, students need to be provided with jobs that serve them in their life, and to have fun with friends. They need to experience work that they feel matter to them. "Blended learning makes it easier for educators to deliver the array of academic and social experiences that can make school the best place for students to get their jobs done." (p.157)

The Station Rotation model allows for students to move online at their own pace but limits them as the teacher requires them to move to the next station. (p.227)

The Individual Rotation model allows for students to choose a playlist of activities and to move more independently between activities. Students receive more one on one support in this type of model.

Place

-Learning would mostly take place within the 4 learning spaces (classrooms) for the Station Rotation groups, then in the lab, library and in the conference room for the Individual Rotation. Students would have the flexibility to work in the hallway and in different places in the classroom according to their work/assignment. Because of the LSW support to each class, there would be options to do some supervised work outside the building depending on their task or rotation. The use of Ipads to explore and document by taking pictures and video would be encouraged.



-Specific workstations would be delineated in the learning space. Areas such as a couch, a comfy chair and/or a bench would be a collaborative work area (Figure 3). My back counter is the tech cafe and students can sit at the windows to work with the tech or, they can use the 4 desk computer station as detailed in Figure 4.

Figure 3 (Credit B. Atwood)

The new learning spaces would have specific areas for students to work on different tasks. The following figure is an example of a Blended Learning space once called classroom.

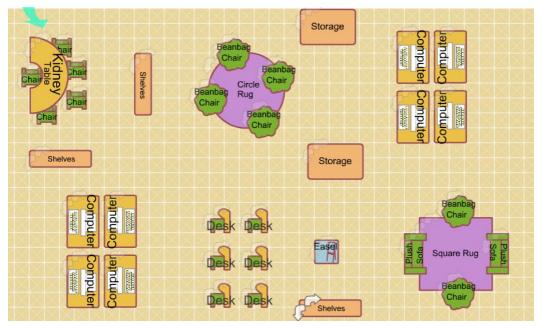


Figure 4 Classroom/Learning Space (http://classroom.4teachers.org/)

- -Stations (with and without technology) will be set up for group collaboration and exploration as well as for small teacher-led sessions.
- -The Smart Board can be an area for students to work collectively or for the teacher to teach a lesson to a small group.

Path

- -We would provide clear work goals for each subject area, core competency skills to consider and create a rubric of expectations with the group. The students would also have input depending on their personal interests and goals.
- -We would offer differentiated learning to maximize engagement and progress. Involving students in voicing their prefered ways to show learning will motivate them. Making a list of how to show what they know is fun for them.
- -Horn and Staker (2015) state that the 2 biggest priorities for students are being successful by making progress as well as having positive relationships with others. Providing opportunities for collaborative work where they are problem solving and interacting with their peers and teachers makes learning fun. (p.142)

-As in many jobs, there are "to do" that you can't get away from so I think having a few "to do's" on their rotation would be appropriate. Some students like the predictability of the assignment or task, so until they'd be independent enough, options would be provided. The more independent students could work more independently on their playlist as those who struggle with the set schedule could make their own playlist according to their interests.

-Students use technology for each/some assignments or work tasks in both models.

Pace

- -As for the pace, the team would brainstorming ideas for acceptable completion time for projects and assignments. Depending on the task, students could be working on a STEM project for a rotation and on a personal assignment or tool on the technology. Not all tasks would require the same amount of time to complete. Opportunities for providing timely feedback to students and providing time to make improvements are important. Being flexible and as well as considering students needs as individuals would also be important factors.
- -Like the path, when you have a job or responsibilities in real life, there are deadlines. I think if they are part of the decision making, they are more able to respect them or learn how to negotiate for extra time!
- -The Blended Learning model will benefit those who are away or at the other weekly activities outside of school because they may choose to complete their expected work differently than those who are there daily. By participating in programs during school time or being absent doesn't mean they don't need to do the work they missed or do extra but will hopefully teach them about making choices and showing responsibility.

Considering these 4 components, I would suggested starting small and implementing the Station Rotation and Individual Rotation in the morning only from Monday to Friday in the Language Arts and Math curriculum only. This way, teachers can try the models and decide if/when we could move towards a more full Blended Learning model with the possibility of including other models depending on the students needs.

What model of blended learning will you adapt?

As this model is new to staff at our school, starting with the Station Rotation model allows for teachers to keep a bit of a controlled learning environment but still gives options for students to learn differently. The Station Rotation model supports students who are at school daily and are in the classroom.

Station Rotation Model

"The Station Rotation model allows students to rotate through stations on a fixed schedule, where at least one of the stations is an online learning station."

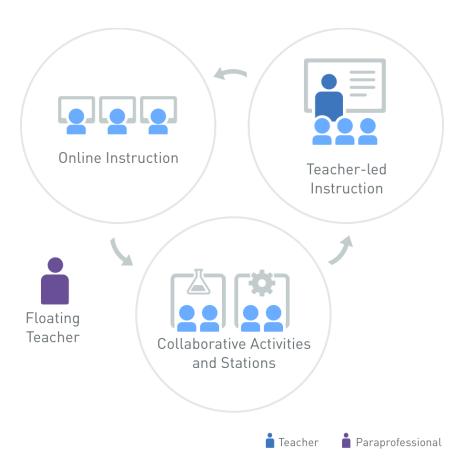


Figure 6 - Blended Learning Universe, 2018 (https://www.blendedlearning.org/models/#stat)

The following Individual Rotation model would be an option for students who would benefit from a more flexible plan. Students who are regularly absent from school or need different learning spaces than the classroom could benefit from the Individual Rotation model as they have greater choice and flexibility in when they learn. They are not confined to a timed schedule for each activity.

Individual Rotation

"The Individual Rotation model allows students to rotate through stations, but on individual schedules set by a teacher or software algorithm. Unlike other rotation models, students do not necessarily rotate to every station; they rotate only to the activities scheduled on their playlists."

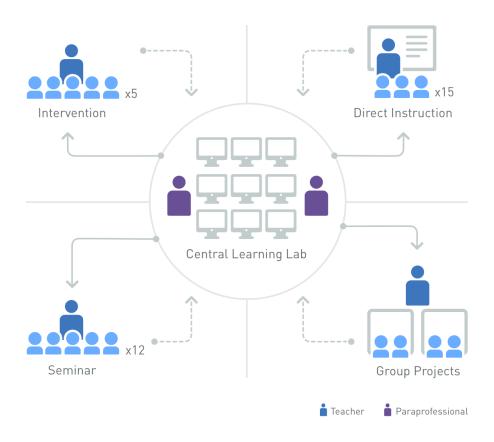


Figure 7- Blended Learning Universe 2018 (https://www.blendedlearning.org/models/#stat)

What do you want the primary role of the teacher to be?

According to Horn and Staker (2015), students need teachers as mentor to help them succeed in life. (p.171). The role of the teacher is more of a helper/guide/facilitator. The authors also mention the changing role of the teachers. They are no longer planning in an isolated environment but rather working collaboratively in teams and developing their own strengths in places such as becoming content experts, content designers, small group leaders, evaluators and data collectors. (p.179)

The Station Rotation model provides the teacher with extra time, with smaller groups of learners, which in return allows for extra support for each learner.

- -The learning spaces would have the face-to-face teacher, with possibly another teacher and 1 LSW. Teachers would be, at times, rotating through each station to support learners, staying at one station to support learners or teaching at one station. The LSW would be there to assist and monitor. The extra teacher could be assigned to a group.
- -The teachers would provide screencast mini lessons, examples or explanations to support certain technology stations so students could view and review independently or until the teacher was free, to receive extra support. These recordings could be offered to students who were absent or wanted to view content at home. Videos also offer options to watch with a partner and discuss to ensure understanding.
- -Personalizing the learning to maximize time on task as well as increasing confident for struggling learners.
- -Also, pushing the strong students to go even further with learning. Giving them tools and challenges to problem solve and to think critically.
- -Creating activities that will have students use the Core Competencies to help them work on skills and development. Offering stations with encourage problem solving, group collaboration and critical thinking skills is important when planning the curriculum stations.

The teachers in the Individual Rotation model would offer face-to-face tutoring, guidance and enrichment in the more open spaces. The LSWs would support the learners in the Individual Rotation model as that group of student have more choice in what they are learning and may need more one on one support. The teachers

supervising this model would be the special ed teacher, the learning support teacher, the learning and inquiry team support teacher as well as the teacher librarian.

- -The teams supporting the Individual model also share the qualities of the Station Rotation team but would have greater emphasis on individual support for success. Students learning plans would be considered with proper accommodations and modifications to help the learners move forward. Consideration for students who need an extra challenge to help them move forward would also be addressed.
- -Teachers would also help guide those students who were capable of independently following a learning plan based on their interests and strengths.

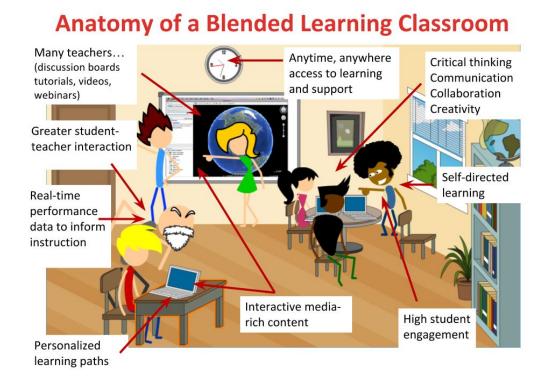


Figure 5 (https://elyonschools.org.ng/the-21st-century-learner/)

What hardware, software and physical space will you choose?

<u>Freshgrade</u> is our district approved online portfolio where students can access assignments, post work to share with teachers and parents. It is also where teachers will track work and assessments so it will be used as an LMS. Teachers will also use the portfolio to create reports for each reporting period.

Examples of Software options for LA and Math

For Language Arts, some of the tools the students will be able to access are **Epic books** for reading where they can choose books or be assigned books to read. Students have options to listen to reading as well as watch videos on different subject matters. Quizzes and assignments can be created to check for understanding. Students can use Apps such as **Book Creator** to create digital books. This tool allows students to add text, images, audio and video to their creations. Google docs will also be used to support speech to text, text to speech as well as word processing allowing students to collaborate on work with a partner or in small groups. This tool allows for composing and editing from different devices. Other tools such as **SnapType** allow for fillable graphic organizers and can support students with designations who need support with writing.

For *Math*, one of the tools the students will be using <u>Mathletics.ca</u> to support the concepts seen in class. Teachers will differentiate by providing activities at their appropriate levels. Students can take assessments and teachers can track progress as needed. Teachers will can also provide <u>Reflex Math</u> for fluency practice. Teachers can create short lessons on <u>Explain Everything</u> and have students view to solidify understanding. Students can then use the tool to explain a concept with voice to send to the teacher. The <u>ShowMe</u> app is also a good interactive whiteboard tool.

Needed for Blended Learning models implementation: Spaces and Technology equipment

Classrooms become *learning spaces* for Station Rotation and the library, computer lab and conference room will be used for the Individual Rotation model. They will require the following:

- Tables of different shapes and height, and carpet areas will replace desks only spaces
- Desks will be available to create learning groups and spaces for independent work
- Seating options will be comfortable desk chairs, cushions, couches, lounge chairs, stools, balance stools

- Moveable whiteboards as well as small white boards for student individual use
- Shelves and storage spaces properly store technology and other materials.

Learning Spaces

Figure 9 Computer Lab (Photo by B. Atwood)





Figure 10 Library Space (Photo by B. Atwood)

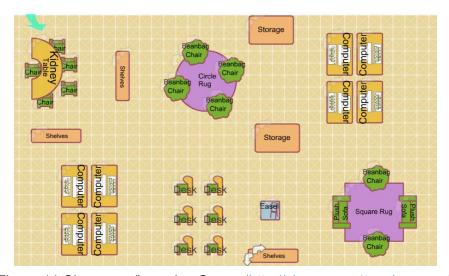


Figure 11 Classroom/Learning Space (http://classroom.4teachers.org/)

Figure 8 (https://pixabay.com)

Devices needed are:

- A mix of Chromebooks and Ipads as well as headsets will be available for student use. (enough for each student or at least 1: 2) Approximately 50 Chromebooks and 40 Ipads
- Printer stations/3D printer station available for each class (x4)

Current spaces and technology equipment

- -4 classrooms with desks and chairs and a few tables
- -Storage space in classrooms
- -20 IPads
- -30 Chromebooks
- -30 Headsets for Chromebooks
- -Smartboard in every class, including the library
- -TVs with computer capabilities in the conference room and in the computer lab.
- -30 desktop computers with one printer in the computer lab.

Possible Blended Learning Model Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
Am (9-12:15)	Blended Learning Stations (Language Arts and Math)				
PM (1-3)	Other Curriculum	Other Curriculum	Other Curriculum	Other Curriculum	Other Curriculum

Blended Learning Stations: Station Rotation model in each individual classroom with Individual Rotation for certain students in the classroom, library and conference room with the lab being the central learning space. Students following the Individual Station model could have their model extended into the afternoon depending on their learning plan.

Other curriculum: PE (Prep time), Library for each class happens in the afternoon. Genius hours with Daily physical activity happens here too. *Specifics to be determined by the team.

Time/Day	Monday	Tuesday	Wednesd ay	Thursday	Friday
1-2	PE (A. Hogarth) Library (Atwood) Carrier Language (Teegee) Other Curriculum (V.Hogart)	PE (Teegee) Carrier Language (Atwood) Other Curriculum (A. Hogarth)	Genius Hour	PE (Atwood) Other Curriculum	PE (V.Hogarth) Library (Teegee) Other Curriculum
2-3	PE (Atwood) Library (A. Hogarth) Carrier Language (V. Hogarth) Other Curriculum (Teegee)	PE (V.Hogarth) Carrier Language (A. Hogarth) Other Curriculum (Atwood)	Genius Hour	PE (A.Hogarth) Other Curriculum	PE (Teegee) Library (V.Hogart) Other Curriculum

How will you shape and maintain a positive culture in your school?

"Creating the right culture is critical for a blended learning model to be successful." (Horn & Staker, 2015, p. 261)

Students- Horn and Staker (2015) mention the following in their book concerning students and culture in Blended Learning environments.

- 1. We want student to become, "self-managing contributors towards the common goal". The key is to teach the children how and then let them set the goal.
- 2. According to Oliver Sicat (2013), in Horn and Staker (2015), "holding students to high expectations for behavior and having rewards and consequences for every negative and positive behavior, we don't tolerate without excuses." (p. 256)
- 3. Having students understand the importance of time efficiency. Moving between activities in a timely manner to benefit from learning time and not wasting it to move between activity is important to understand from the beginning. (p. 258)
- 4. Teaching students about taking breaks as we do in our everyday jobs is also important. Taking to time to review how long, when, where, why and how breaks look like needs to be explained. (p. 259)
- 5. Students need to understand the process of blended learning as well as responsible ways to handle challenges. As students live the different Blended Learning models, they

will have questions and require help. Providing them with clear expectations and solutions to problems that may arise will help them to have a positive experience.

Teachers-Working together towards a common goal. Using the SMART goal approach is recommended. This usually happens when an issue or problem needs to be solved. Working together by making small changes to the regular process or routine could improve or change the problem. Creating groups to investigate solutions and reinvestigating if progress isn't made will help in finding a solution. Horn and Staker (2015) state that culture is created through repetition.(p. 254). Here are the steps to shape culture as recommended by the authors.

- 1. Define a problem or a task that recurs again and again.
- 2. Appoint a group to solve the problem.
- 3. If they fail, ask the group to try again with a different process.
- 4. If they succeed, ask the group to repeat the process every time the problem recurs?
- 5. Write down and promote your culture.
- 6. Live in a way that is consistent with the culture.

Horn and Staker (2105) remind us that "Communication is important but it is even more important to hold to that communication, and follow through with it." (p. 254)

Budgeting

The blended learning model proposal will require a certain budget to roll out. Here are some budgetary items we need to consider.

Items	Year 1	Year 2	Year 3	Costs over 3 years
Furniture (Tables/Flexible seating)	5,000	3,000	2,000	10,000\$
Chromebooks (X20)	4,000	2,000	2,000	8,000\$
Ipads (X20)	6,000	2,000	2,000	10,000\$
Paid version Apps	500	500		1,000\$
3D Printers (X4)	2,000			2,000\$
	17,500\$	7,500\$	6,000\$	41,000\$

Total			
Total			
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- -The school board has a grant writer who could help us write grants to support our technology needs.
- Also, the Parent Advisory Committee (PAC) could help with contacting Staples or Best Buys to apply for special programs to bring technology in classrooms. They could give us lower prices which could lower our funding needs.
- -We raise approximately 5000\$ at our Xmas Craft Fair so we could get our classes together to help support the day and keep that money to help with our technology needs.
- -Classrooms could participate in projects such as SetBC Synergy Project. I received 10 lpads after completing a year project with my class last year.
- -We could ask for financial donations from our local businesses.

As this project is only at it's beginning phases, we would commit to a 3 year exploration phase with the district and gradually add the tech we needed as our needs change and grow.

References

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Why should we do blended learning (3min 20sec)

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