



Welcome to Grade 8 Science!



Hello and welcome to Grade 8 Science! I would like to take this time to formally introduce myself as I will be one of your son or daughter's new teachers!

My name is Scott Hebert and I will be your son or daughter's science teacher! I have been a teacher for 10 years now. I originally taught in the city of Calgary at Westmount Charter School. I have a 4 year degree in Physical and Health Education and I also have minors in Psychology and Science. I would describe myself as an extremely passionate and devote teacher who is always willing to learn and undertake new challenges to improve my students' educational experience.

The Goal

My goal this year is to help foster and grow a dynamic learner who learns to question and explore the world around them. All too often we take what others say for granted and move on. In the world of science, this is something that should be avoided as theories should be tested and the world should be explored in order to be understood.

This is where things will begin to look a lot different from your traditional class...

Gamification

This year, the grade 8 science program will continue with its "Gamification" overhaul. If you are new to this program, what does that mean exactly?

The first thing people tend to think of when they hear about this is that students will play video games instead of being directly taught or they will be glued to screens. Please let me ensure you that this is not the case. Gamification, in its simplest form, is the application of game design elements and principles into non-game environment. In this case, to your child's classroom...but why?

The video game industry is worth billions of dollars annually. Players will spend a few hours a day to over 25+ hours per week playing games. What draws the player in and, more importantly, what keeps them coming back for more? This is why Gamification is an exciting movement in the field of education – can we as educators harness that power?

Progress Mechanics

So what are the key concepts of Gamification that are brought into the classroom? Well, the big one is known as Progress Mechanics and these are what we most commonly associate with

video games. Things such as leaderboards, XP (or other types of point systems), achievements, badges, levelling-up, and so on. This, from a student's perspective, is the major draw of gamification because it rewards students frequently, at various points and pushes students of all different mindsets - the competitive, the game lovers, the team players, the high achievers, the collectors, etcetera.

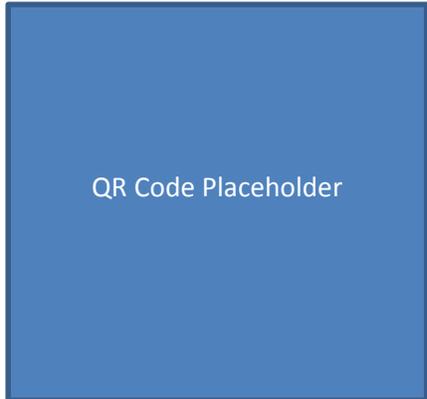
Story & Narrative

The second major component, this being the most controversial to many, is the running narrative and the main storyline. Most people who argue against gamification have their arguments rooted in the belief that if you do not have a story to play as part of the game you are missing the major component to games; the world the player becomes consumed in. This personally was my favourite portion of gamification as I was able to come up with a fictitious world, characters and quests which has totally flipped my classroom. You will be hearing a lot about the land of "Scientia Terra", the evil "Minotaur King" and saving the land on behalf of "Master Heeb". If the kids are talking, then the plan is working! 😊

The Feedback Loops

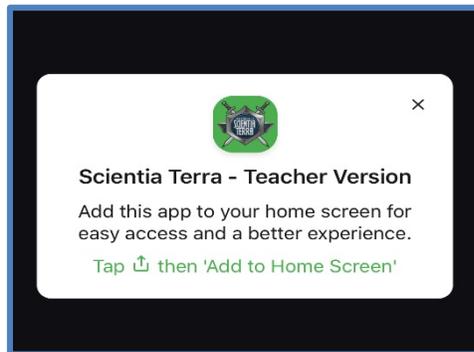
Next, coupled with in progress mechanics are rewards and immediate feedback. Teaching for 10 years now, I've quickly come to notice that students are often excited to hand in a major project or get a test out of the way however their level of care quickly drops when the mark takes time to get back to them. Gamification provides the user with a more immediate feedback system. As they complete shorter and quicker missions, quests and challenges they are provided with immediate feedback and sometimes a reward. When this happens students tend to feel more accomplished and motivated. While the feedback is not instantaneous, when even the most difficult to motivate student completes a short quest, receives quicker feedback and maybe even earn a reward, they are much more motivated to begin an increasingly more difficult task.

On that note, in order to keep everyone up to date and with information at their fingertips, I have learned to do something that resonates with every 12 to 14-year-old child ... I built an app! Yes, you read that correctly! This year, your students will be able to load an app onto their device (Smartphone, Chromebook, Laptop) that will contain what they need for the entire school year. It will contain important dates and upcoming events, it will show them where they rank, how much they have progressed in the monthly quests, how much gold and health they have, links to every single note provided in class and so much

A blue rectangular box with the text "QR Code Placeholder" centered inside it.

more. I am very excited about this addition and I cannot wait to see how it works throughout the year.

Please do keep in mind this is a new addition so there may be a few bugs that need to be worked out but I will keep up with app maintenance very diligently!



Adding the app is extremely easy to do and I would encourage you, as a parent/guardian, to do the same! Just take out your Smartphone, turn on the camera and point it at the QR on the previous page. When the app loads, the notification (shown to the left) will appear. Tap the icon indicated, scroll to the far left and click on “Add to Home Screen” The app will create and add an icon right onto your phone! Simply tap to open and you are

on your way!

Don't have a Smart Phone? No problem, I got you! Please go to the following link and you will be directed to the web based version of the app. It works exactly the same as it would on any phone and keeps you just as connected. It is into your “Bookmarks” and you are on your way!

Insert [link](#) here

Other Mechanics

Finally, there are other categories such as scaffolding to increasing challenges (which I touched upon above), opportunities for mastery, creation of avatars, a wide open playing field to promote creativity, emphasis on social connection, group and team building skills and the list goes on. I hope this new approach helps to motivate your son or daughter and to create an enjoyable and unforgettable educational experience.

An Ever Evolving Classroom with No Furniture...?

Based on the success of this program, which was awarded the 2015 Gamification in Education Project of the Year by the World Gamification Congress, I will be tweaking the game and continuing to build upon it. You will hear your child tell you that there are no tables and chairs and limited supplies in my classroom and that is correct! It is also true they will be building their own furniture – should they choose to do so! They can earn the resources as a team and the students are pretty excited about this added twist, and the many others I have planned for this year.

Why do I do this?

The first reason is that I want my classroom to reflect the experience I am trying to create for my students. If they were hired as mercenaries to help me, they most certainly would not arrive with furniture. They would arrive with whatever supplies they could hold and grow from that point – exactly what I am hoping to mirror.

Second, it has really become obvious to me that students in North America are not often aware of the privileges and benefits they have, especially in education. Many classrooms around the world have limited resources and old buildings yet the students and staff arrive happy each day. Eliminating some of the basics and having students earn and/or create them should hopefully open their eyes to the benefits we have here in Canada and to the struggles others face globally on a daily basis.

Grading

This science course will contain a final that will be worth 10% of your son or daughter's final grade. This leaves 90% to be made up of a variety of course work. Each of the 5 units will be worth 18% of their overall grade and will contain materials such as: quizzes (boss battles), a unit test (final boss), assignments (questing), study tools (grinding) and solo/group projects (guild wars). You will also hear your child use the term "XP", which is their gamified term for grade. Each month they are striving to earn as much XP as they can which is converted into their grade which appears in PowerSchool. It generally breaks down as follows ... **this is subject to change to ensure proper timing of all course materials**

Final Exam → 10%

Unit 1 *Mix & Flow of Matter* → 18% (September – October)

Unit 2 *Mechanical Systems* → 18% (November – December)

Unit 3 *Light & Optical Systems* → 18% (January – February)

Unit 4 *Cells and Systems* → 18% (March – April)

Unit 5 *Fresh & Saltwater Systems* → 18% (May – June)

Missed Work / Classes

I have built a website (www.mrhebert.org) in order to keep all students and parents up to date in all of my courses. It mirrors the app, generally speaking. It contains all of the necessary information to help your child, as well as yourself, navigate through the year. Any missing work or important documents will be downloadable from this site. It will also outline key dates and times. Regarding the website, if you feel there is something it is lacking or an error on the site I

should be aware of please feel free to contact me. You can also track the progress in the Gamification here as well.

Contact Information

Should you have any questions, comments or concerns about anything from the course please do not hesitate to contact me at scotth@eics.ab.ca. I also welcome e-mails about anything I should be aware from family vacations to sudden emerging issues. My door is always open!

Again, I look forward to meeting and working with you all throughout the course of this year. Also, again, should you have any questions, comments or concerns, please do not hesitate to contact me!

All the best,

A handwritten signature in black ink, appearing to be 'S. Hebert', written in a cursive style.

Mr. Scott Hebert

Grade 8

St. John Paul II – Sciences

The Oath of Scientia Terra

The land of Scientia Terra is a dangerous place. A place full of adventure, challenge and consequence! I must ensure that only the fiercest, bravest and most determined warriors are coming with me on this 10-month journey! I must know that you are with me...

Please read each statement carefully and sign and/or initial where indicated 😊

- I hereby pledge to do my best to save the land of Scientia Terra! Although the journey will be tough, and most certainly will feel long at times, I promise to give it my all Initial.
- I understand that the land of Scientia Terra is governed by a unique set of rules with even more unique consequences. Not working to my individual potential is not acceptable in the land of Scientia Terra and Master Heeb's *will not* be there to hold my hand throughout the process and struggling while learning to persevere is part of the process Initial.
- I understand being able to work independently, or within a team, is crucial as I eventually progress to the land of *Princeps Schola* (aka: High School) and having my work done for me will not help me grow as a fearless warrior in this land Initial.
- I understand that the only way to survive in this wasteland is to build up a strong allegiance with my guild mates and that tearing people down will not only stop progress but could result in a trip to the Dungeons of Scientia Terra Initial.
- I respect the amount of work and effort put into the creation of this program and will always to my best to respect it, others and those around me Initial.

I Print Name Here, pledge my allegiance to the land of Scientia Terra and will put forth my all to vanquish this land of the evil Minotaur King and rebuild this land into its former glory!

Student Signature

Parent Signature

Date