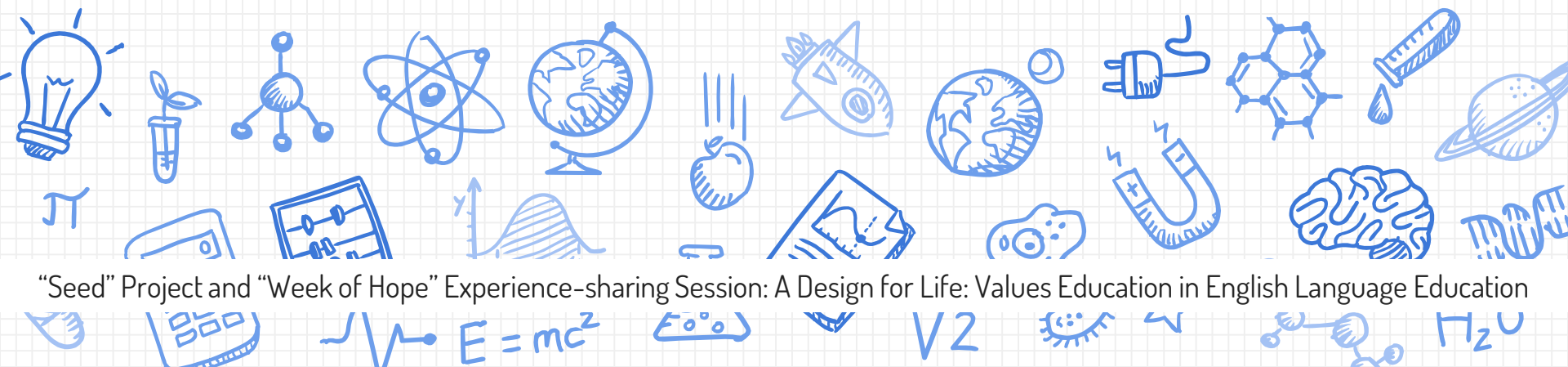


MAKING IT PERSONAL

How the Makerspace Experience Enables Students to
Demonstrate Greater Engagement in Their Own
Learning



“Seed” Project and “Week of Hope” Experience-sharing Session: A Design for Life: Values Education in English Language Education



HELLO!

Mrs. Kitty Leung

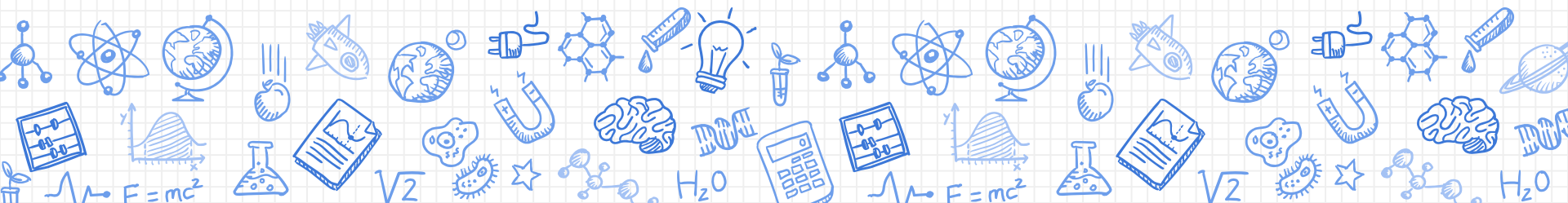
Ms. Rebecca Martyn

Ms. Lauren Minnie

Marymount Secondary School

MYTH ONE

MAKER EDUCATION IS FOR STEM SUBJECTS AND HAS LITTLE
TO DO WITH LANGUAGE LEARNING.



Maker Education

an approach to learning that relies on **hands-on**,
often **collaborative**, **creative** learning experiences
as a method for **solving authentic problems**



Design Thinking

a systematic, solution-based, hands-on approach
to creative and innovative problem solving which
helps us tackle complex human problems in
society and our lives



Design Thinking

a systematic, solution-based, hands-on approach
to creative and innovative problem solving which
helps us tackle complex human problems in
society and our lives

S3 ENGLISH LITERATURE NEW YEAR INTRO

Students used DESIGN THINKING STEPS to create an avatar for a classmate, using the costume and design to address the classmate's current CONCERNS OR ANXIETIES. They recorded an ORAL explaining their design.



“I designed this for my friend who worries about her academic work and feels insecure about herself. The glasses are meant to give her wisdom and the torch with hearts as well as on her dress are to remind her of her passion to help others and to appreciate herself. The booster boots are to help her rise above her challenges.”

“My friend’s superpower is to read other people’s feelings. Some other people find her annoying. The costume is in dark colours except for the light blue because she doesn’t want stand out. She can use the goggles to read people’s emotions more accurately. She can sense positive and negative emotions.”

This one rather than being focused on worries about academic work in S3 was more focused on a student’s personal worries/concerns with relationships and how to navigate them. The avatar addresses how she could be more sensitive to those around her



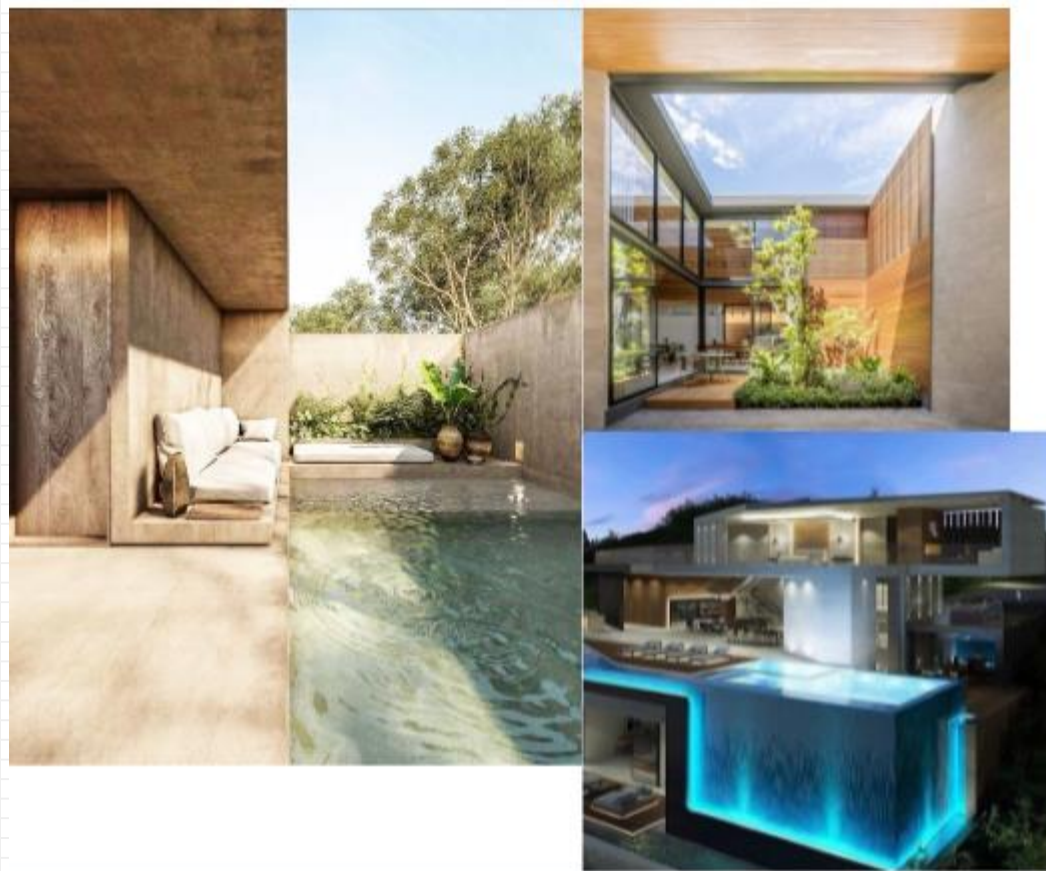
S6 ENGLISH LANGUAGE NEW YEAR INTRO

Students used DESIGN THINKING STEPS to design a home for a classmate to address the classmate's current CONCERNS OR ANXIETIES. They WROTE A RATIONALE explaining their design choices.



“My friend is an imaginative person. She loves fancy pictures. Therefore I would like to design a flying house for her so she could enjoy a sense of tranquility in the sky. She loves travelling as well. If she owned a flying house, she could travel around the world easily. The colourful balloons symbolise happiness. I truly wish that her life could be filled with love and joy so I designed a flying house carried by balloons of various colours. She is apprehensive about her academic results In order to get rid of her anxieties, I designed her a house flying in the sky so she might be free from all the troubles happening on earth.”

This student actually isn't the strongest or accurate but she used language quite accurately and her use of modal verbs conveying hopes and wishes is done well actually.



My partner likes the modern take on design for buildings so the exterior of the architecture I've chosen, it perfectly mirrors her taste and would be a comfortable setting for her to live in, she enjoys neutral colours with some more bolder choices in design. This shows how she has an open mind and is accepting of more diverse choices than just the typical plain old.

Her interior reflects how her personality more, the pool is more of her interest since she enjoys swimming. It's not too exposed nor is it too hidden, it shows how she is trusting of people yet knows her boundaries as well. She enjoys the openness since it gives her more air to breathe since her building is pretty packed with people so she would love fresh air. She also enjoys the sun, it's healthy since she is quite a healthy and active person, also shown by the nature around her.

Mostly neutral colours inside since she usually remains neutral with her choices, she also gives off a calming aura, hence the serene interior. Her exterior also shows that she's quite fun as well. She doesn't have too many greens as it can be overwhelming at times so I kept it to a minimum so she can be less stressed.

This student actually is quite strong and she has more detailed descriptions on the interior to describe aspects she chose to address her classmate's concerns.

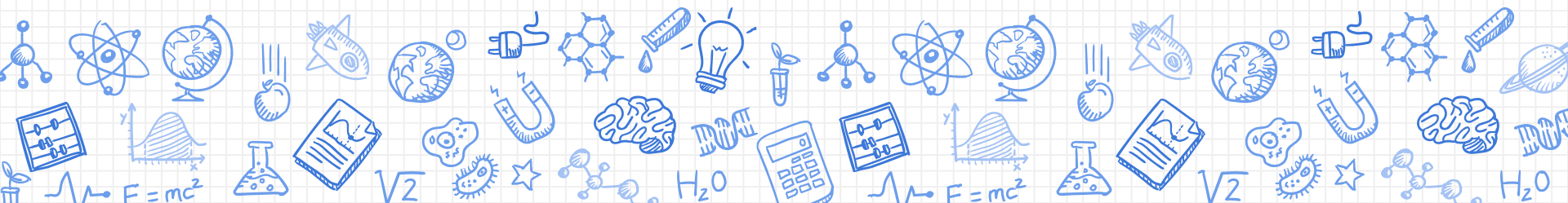
TAKEAWAY?

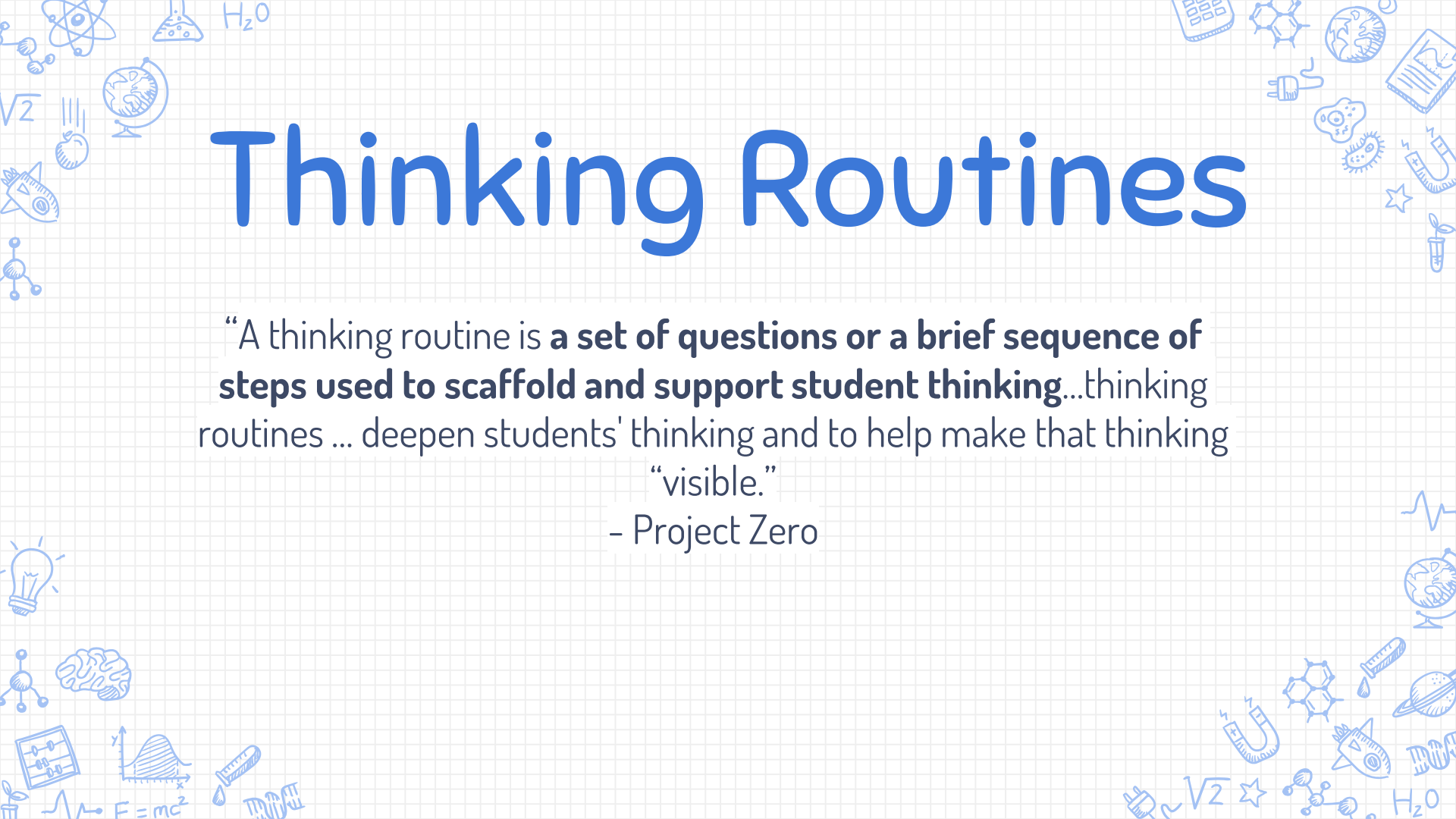
Students showed great empathy and creativity during their interviews and in their designs. Their work was thoughtful, detailed and unique. They were able to express their reasoning and rationale behind designs.

DESIGN THINKING CAN BE INCORPORATED INTO LISTENING, SPEAKING AND WRITING TASKS.

MYTH TWO

STUDENTS CAN'T THINK OF AND COME UP WITH IDEAS.

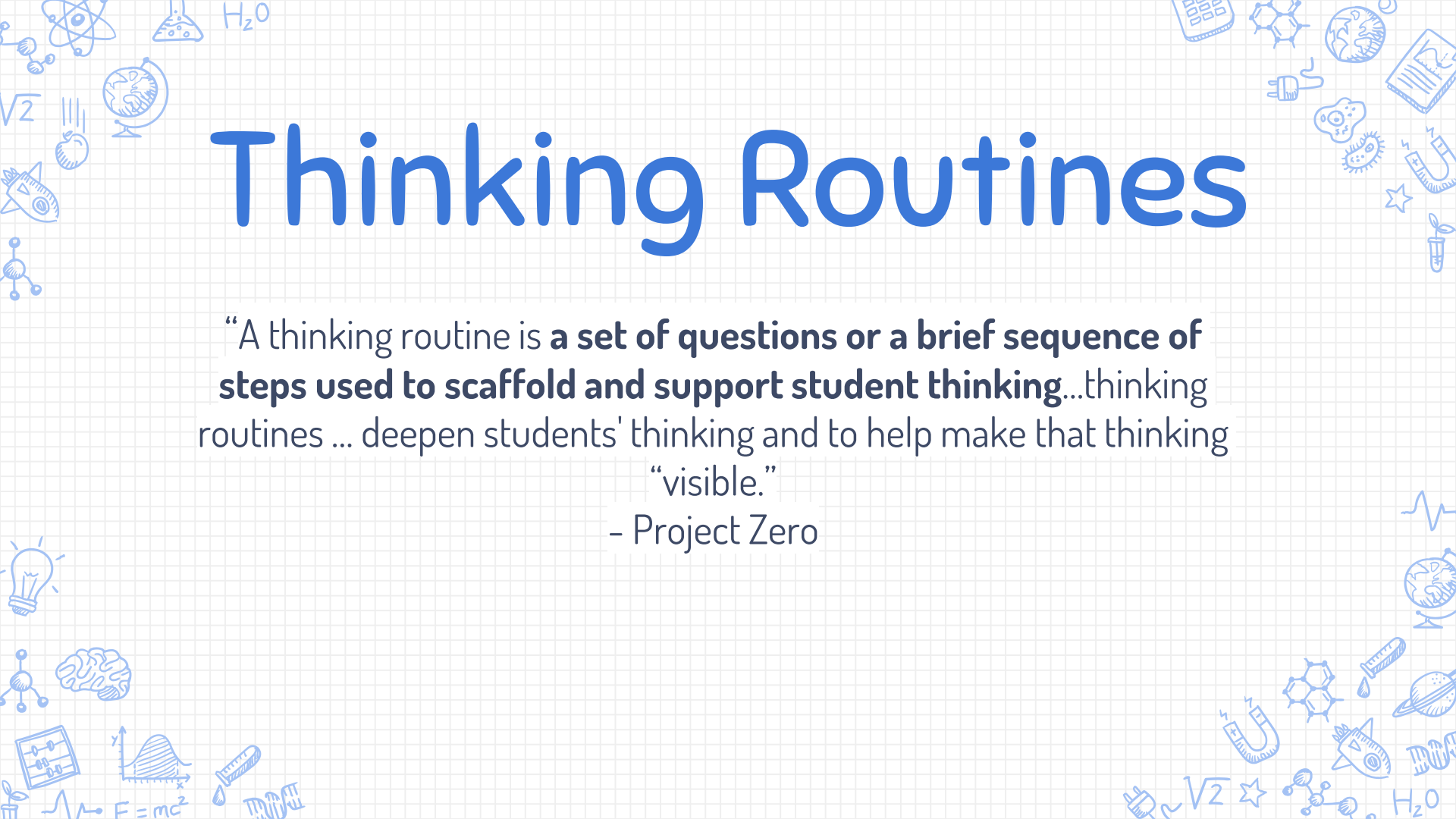




Thinking Routines

“A thinking routine is **a set of questions or a brief sequence of steps used to scaffold and support student thinking**...thinking routines ... deepen students' thinking and to help make that thinking “visible.”

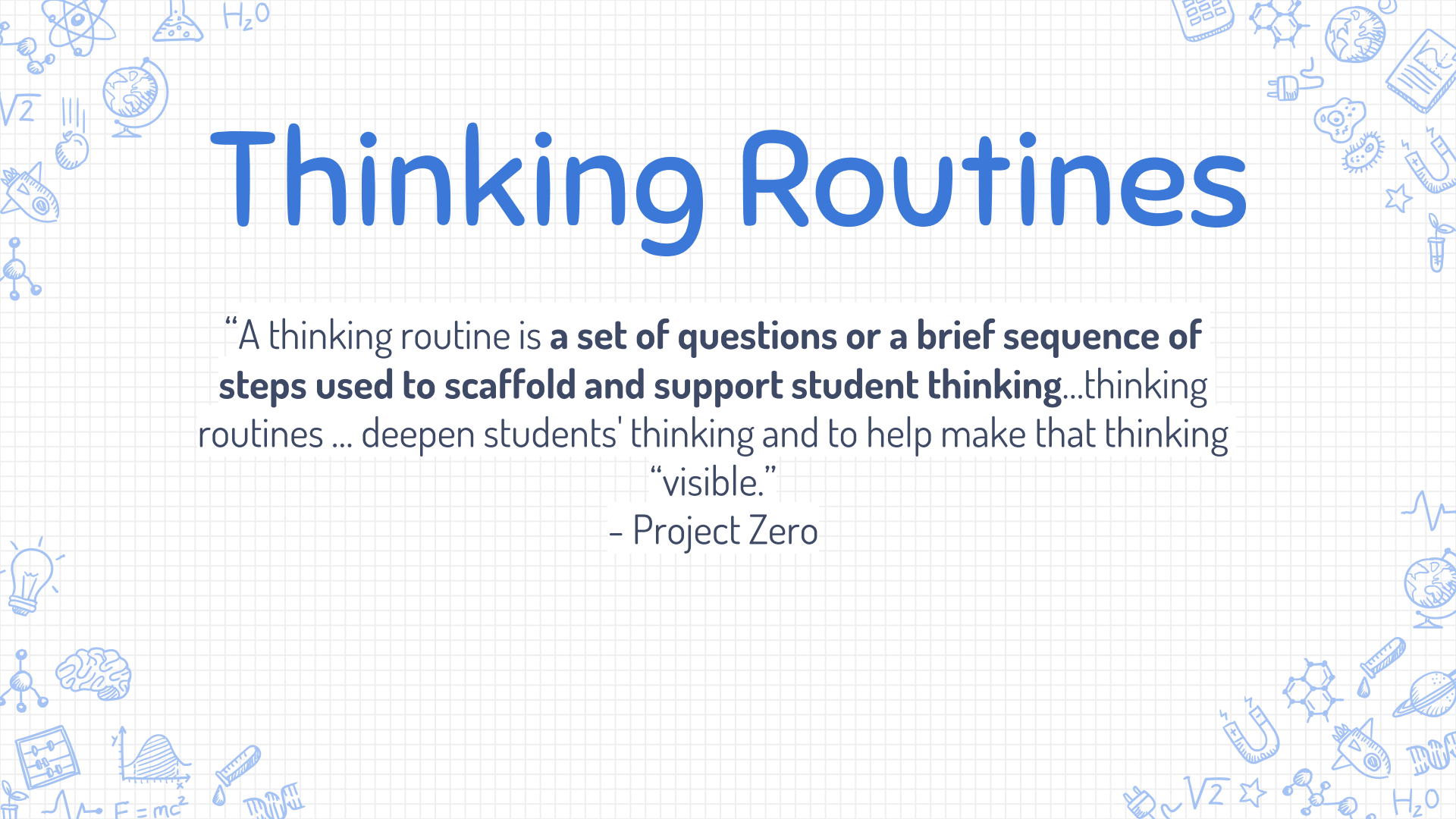
– Project Zero

A decorative border of various science and math icons surrounds the central text. The icons include a lightbulb, a brain, a DNA helix, a globe, a rocket, a microscope, a beaker, a test tube, a magnifying glass, a calculator, a pie chart, a bar graph, a line graph, a scatter plot, a coordinate plane, a vector, a matrix, a graphing calculator, a computer monitor, a smartphone, a tablet, a laptop, a desktop computer, a server rack, a network diagram, a cloud, a lightning bolt, a star, a planet, a moon, a sun, a galaxy, a nebula, a comet, a meteor, a satellite, a space station, a rocket ship, a space shuttle, a space lander, a space probe, a space rover, a space module, a space habitat, a space colony, a space city, a space empire, a space civilization, a space culture, a space society, a space community, a space family, a space nation, a space world, a space universe, a space everything.

Thinking Routines

“A thinking routine is **a set of questions or a brief sequence of steps used to scaffold and support student thinking**...thinking routines ... deepen students' thinking and to help make that thinking “visible.”

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Thinking Routines

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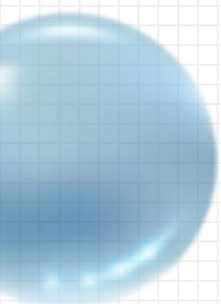
– Project Zero

Thinking Routines

“A thinking routine is **a set of questions or a brief sequence of steps used to scaffold and support student thinking**...thinking routines ... deepen students' thinking and to help make that thinking “visible.”
– Project Zero

**But what does this
have to do with
learning English?!**





Let me show you!

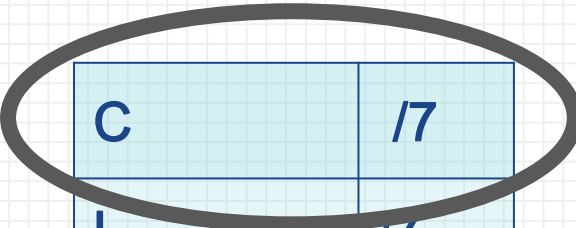


What is this? →
Paper 2 marking scheme

C	/7
L	/7
O	/7
Total	/21



Let's focus on the content marks



C	/7
L	/7
O	/7
Total	/21

“totally relevant”



“all ideas are well developed”

“creativity and imagination are consistently shown”



How might a thinking routine help my students produce writing that is...

“totally relevant”

“all ideas are well developed”

“creativity and imagination are consistently shown”

S1 ENGLISH LANGUAGE INFORMATIONAL ESSAYS

THINKING ROUTINES WERE USED TO
SUPPORT STUDENTS' INTERVIEW AND
RESEARCH SKILLS, HELPING THEM
WRITE ESSAYS WITH UNIQUE, DETAILED AND
INTERESTING CONTENT.

Classmate Introduction

S1 students were tasked with writing a short informational essay where they introduced a new classmate to the class.

To gather information about their new classmates, they first had to interview them.

After writing a long list of questions to ask their “new classmate”, a different classmate proofread their questions using the “Question Starts” thinking routine.

Question Starts

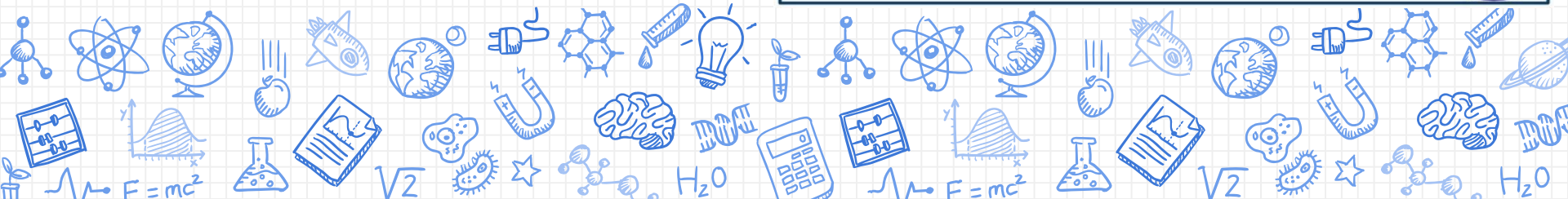
Brainstorm a list of at least 12 questions about the topic, concept or object. Use these question starts to help you think of interesting questions:

- Why...?
- What are the reasons...?
- What if...?
- What is the purpose of...?
- How would it be different if...?
- Suppose that...?
- What if we knew...?
- What would change if...?

Reflect: What new ideas do you have about the topic, concept or object that you didn't have before?

This routine helps learners develop good questions that provoke thinking and inquiry into a topic. It also helps learners brainstorm a variety of different kinds of questions.

Digging Deeper Into Ideas



Revising Interview questions using "question starts"

(12) Interview Questions - 1st Draft

1. Which kind of music genre do you like the most?
2. Do you like k-pop or pop more?
3. Do you like BTS more or TXT?
4. What is your favourite colour?
5. When is your birthday?
6. What is your favourite song?
7. Do you prefer friends or family? Why?
8. Who is your bias in BTS, SVT?
9. Do you like TxD more or Seventeen?
10. What is your dream pet?
11. Which country/city do you like the most?
12. Are you a dog person or a cat person?

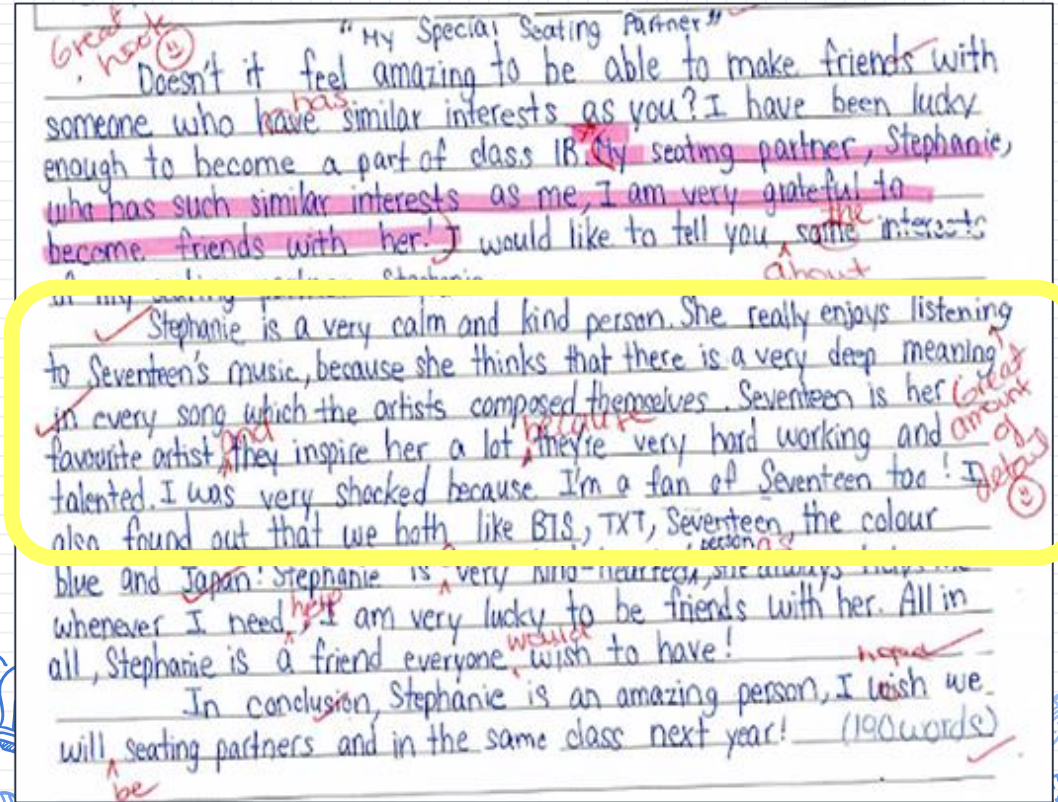
Interview Questions - 1st Draft

1. Which kind of music genre do you like the most?
2. Do you like k-pop or pop more? Who is your favourite artist?
3. Do you like BTS more or TXT? Why? (TXT for me :D)
4. What is your favourite colour?
5. When is your birthday? How do you usually celebrate it? Who do you celebrate with?
6. What is your favourite song? Which artist does it belong to?
7. Do you prefer friends or family? Why?
8. Who is your bias in BTS, SVT? (My bias is Jungkook and Wonwoo :D)
9. Do you like TxD more or Seventeen? Why?
10. What is your dream pet? Why?
11. Which country/city do you like the most? Have you been there before?
12. Are you a dog person or a cat person? Do you have any pets?

Final Writing Piece

While there are several areas for improvement in the student's final piece, she has been able to elaborate and build upon her ideas relating to her classmate's love for the k pop group "Seventeen", instead of just mentioning this point once, and moving on to another idea.

Thus, she is moving in the direction of producing writing where her ideas are "well developed", and "relevant".



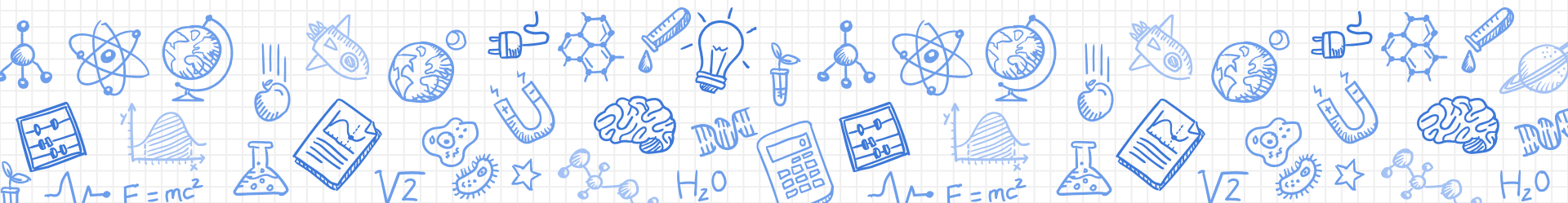
TAKEAWAY?

It is possible to teach strategies to improve complexity of thinking and ideas. If given the right tools, students can gradually improve their ideas and come up with more relevant, interesting and creative content.

THINKING ROUTINES CAN SUPPORT STUDENTS' IDEAS AND CONTENT IN WRITING.

MYTH THREE

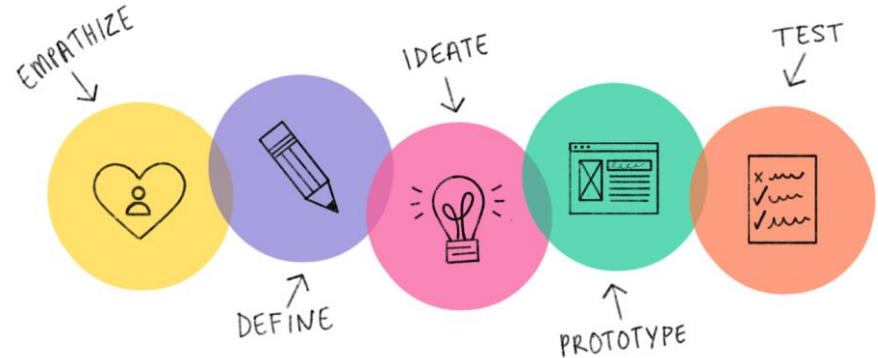
STUDENTS HATE PROCESS WRITING. THEY FIND IT BORING.



THE WRITING PROCESS



THE DESIGN PROCESS



S2 ENGLISH LANGUAGE TRAVEL WRITING

DESIGN THINKING STEPS were used to
support students in PROCESS WRITING,
helping them better identify
OPPORTUNITIES TO IMPROVE each draft of
their writing.

Charlotte Tsang

The design thinking routine has helped me to better empathize and recognize the needs of my clients as I learnt to listen with an open mind and seek to understand their perspectives to create a distinctive travel brochure. The project has also trained me to speak from my heart sincerely instead of reading from my script aimlessly.

They enjoyed the
communicative and creative
process during the empathize,
ideate and prototyping stages.

STUDENT REFLECTIONS

Lisa Yeung

I have learnt collaborative skills through communicating with our clients and listening to their needs. I have improved my creativity in the design thinking process by planning different events for our clients, and imagination in ideating strategies to achieve our goal and match our defined statement.

2B (13) Bernice Ku

During the stages of this design thinking task, the define stage and empathise stage helped the most. At first we struggled with which place we should choose but after asking useful questions and defining our clients' needs, we were able to decide on a place and attractions. Other than that, the feedback stage was also very helpful as we got to know in what aspects we might've been lacking and what we can change to improve our package.

STUDENT REFLECTIONS

Prototyping offers a chance for students to practice feedback and problem solving. Prototyping coupled with feedback was helpful for guiding improvement and attention to detail.

2B (12) Natalie Ko

As a travel lover, this was one of the most memorable projects during this school year. Among the work, my biggest takeaway was to understand the different needs of our clients compared to us. The comment that our clients gave us after prototype 1 was definitely a big help on how to improve the trip. With our strong teamwork, we were able to incorporate competencies to solve our problems and it was an enjoyable experience with my group mates.

Ashley Wong: Through this design thinking process, I learned how to rationalize our ideas and emphasize our clients' needs. By defining their expectations, I learned to balance unrealistic expectations and reality. An example of this is not being able to arrange a K-pop concert because of time constraints and the difficulty in buying tickets to K-pop concerts. During the process, I also learned to not be offended by constructive suggestions and how to deal with free riders (conflict resolution).

Annette Shair: Through this design thinking process, I learnt how to work and communicate as a team without criticising others' opinions. Moreover, I gained better planning skills throughout planning the trip by the prototypes. Speaking of prototypes, I now know how to make good use of them unlike the time in the first term when I was confused about their use. Overall, I think my team and I did a pretty good job on the design thinking process in this project.

Students started prioritizing planning and the learning journey instead of the final outcome. They understand the purpose and value of the PROCESS WRITING!

STUDENT REFLECTIONS

TAKEAWAY?

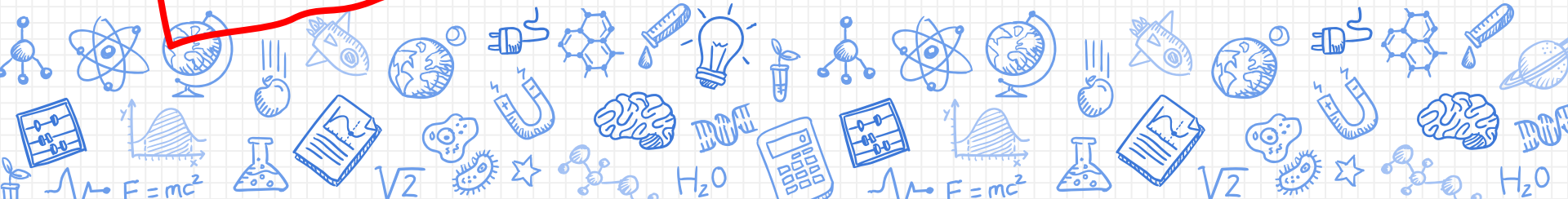
Students are excited to revise and improve their work when the task feels interesting and engaging.
Students appreciate being given the skills to identify areas of improvement.

DESIGN THINKING CAN HELP US ACHIEVE BOTH THESE aims!

MYTH

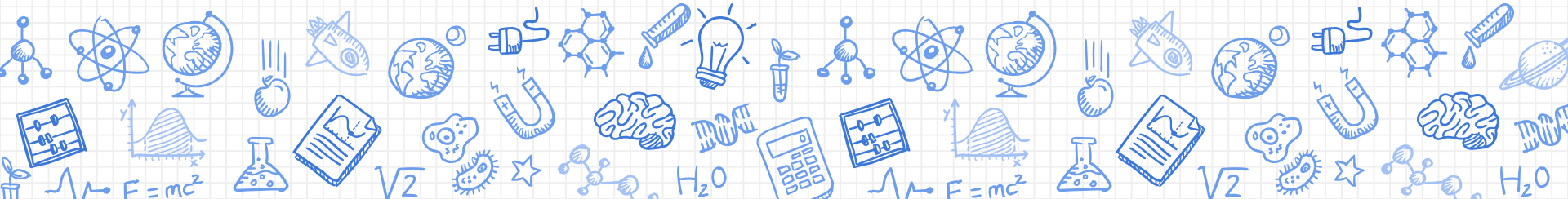
BUSTED!

STUDENTS HATE THE PROCESS OF WRITING. THEY FIND IT BORING.



MYTH FOUR

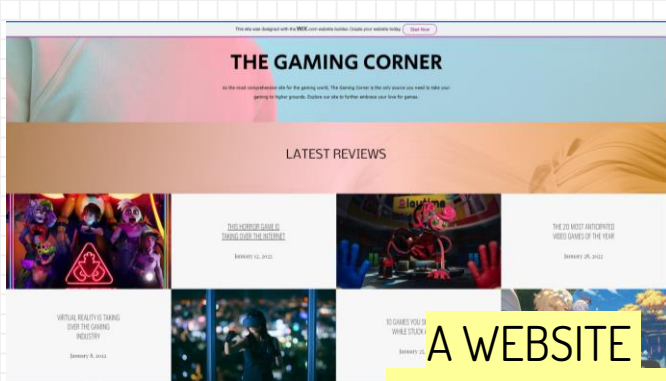
IF I LET STUDENTS DESIGN THEIR OWN PROJECTS AND ASSESSMENTS, THEY WON'T BE PREPARED FOR EXAMS.



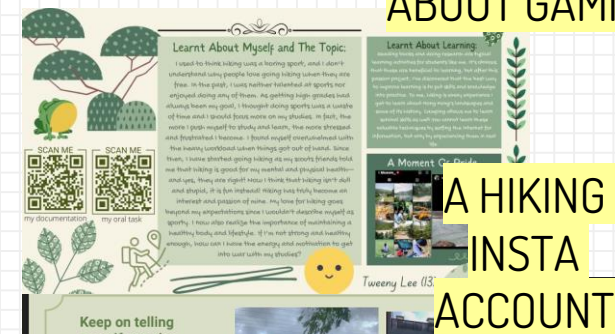
S3 ENGLISH LANGUAGE PASSION PROJECTS

The Passion Projects combined MAKER EDUCATION AND DESIGN THINKING in that students had to make a product based on their passion. Design Thinking offered some concrete steps for students to following, offering GUIDANCE AND SCAFFOLDING FOR DIRECTING THEIR LEARNING AND THINKING, while at the same time, connecting with real audiences and real issues.

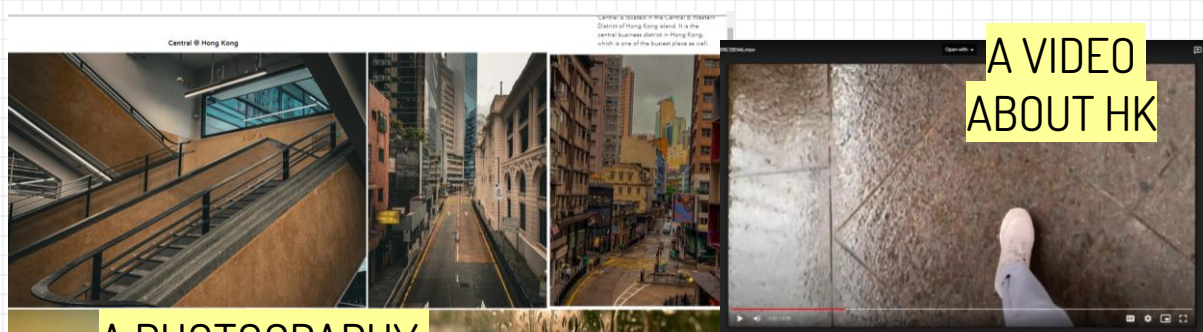
As each project and passion was very individual and personal, we used THINKING ROUTINES to help student direct their learning and identify opportunities for more COMPLEX AND CRITICAL THINKING.



A WEBSITE ABOUT GAMING



A HIKING INSTA ACCOUNT



A PHOTOGRAPHY PORTFOLIO

MY PASSION PROJECT PROTOTYPE: *The Psychology of Life*

By 3D24 Candy Xie

The Psychology of Life-Introduction
Life—the process of living. Yet, there's still lots of things to discover behind the hierarchy of life principles and systems. Time after time, I thought to myself, "How do the things on Earth I feel, touch, connect with, and hear, see, listen... occur in and react with my brain and how do I actually deal with it?" As a student, I'm overwhelmingly filled with a lot of work and assignments to hand in, finalising them with a last-minute spirit. For that, I never get to experience the feeling—knowing what and

A RESEARCH REPORT

37



A SHORT STORY

A COSPACE GAME





Letter to my parents
Lauren Lau 3D (0)

Dear Mom and Dad,

Hells. It's Lauren. I guess you must be interested in what I do in my English school lessons so I want to share a fascinating project I've encountered with you.

It's a passion project. A passion project is a project-based learning activity in which students do research on topics and make something they are passionate about. As I love photography and writing diaries, my passion project is making a digital journal. I will insert photos I've taken and write diaries on an iPad calendar template. My goal is to be able to finish a complete digital calendar but I might change my mind if there were too many tests and homework at school.

The main reason why I chose this as my passion project is because it includes two of my hobbies. Secondly, this is a long project which goes on for months and requires me to update it in a short period of time. This project can train my perseverance as you know I usually give up half on my work. Moreover, I want to record my daily life to practise gratitude, realising I should be grateful for everything around me.

This must be such a new idea to you as it's very different from the traditional learning method. I understand you might doubt if I can learn anything from this project but it actually allows me to develop various skills, especially problem solving skills. As everyone's passion projects are different, there isn't a specific outline which indicates what I need to do. Therefore, I often need to solve problems by myself when exploring various fields. I need to figure out how the app works, what template suits my taste and how I can arrange my photos in an organized way. Through this project, I definitely have become a more creative problem solver and learnt to view situations from another perspective. This is undoubtedly one of the takeaways from the project.

LONG WRITING



Audrey's classmates loved her idea and you can see that their support has boosted her confidence. She also speaks more confidently and comfortably when talking about her passion. I love seeing this side of my students :) it's great evidence how greater agency can change the learning atmosphere.

ORALS

Furthermore, I started using thinking routines, such as 'Appreciate, Wonder, Suggest', 'Think, Puzzle, Explore' and 'Think, Feel, Care'. They helped me to reflect and improve my ideas. I barely used thinking routines before as I thought they were useless and time-consuming. However, my English teacher encouraged me to use different thinking routines to organize my ideas and I found out it really helped me. After using the thinking routines, I changed the details of my final product and decided that I shouldn't record every day on the calendar. Thinking routines allowed me to think and make changes to the final product. Learning to use thinking routines is a breakthrough I've made in doing the passion project.

You may also ask how the passion project relates to English lessons. Actually, there are many opportunities in the process which allow me to develop English language skills. I can develop my listening skills when listening to others' presentations about their passion projects on Plickers. Speaking skills are used when I need to present my passion project ideas to my teacher and peers with clarity. For reading skills, I read various articles, websites, different texts and multimodal media when I'm doing research. I write my diaries to make the final product. Thus, I can during the process.

I am very excited to do the passion project and you making this passion project. This idea might be new to you in finishing my passion project because this is what I

Research Summary

Name: Anna Yu
No. 25
Passion Project: Global warming issues, effects and how to reduce!

WHAT'S GREEN AND GLOBAL WARMING?

Researcher's Name: Anna Yu

Topic: Global Warming

Goal: To understand the causes and effects of global warming and how to reduce it.

Key Findings:

- Global warming is caused by the greenhouse effect, where the sun's rays hit the earth and are reflected back to the earth by the atmosphere, making it warmer.
- The main cause of global warming is the increase in greenhouse gases, especially carbon dioxide, in the atmosphere.
- Global warming leads to various effects, including rising sea levels, more frequent and severe weather events, and the melting of glaciers and ice sheets.
- Global warming also affects ecosystems and biodiversity, with many species facing extinction due to changes in their habitats.
- Human activities, such as burning fossil fuels, deforestation, and industrial processes, are the primary sources of greenhouse gases.

Conclusion:

Global warming is a serious threat to our planet and future generations. It is essential that we take action to reduce greenhouse gas emissions and mitigate the effects of global warming. This can be achieved through a combination of individual actions, such as reducing energy consumption and using public transport, and government policies, such as implementing carbon pricing and promoting renewable energy.

RESEARCH AND READING



REFLECTION
WRITING

VISUAL
LITERACY



3D Portfolios of Learning

Feedback from others



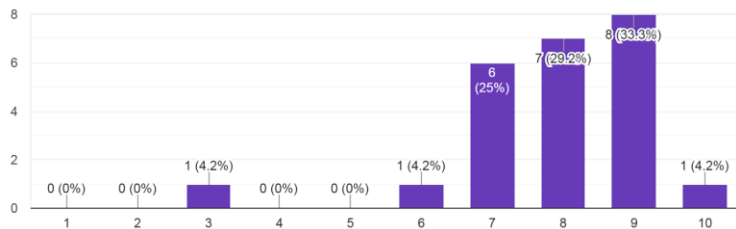
LEARNING
PORTFOLIOS



THE RESULTS?

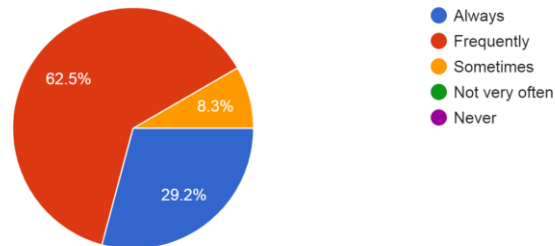
To what extent did you enjoy working on Passion Projects?

24 responses



In Ms. Minnie's lessons, I'm pushed to think...

24 responses



How meaningful was your learning experience during Passion Projects?

24 responses



- A positive learning environment
- Student engagement
- Student voice and choice



ALISON CHAN 3D (03)

Visit my Website!

<https://s19j05.wixsite.com/thegamingcorner>

Puzzles and Challenges

What I Used To Think

I used to question about the purpose of passion projects, I thought it was useless and would not be able to help or benefit us, let alone help improve our English. But now, I can see that I was wrong. This passion project not only helped me discover my own passion but I also had a lot of fun creating the website! It also helped enhance my writing skills.

What have I gained from this Passion Project?

Puzzles and challenges that I have experienced are definitely trying to figure out how to get the website to run smoothly and to attract more readers since my website is still small but I think I have a pretty good start as of now.

From this project, I have definitely discovered more about what my true passion is and I was also able to learn how to create a website which was my moment of pride! I was also able to enhance and practice more about my editing and writing skills by writing reviews on my website.

Now what?

I have so far wrote a review on my website to test whether the website runs smoothly and that readers are able to access and read the review and luckily it was a success so I will slowly continue to update the website as I am still slowly figuring out the basics of editing and upgrading the website.

Positive learning attitudes and classroom atmosphere

More meaningful reflection on learning

Using reflection to direct learning and explore opportunities and challenges

MY PASSION PROJECT - FYI

My passion project about?

My project is a song about a stressful person whose mindset changed in the song from feeling she has to complete everything and bear everything on her own to giving herself a break and stopping for a bit. The song is now 90% completed and took me half a year to finish mixing, writing the lyrics and making the melody of the song.

What did I learn about myself?

I learn that I can do things really fast after I passed an obstacle. In this case it is my lyrics. After I finished writing my lyrics, I can immediately think of a melody for my lyrics and record it swiftly. It is as if the obstacle is a booster and helps me do stuff faster after I passed it which I find really amazing.

What did I learn about writing music/ lyrics?

Throughout the song, I wrote my first song with complete lyrics in English and it is a remarkable moment when I completed it. I learnt that when I'm writing lyrics, I don't have to overcomplicate them, choose words which they should match the meaning and the melody. I always thought before that the lyrics should rhyme with each other or else it wouldn't sound good but actually when it didn't it still sounded equally good in my opinion. For music writing, I haven't learnt to write negatively. It means that instead of adding a lot of instruments and topping them off each other, I would rather think which instruments would play which part and what notes before I record myself playing so the sound would be cleaner instead of messy and even a bit annoying.

Some links throughout my journey:

[my research summary](#)
[my documentation and reflection](#)
[my prototype 1](#)
[my oral report](#)

What did I learn about thinking/ learning?

When I made songs before, I always rushed and recorded EVERYTHING that I was thinking on the spot without any hesitation or thinking if it makes sense. However, I have now learnt to stop and think about the different things before I go on and record. This allows me to have a clearer picture of what I wanted to do and how I could do it. The same story goes for learning, when I am doing tenses exercise, for example, I have now learnt to think twice before I give my answer and it really increased my correct percentage.

going me to go to school
go get changed and be slowly
pick up my bag and hurry outside
top on the bus and begin to write

hundreds and thousands of pages
of essays scattered all on the floor
I'm hoping that this could end soon
I'm hoping that the timer doesn't go off
let me write and write and type and type
until I run out of time

maybe I'll be late for school
maybe I'll start packing up too

everytime I look down and see the minute hand tick by
I realized I have lost so much time

I dunno how how can I cope with this life
all I can do is to strive
to survive

now against the clock
gotta get it all you got
don't bother to go and take a walk
do your best before you stop
get 'em down before you drop
do more than you ought

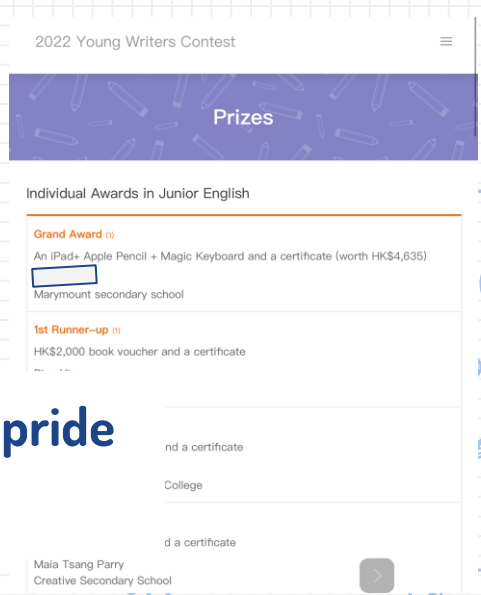
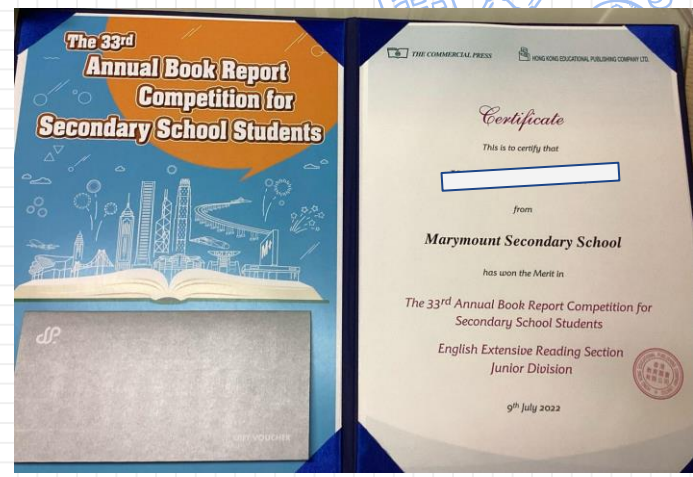
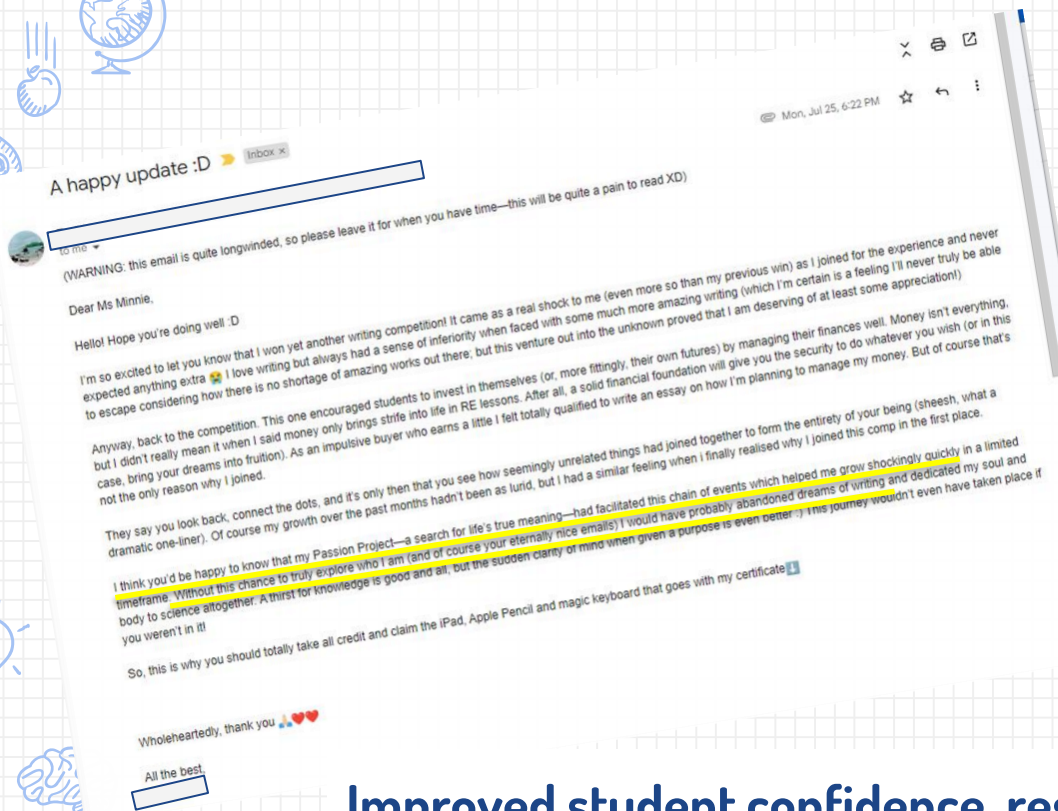
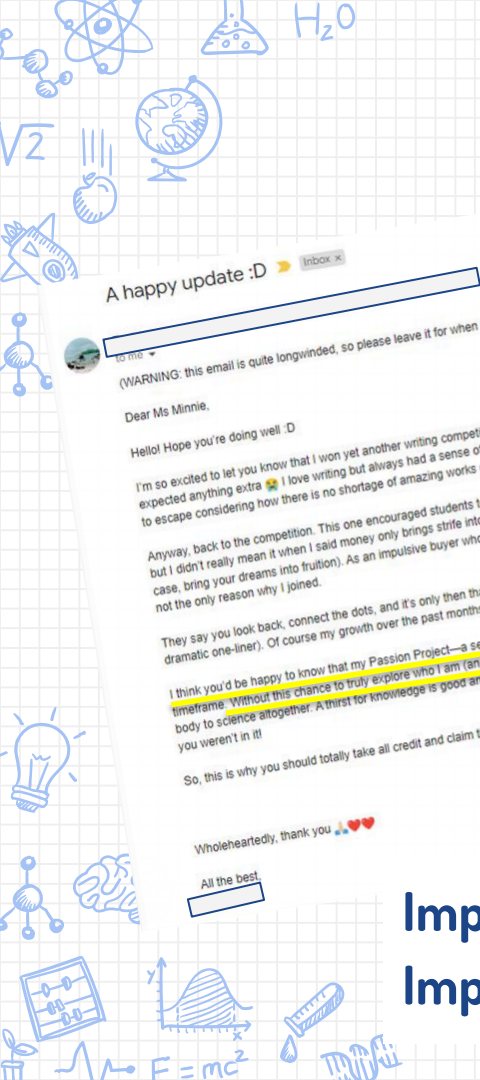
this is the only way to live... I wonder
shouldn't be striving for things even when it's a burden
it will come to an end someday
I will end up in smoke someday

piles of files of paperwork still left on my floor
there's nothing much that I could do
except really doing my best
thinking 'bout if this the best way for me to live out my life
maybe I could go to bed and take a little nap for an hour or two

everytime I look down and see the minute hand tick by
I realized time has been taken by
but why should I rush up at my time
just to work so hard instead of enjoying life

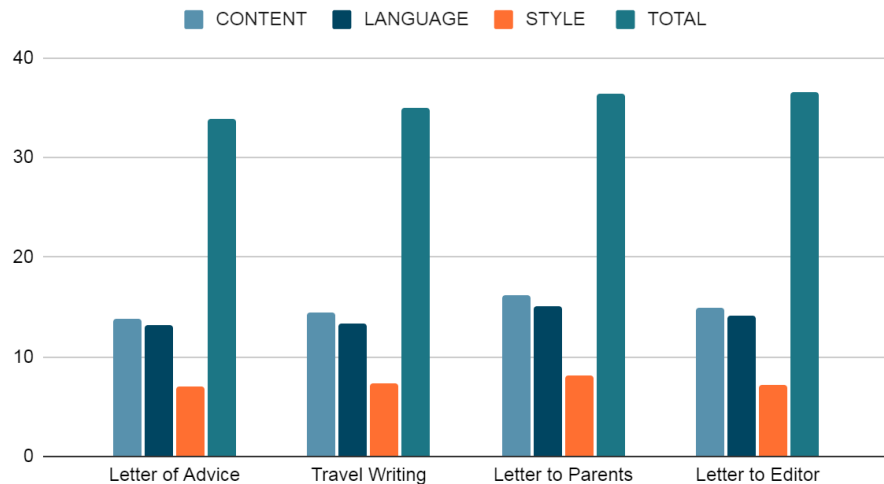
throw away the clock
take back what I want
fly like a bird out from a cage

swapping soaring just stress free
over clouds and cross the sea
recharge myself with strength till I come back for more



Improved student confidence, resilience and pride
Improved teacher-student relationships

3D ELAN LONG WRITING TASKS



A 5% improvement in the class average from their first timed LONG WRITING task to their last

Noticeable improvement in considering different perspectives and points of view

Mature and compassionate ideas

Better sensitivity to audience

TAKEAWAY?

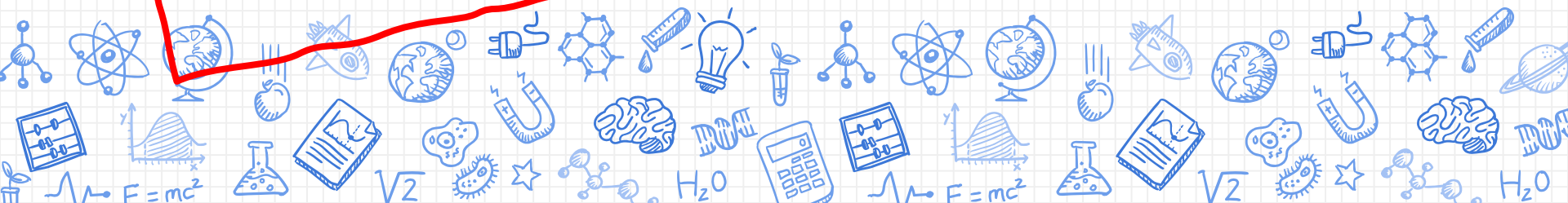
We can make English learning more personal and offer room for student voice and choice. Students are engaged and active when they get to design their learning journey.

DESIGN THINKING, MAKER EDUCATION AND THINKING ROUTINES ARE SUPPORTING PEDAGOGIES TO MAKE THIS A REALITY!

MYTH

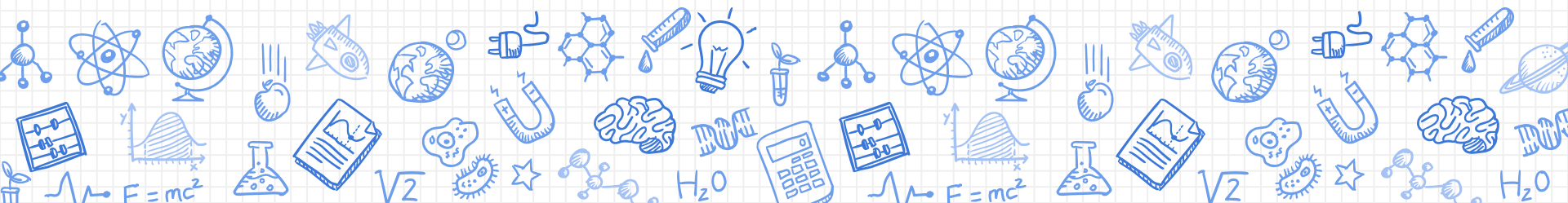
BUSTED!

LET STUDENTS USE THEIR OWN PROJECTS AND
ASK QUESTIONS THEY WON'T BE PREPARED FOR EXAMS.



KITTYLEUNG@MSS.EDU.HK

THANK
YOU! 😊



Q&A