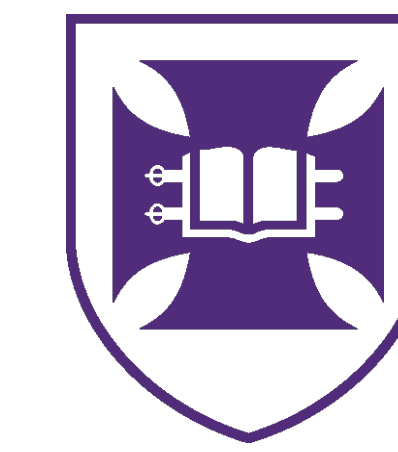




Ravenswood

Cultivating Curious Classrooms

Fiona Cooney, Malinda Gardner, Deborah Hill, Evan Roberts,
Ken Wong, Carmen Brading, Amber Ripley & Michael Varecka

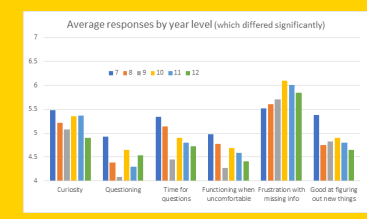


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BACKGROUND & RESEARCH

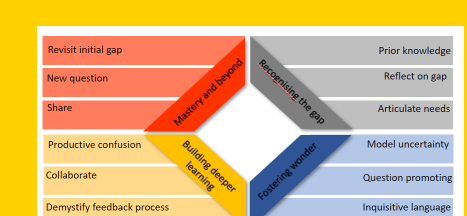
Phase 1 (2021)

- Student Curiosity Survey



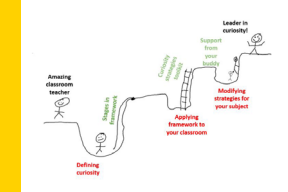
Phase 2 (2022)

- Focus Group
- Framework Development



Phase 3 (2023)

- Pilot Project



- Implementation Trial
- Instructional Coaching (and Professional Learning model)

Phase 4 (2024)



Pilot Team
&
Researchers

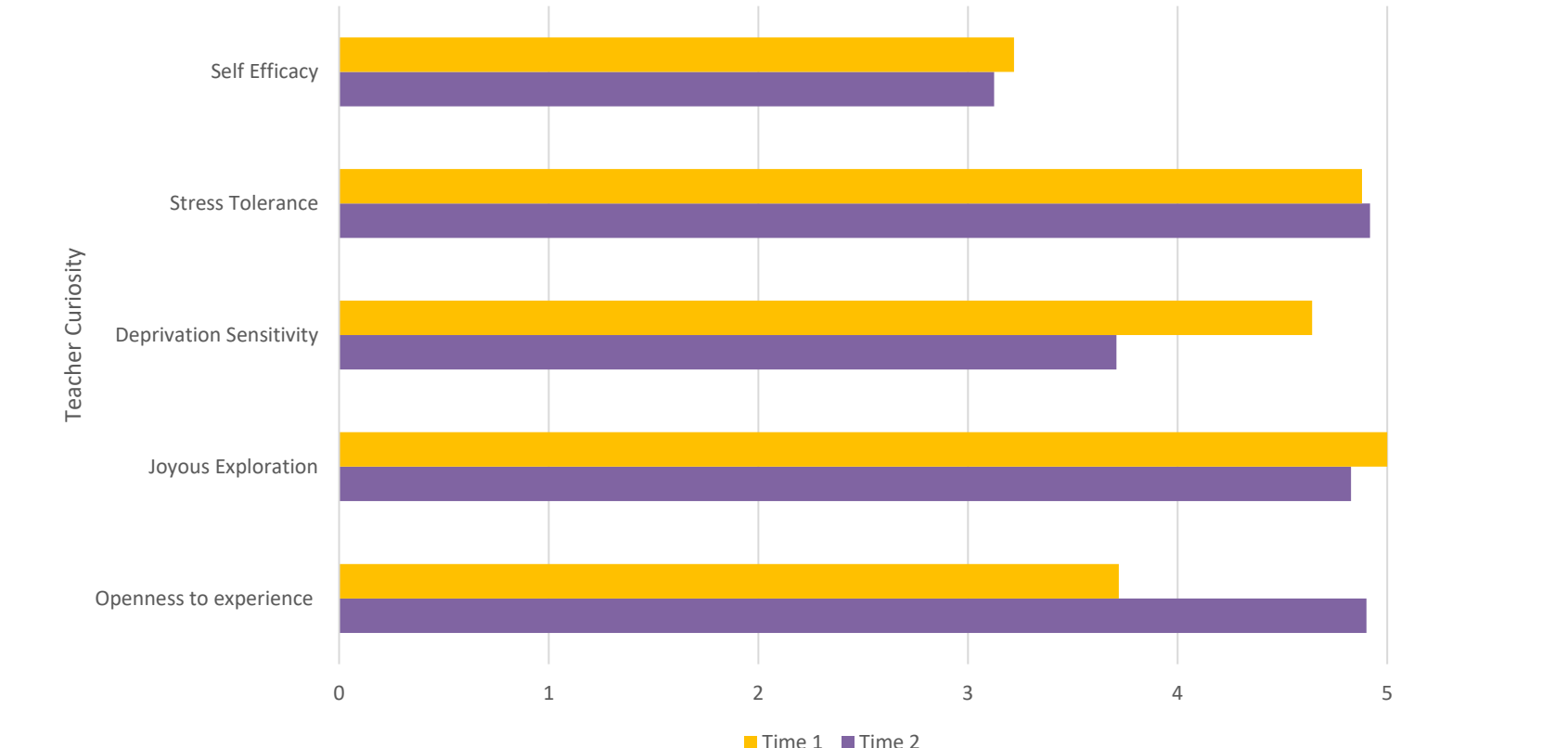
METHODS

Pilot Project

Participants	One teacher per project buddy ($N = 5$) <ul style="list-style-type: none"> French, Mathematics, Science, Music, Learning & Literacy
Procedure	<ul style="list-style-type: none"> Pre-test survey and lesson observation Intervention Workshop Implementation Buddy and Group Check in Post-test survey, lesson observation, teacher interview
Measures	<p>*Students **Teachers ✓Both</p> <ul style="list-style-type: none"> ✓Five Dimensions of Curiosity Revised ✓Big Five Inventory *Children's Images of and Attitudes Towards Curiosity (CIAC) **General Self-Efficacy

RESULTS (cont.)

Teacher Factor Analysis



Teacher Comment Analysis – Time 2

Enablers	Barriers
<ul style="list-style-type: none"> Curiosity framework Mentorship – buddy system Modelling confusion and problem solving Classroom environment that is safe and values student voice Relationships with students Relevance of the topic 	<ul style="list-style-type: none"> Understanding of curiosity Rigid classroom culture Time constraints and deadlines Resource access Balancing curiosity tasks with formal content and curriculum demands

ANALYSIS & RESULTS

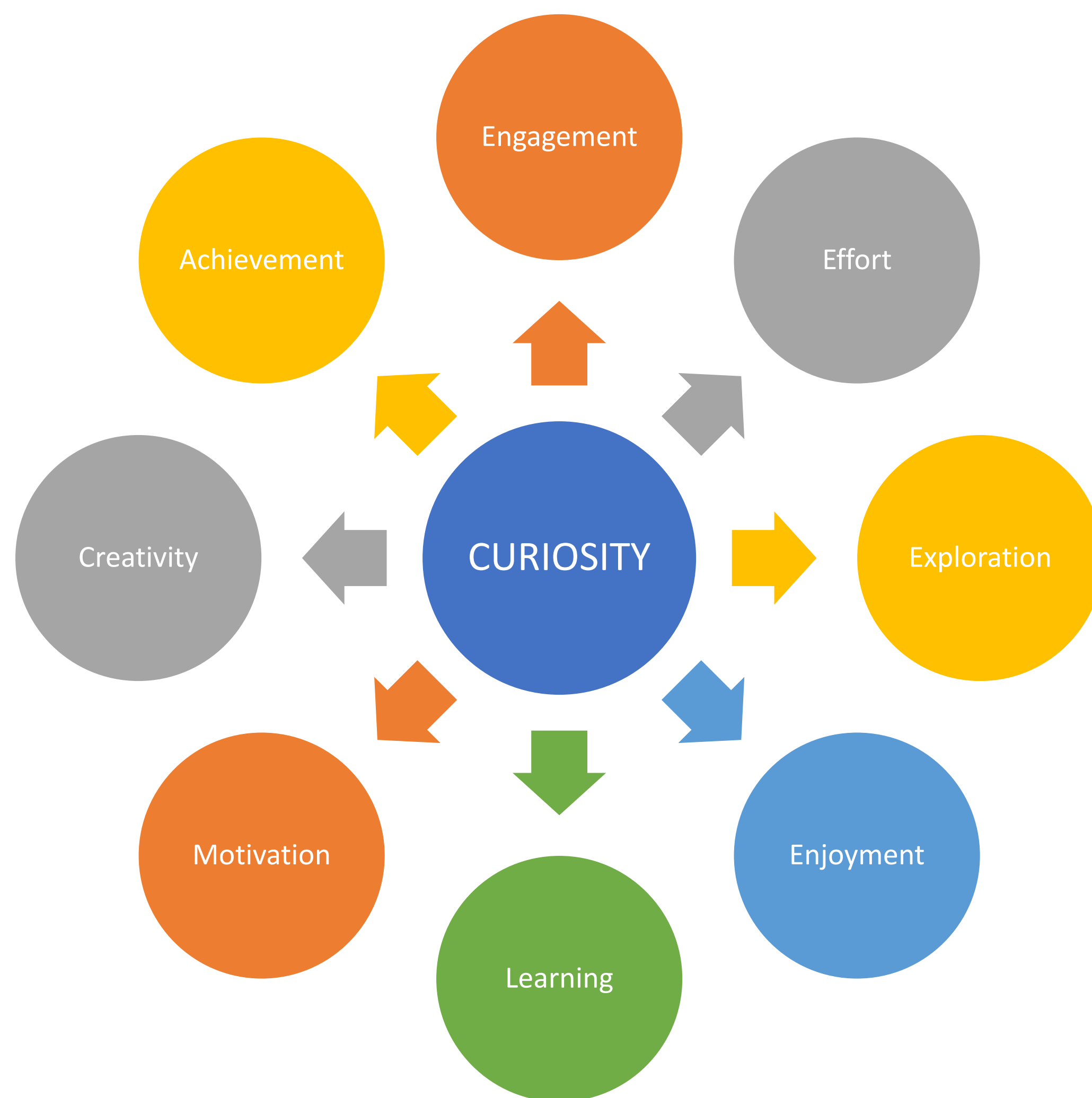
Type	Teacher	Student
Factor Analysis (survey items)	✓	✓
Latent Profile Analysis (survey items)		✓
Thematic Analysis (observations, interviews, comments, artefacts, diary)	✓	✓

Teacher Comment Analysis – Time 1 & 2

Definition	Time 1	Time 2
What is your understanding of curiosity?	Time 1 Inquisitive attitude Thirst for knowledge Interest cultivation	Time 2 Gap identification Desire to close knowledge gaps Emotional aspects of curiosity
How do you try to foster curiosity?	Time 1 Novelty, creative activities Questioning and Differentiation Real World Connection	Time 2 Embracing Mistakes Modelling Curiosity Trusting Classroom Environment Reflective Learning
What helps you foster curiosity?	Time 1 Engagement and Enjoyment Staying Informed Effective Routines	Time 2 Question Encouragement Independent Thinking Safe Classroom Culture Teacher Influence
What hinders curiosity in the classroom?	Time 1 Time constraints Curriculum limitations Assessment Pressure Diverse Classroom needs	Time 2 Student behaviour & overwhelm Time constraints and syllabus alignment Unlimited resources and exam-centric motivation

Benefits of the Curiosity Pilot Project

- The concept of curiosity broken down into practical steps
- Exposure to more teaching strategies
- Enthusiasm to refine and develop the strategies and their teaching style
- See students engage and build deeper understanding of the content
- Collaboration with colleagues (their buddy)
- Teachers feel challenged and supported



RESEARCH QUESTIONS

How does our curiosity framework work in the classroom?

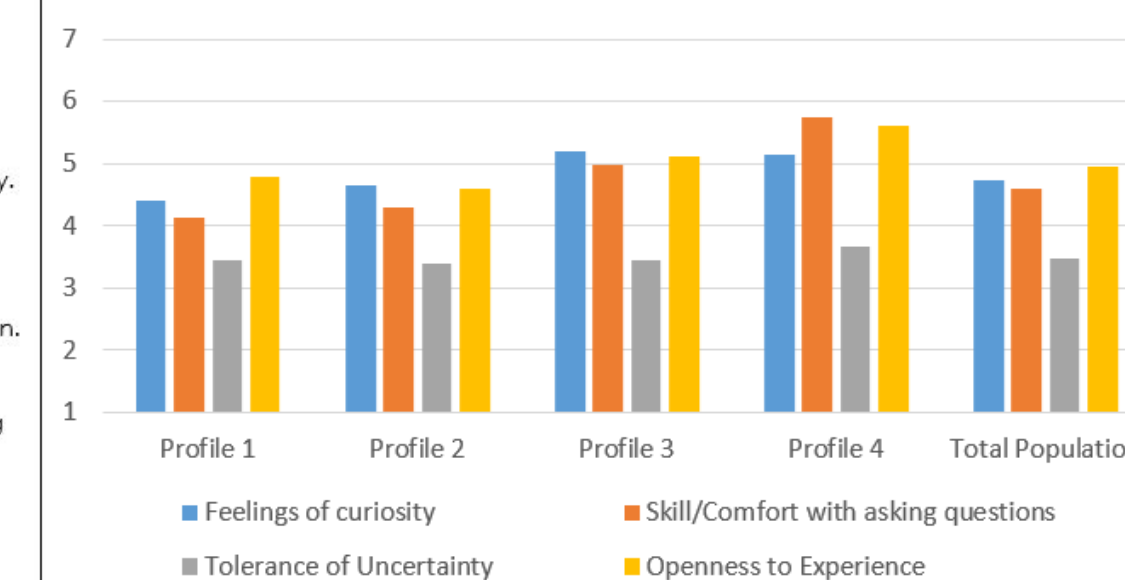
What are the barriers and enablers to implementing the framework into the classroom?

What are the challenges that are evident or not evident that need to be addressed before scaling?

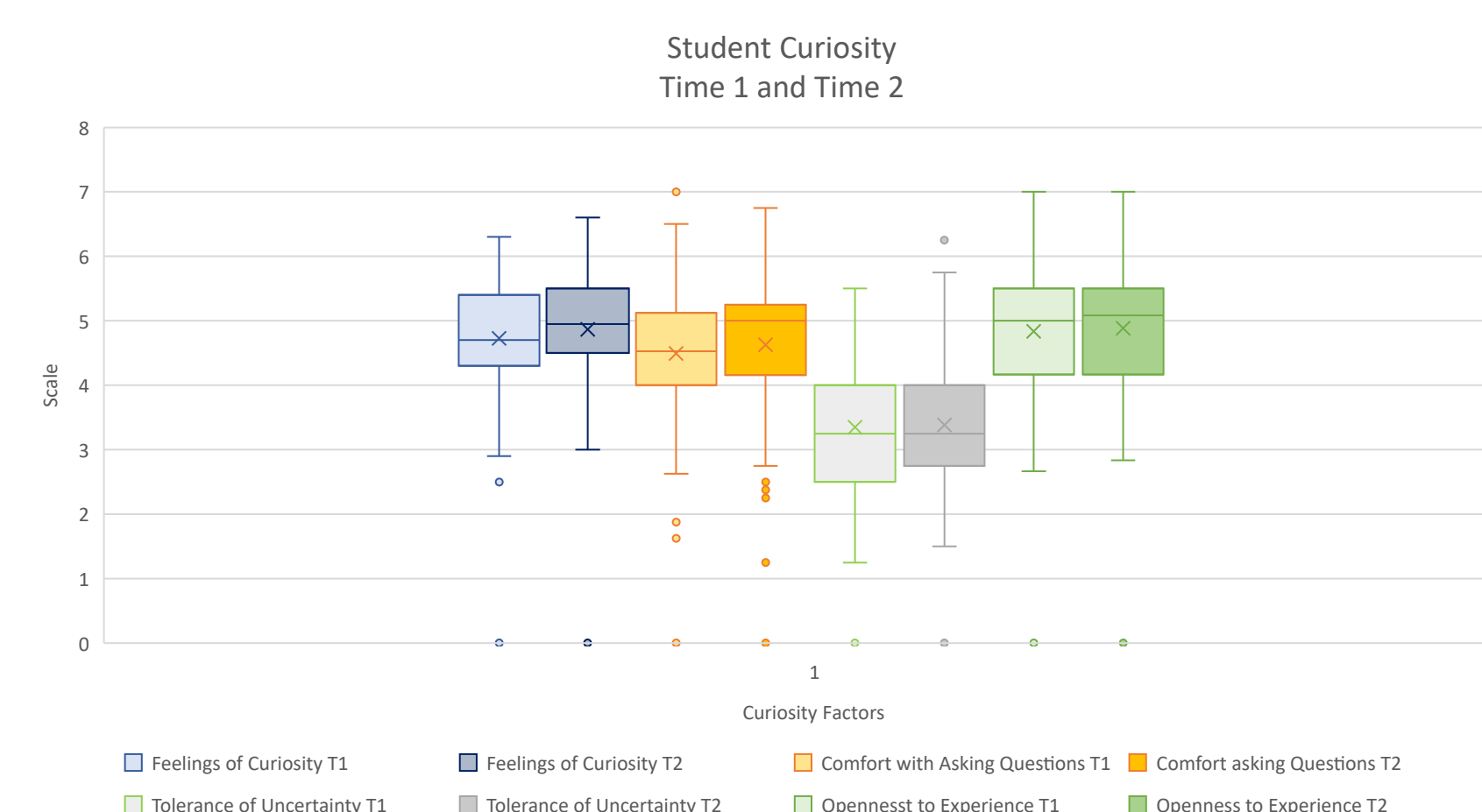
Student Open Comment Analysis	
Enablers	Barriers
<p>Engaging Teaching:</p> <ul style="list-style-type: none"> Engaging teachers play a pivotal role in promoting curiosity. They employ creative and interactive teaching methods. Their ability to make lessons interesting and enjoyable captures students' attention. <p>Interactive Learning:</p> <ul style="list-style-type: none"> Interactive methods, such as discussions, group activities, and games, foster curiosity. Active participation keeps students engaged and curious. Interactions with peers and the teacher deepen understanding and curiosity. <p>Comfort and Inclusivity:</p> <ul style="list-style-type: none"> A comfortable and inclusive classroom environment is essential for curiosity. Feeling at ease allows students to freely express their curiosity. Positive teacher-student relationships contribute to a sense of comfort and openness. <p>Interest in Content:</p> <ul style="list-style-type: none"> Curiosity is heightened when the content is interesting and relevant. Engaging subject matter captures students' attention and sparks curiosity. Students are more likely to explore topics aligned with their interests, leading to a more motivated and curious learning experience. 	<p>Lack of Interest:</p> <ul style="list-style-type: none"> Lack of interest in the subject results in boredom and reduced motivation. Students are less likely to explore topics they find uninteresting, which hampers curiosity. <p>Fear and Confidence Issues:</p> <ul style="list-style-type: none"> Fear of judgment and low self-confidence discourage active participation. Students may avoid asking questions or participating in class discussions due to these fears, limiting their curiosity. <p>Disruptions:</p> <ul style="list-style-type: none"> Noisy and disruptive classmates divert students' attention. These interruptions hinder their ability to focus on the subject matter, leading to decreased curiosity. Ongoing disruptions can cause frustration, discouraging further exploration. <p>Pacing and Engagement:</p> <ul style="list-style-type: none"> Inappropriate pacing of lessons affects curiosity. Material presented too quickly or too slowly can lead to disengagement and reduced curiosity. The right balance in pacing and engaging content is crucial to maintaining students' curiosity.

Student Curiosity Profiles

Average Response by Profile Group



Student Factor Analysis



IMPLICATIONS FOR TEACHING & LEARNING

- We need to be mindful of both teacher and student tolerance of uncertainty.
- Teachers who are less 'deprivation sensitive' (feeling discomfort and annoyance with the knowledge gap) and who are more 'open to experience' may be better able to cultivate feelings and behaviours of curiosity in the classroom.
- Students value a supportive inclusive environment where they can take risks and have opportunities for social interaction and time and space to think, build depth in understanding and engage with the subject content (even if they are initially reluctant to do so)
- Strategies from the framework provide ideas and structure for teachers and students, but it is the learning intention (principles) and teacher style (instructional influences) that seems to be as important to consider (more research required!)
- Having a buddy/mentor to bounce ideas and reflect on teaching, with the curiosity framework in mind, was appreciated by the pilot teachers and a key consider if scaling the project.

KEY LEARNINGS

- The curiosity framework was associated with improvements in students' feelings of curiosity, comfort with asking questions, engagement and building deeper knowledge.
- No one likes uncertainty, but teachers need to embrace and model uncertainty to foster curiosity in the classroom.
- Principles + Strategies + Teaching Style = Cultivating Curiosity in the Classroom
- Having a buddy/mentor helps teachers feel more comfortable with uncertainty and taking risk with their teaching strategies and style.