



Language Bridging

Singapore American School

Shuli de la Fuente-Lau, Sherry Peng, Claudia Kimura, Mimi Zheng, Sky Li, Louise Donaghey



SINGAPORE
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Research Question

In what ways are Chinese and English immersion teachers using **language-bridging practices** during different K–5 subject areas to support students' understanding and learning?

Context

Currently, in our K-Grade 5 Chinese Immersion Program, many content areas are taught in only one language throughout the years.

Subject-Specific Language

Specifically, Science/Social Studies is taught solely in Chinese. Math is Chinese (K-3) and then English (4-5).

Modern Research Alignment

Aligning with research on translanguaging and cross-linguistic instruction benefits.

How might we pilot shifting away from a model that relies on language separation and one that integrates languages more intentionally?

Literature Review

Integrating Content and Language Instruction for Multilingual Learners (Domke et al., 2024)

- Learning in one language supports another through intentional vocabulary connections.
- Effective programs include planned opportunities to compare and connect languages.

On the Road to Translanguaging in a Dual Language Classroom (Zhou, 2021)

- Students better make sense of math/science concepts when both Mandarin and English support meaning-making.

Enhancing learning for emergent bi/multilingual children (Yun, 2025)

- Using both languages helps students learn and retain vocabulary in the target language.
- Intentional use by teachers is more effective than random use.

Bidirectional transfer of definition skills and expressive vocabulary (Lü et. al, 2022)

- L1 use during planning leads to more developed writing in the target language.
- Language bridging strengthens overall bilingual ability rather than limiting growth.

Literature Review: Identifying the Research Gap

The Research Gap

Exploring how immersion teachers intentionally plan for language bridging when this currently does not exist in our planning structures so students can transfer:

- Vocabulary
- Concepts
- Meaning

Structural Challenge

Content taught in certain languages creates "separate learning spaces" unless teachers design moments for:

- Cross-language connection
- Content transfer
- Bilingual meaning-making

The Role of Partnerships

Collaboration between Chinese and English teachers is essential for:

- Shared planning
- Clarity around content goals
- Implementing cross-linguistic learning

Constraint: The current schedule does not support this level of collaboration across all grades.

Methodology



Teacher Baseline Surveys

Collected baseline data across the whole team on:

- teacher understanding of language bridging
- current instructional practices
- beliefs about translanguageing
- challenges and support needs



Artifacts & Evidence

Grade 1 team intentionally planned two science units to incorporate Chinese and English learning.

Gathered evidence of:

- visible language-bridging strategies
- student language engagement
- co-teaching & instructional routines
- classroom environments
- co-planning conversations
- lesson plans



Teacher Reflection Forms

Captured:

- post-lesson reflections
- teacher actions & decisions
- student responses & transfer
- successes & challenges

Findings: Teacher Baseline Survey



Teacher Understanding of Language Bridging

Most teachers reported a **moderate to strong understanding** of language-bridging practices, suggesting growing awareness across the program. However, responses and examples showed varying interpretations of what intentional language bridging looks like in practice.

The team created a [shared definition of language bridging](#).



Current Instructional Practices

Teachers most commonly reported using:

- visuals and gestures
- sentence stems
- bilingual vocabulary supports
- translanguageing opportunities



Beliefs About Translanguageing

Most teachers believe translanguageing positively enhances student learning. There is strong openness toward bilingual instructional practices and recognition that students naturally connect languages to make meaning.

Case Study - The Grade 1 Team: Creating Cross-Linguistic Connections in Science

Building Conceptual Understanding Across Languages

Teachers supported students in understanding concepts like “alike” and “similar” through repeated read-alouds, vocabulary support, and meaningful examples in both English and Chinese rather than relying on direct translation alone.

Intentional Co-Planning to Strengthen Cross-Linguistic Connections

English and Chinese teachers intentionally aligned books, vocabulary, and language structures to strengthen students’ ability to transfer scientific understanding and academic language skills across both languages.

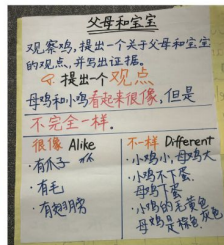
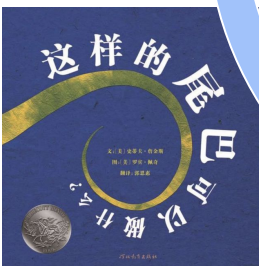
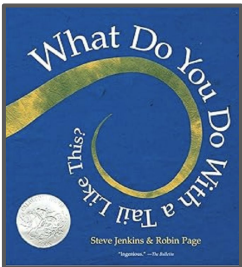
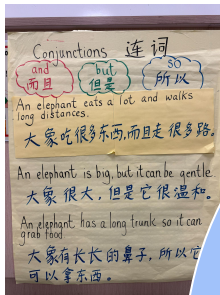
Creating Visible and Authentic Language-Bridging Opportunities

Bilingual anchor charts, shared visuals, and spontaneous discussions about language differences helped students make meaningful connections between English and Chinese while deepening science vocabulary and conceptual understanding.



Findings: Artifacts & Classroom Evidence

Students developed a deeper understanding of the concepts through shared reading, vocabulary support, and repeated examples across both English and Chinese.



traits	遗传特征
genes	基因
parents	父母
pass down	传递

Trails are passed down from parents through genes.

今日句型 Sentence Structure

___有___的___，所以它可以___。

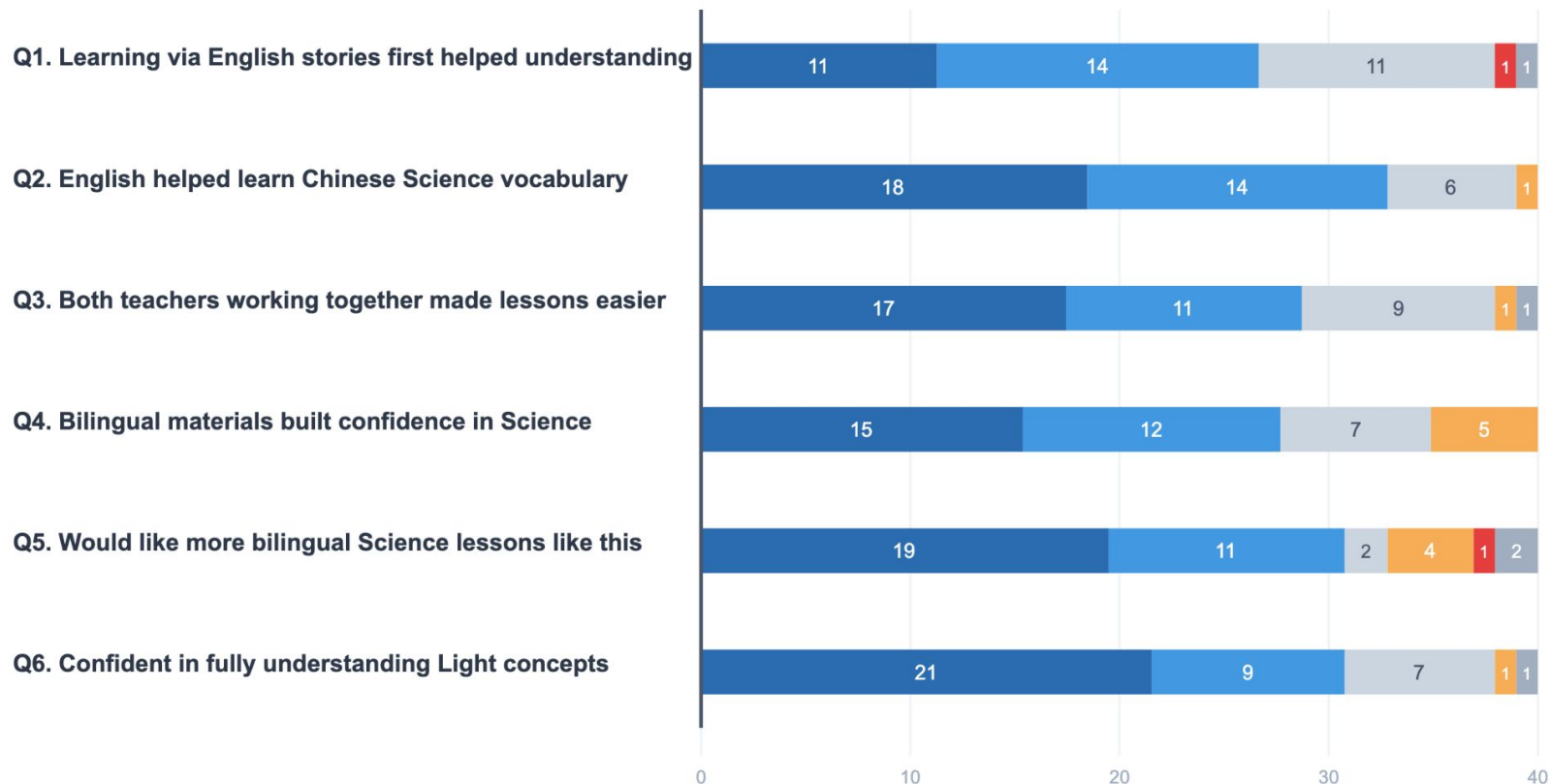
Eg. 刺猬有尖尖的爪子，所以它可以挖洞。

___has___, so it can ___.

Bilingual Science Lesson Survey Results (G1 Light)

5 Strongly agree 4 Agree 3 Neutral 2 Disagree 1 Strongly disagree NA

Total: ~39 students





Findings: Quotes

"I want both Chinese and English teacher to teach Science."

"I would like to have English words with Chinese science words."

"If the worksheet is only Chinese, I don't really understand."

"This is the first time I've enjoyed teaching Science!"

— Chinese Immersion Teacher Reflection

- Students independently shared Chinese vocabulary while reading English science books.
- During STEM lessons, students successfully bridged concepts by providing Chinese terminology for questions about Science concepts reviewed in English.



Findings: Teacher Reflection Forms



Teacher Actions & Instructional Decisions

Teachers intentionally used visuals, sentence stems, side-by-side vocabulary, and content preview/review strategies to support student access to both language and content. Co-teaching structures appeared purposeful and helped create multiple entry points for learners.



Student Responses & Language Transfer

Students demonstrated strong engagement and participation, particularly during small-group interactions and discussions. Evidence of cross-language understanding was observed through students making connections between vocabulary and concepts across both languages.



Successes, Challenges & Emerging Themes

A key success was the intentional planning of visible language-bridging strategies within a content lesson. An emerging theme is that structured supports (visuals, routines, sentence stems) increase student confidence and participation. Continued growth areas includes refining co-planning structures to sustain intentional bridging practices.

Discussion

Developing Bilingualism

Language bridging is compulsory to develop bilingualism and biliteracy in bilingual programs..

Integration Goals

In bilingual programs, full cross-linguistic integration is the goal, but any degree (e.g., bilingual books, anchor charts) is impactful.

Assessment Planning

Plan with a cross-linguistic summative task in mind to ensure alignment with learning outcomes.

Key Takeaway

"Intentional planning is most important."

Reflections About Research

Start Small

Don't be afraid to start small. Planning for this is easier than you think.

High Expectations

Be ambitious and set high expectations for production in both languages. Students can do more than you think!

Strategic Insight

"Planned translanguageing is most effective"

Looking Forward

Team Advice

“Just get started. Start small. Start talking. Focus on one content area.”

Sustainability & Planning

Ensure uninterrupted coplanning time via a sustainable shift in the schedule.

Teacher Choices

Offer a menu of choices to explore cross-linguistic opportunities (e.g., tuning in, summative tasks).

Strategic Purpose

Identify goals: removing vocabulary barriers or reducing unit challenges.

Future Methodology

Possibly use Understanding by Design (UbD) to narrow our bilingual teaching focus.