

## Introduction

### Background

Arbor School was founded with a succinct and compelling vision, "Enough for all, forever." The school delivers a rigorous and challenging curriculum, grounded in the National Curriculum for England and the requirements of the Dubai KHDA. It also has its own bespoke set of Ecoliteracy Principles and Concepts and Sustainability Capabilities, which it delivers through Eco-inquiry lessons and through transdisciplinary teaching and learning. While standardised assessments provide one measure of academic progress and attainment, there are no similar tools to assess Ecoliteracy outcomes.

### Research Questions

How can the use of the Self-Perceived Action Competence for Sustainability Questionnaire (SPACS-Q) be used to help understand KS2 and KS3 students' knowledge of action possibilities (KAP), confidence in one's own influence (COI) and willingness to act (WTA)?

## Research

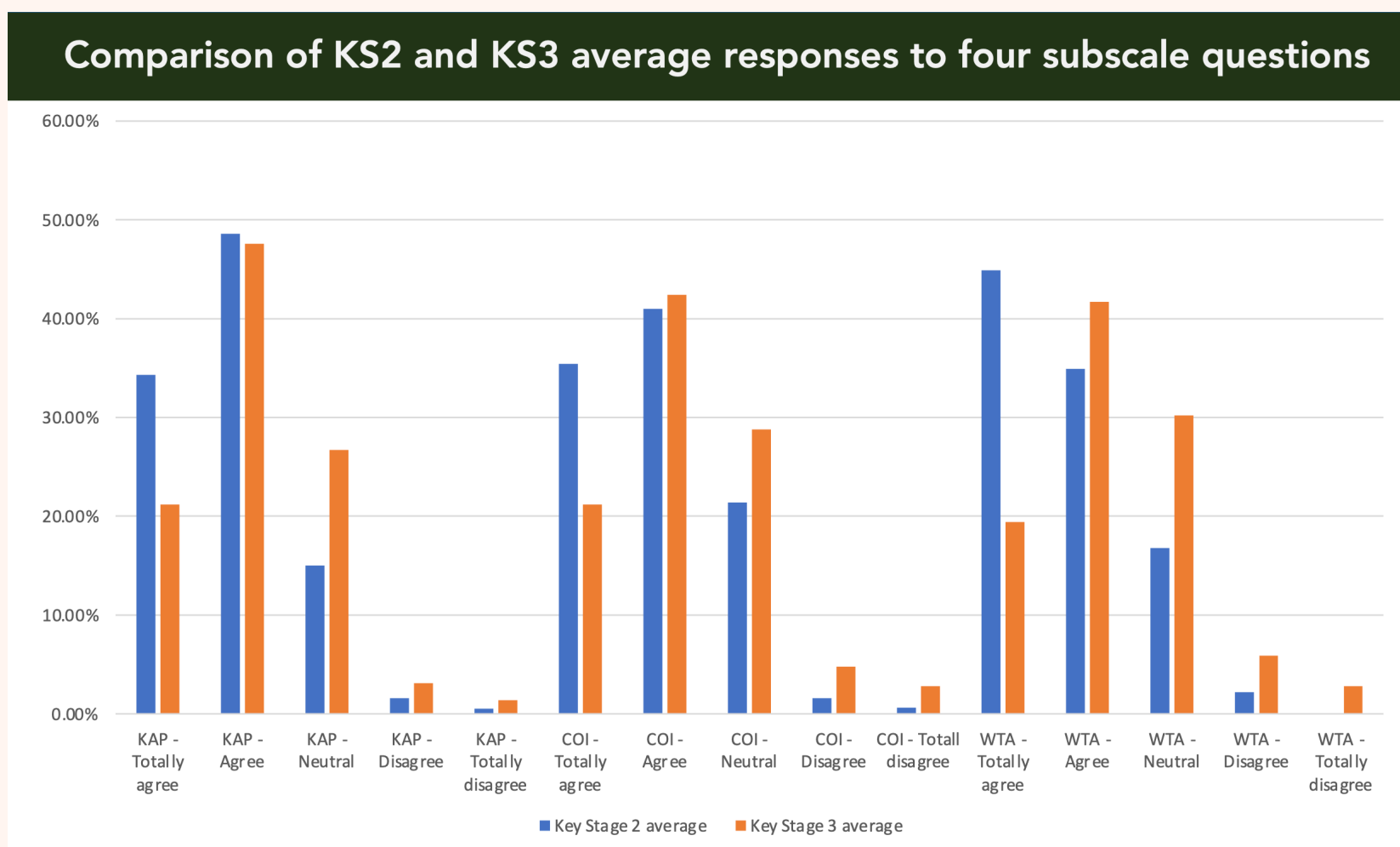
### Research Action

- Students in KS2 attend weekly Eco-Inquiry lessons and Ecoliteracy Principles and Concepts are addressed in termly projects.
- Students in KS2 engage in self reflection, based on Sustainability Capabilities at the end of Terms 1 and 3.
- Students in KS3 attend weekly Eco-Inquiry lessons.
- Students in KS3 self-assess their development of Sustainability Capabilities.
- Students in Key Stages 2 and 3 complete the SPACS-Q mid-way through the school year and at the end of the year.

### Methodology and Analysis

- SPACS-Q was administered to 152 students in Years 4/5/6 and 72 students in Years 7/8/9 in Feb 2024
- 64% of Key Stage 2 respondents and 58% of Key Stage 3 respondents had been enrolled for more than two years
- SPACS-Q mid-year data responses are aggregated by Key Stage for three-scales: KAP, COI and WTA.
- Scaled responses from each Key Stage group are compared.
- SPACS-Q will be readministered at the end of the school year and compared to the mid-year data.

### Mid-year Results



## Conclusion

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- Most student respondents self-reported high levels of agreement with KAP, COI and WTA statements.
- KS3 students self-reported higher levels of neutral responses to each group of KAP, COI and WTA questions

### Reflections

The mid-year student self-report data suggests a shift in agreement with the pro-sustainability KAP, COI and WTA statements from agreement to neutrality or disagreement for some KS3 student respondents. Other researchers have noted similar changes as students' knowledge and understandings of complex and difficult sustainability challenges grows.

This raises important questions about how to mitigate this decline in students' confidence in their understanding of complex issues, and their sense of self-efficacy and agency.

### References

Olsson, Gericke, Sass and Boeve-de Pauw (2020). Self-Perceived Action Competence for Sustainability: the theoretical grounding and empirical validation of a novel research instrument. *Environmental Education Research*, Vol.26, No. 5, pp. 742 – 760.