

Editorial

Uncharted Territories: Exploring the Edges of Culture, Science and Learning

Grace Fisher, University of Warwick

I am Grace Fisher, a final-year medical student at Warwick University and this year's *Reinvention* editor. Working on this edition has been a privilege – not only because of the quality of the research submitted, but because of how clearly our authors embody the spirit of *Reinvention*. Each contribution, in its own way, challenges how we think about knowledge, inclusion and creativity in research.

Across the submissions this year, there is a shared willingness to question assumptions and to imagine something better – whether that is fairer assessment practices, more inclusive systems of support, or new approaches to technology, identity and belonging. What strikes me most is how confidently undergraduate researchers now occupy this space. Their work is not tentative or derivative; it is bold, critical and grounded in lived experience.

IATL at 15

This feels like an especially fitting year to be reflecting on *Reinvention*, as the **Institute for Advanced Teaching and Learning (IATL)** – the journal's home – celebrates its 15th anniversary. Since 2010, IATL has been a space for educational experimentation and collaboration across disciplines. Its ethos is simple but transformative: that students are not just the audience for research – they are its authors, its critics and its future.

As Dr Fraser Logan and Professor Jonathan Hickman-Heron write in their piece marking IATL at 15, the institute aims to help students 'see themselves, and be seen by others, as researchers in their own right'. That belief runs

through every page of this journal. IATL has never been about preserving the traditional model of higher education; it is about rethinking it – creating spaces where students and staff work together to test, imagine and reinvent learning itself.

Reinvention as a practice

For me, *Reinvention* is as much a mindset as it is a theme. As a medical student, I see it daily – in the evolving nature of science, in how care is redefined by new evidence, and in how we constantly revisit what ‘good practice’ means. Research, in any discipline, is built on that same cycle of curiosity and change.

This year’s issue captures that energy beautifully. Our authors show that reinvention can take many forms: it can be methodological, like rethinking what counts as valid evidence; it can be social, like widening access to knowledge; or it can be deeply personal, reflecting on one’s place within a wider system. In all cases, reinvention is not just about breaking things down – it is about rebuilding something stronger, fairer and more human.

Critical reflections

In this issue, we also have a variety of author reflections on their research, offering critical insights that enhance the depth and rigour of their academic analysis. Our Critical Reflections demonstrate the range and depth of undergraduate enquiry. ‘Testing the Limits: Can Nitrate Levels Be Used to Safeguard the Health of UK Rivers? The Critical Reflection of an Undergraduate’s Introduction to Independent Research’ considers how data and lived experience intersect in environmental science. ‘Mysteries for Humans: Navigating the Maze of Science, Objectivity and our Mental Limits’ questions what it means to know or measure truth within research itself. Meanwhile, ‘Artificial Intelligence and Children’s Learning: Exploring the Potential to Support’ reflects on how emerging technologies can both enhance and challenge educational practice. Together, they show reflection as an essential act of reinvention.

Looking ahead

Fifteen years on, IATL and *Reinvention* continue to grow together – both grounded in the same belief that education thrives when students are active participants in creating knowledge. This issue is a reminder that research does not have to be remote or abstract; it can be deeply connected to lived experience and driven by empathy and imagination.

A huge thank you to all our contributors, reviewers and the editorial team who made this issue possible. Your enthusiasm and hard work capture exactly what *Reinvention* stands for: learning as a shared act of creativity and change.

Here's to the next 15 years of questioning, collaboration and, of course, reinvention.

To cite this paper please use the following details: Fisher, G. (2025), 'Editorial: Uncharted Territories: Exploring the Edges of Culture, Science and Learning', *Reinvention: an International Journal of Undergraduate Research*, Volume 18, Issue 2,

<https://reinventionjournal.org/index.php/reinvention/article/view/2098>. Date accessed [insert date]. If you cite this article or use it in any teaching or other related activities, please let us know by emailing us at

Reinventionjournal@warwick.ac.uk.

<https://doi.org/10.31273/reinvention.v18i2.2098>, ISSN 1755-7429 © 2025, contact reinventionjournal@warwick.ac.uk. Published by the Institute for Advanced Teaching and Learning, University of Warwick. This is an open access article under the CC-BY licence

(<https://creativecommons.org/licenses/by/4.0/>)