

Knowing Well in Religious Education

Jo Fraser-Pearce & Alexis Stones

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Templeton World Charity Foundation
Big Questions in Classrooms

IOE, UCL's Faculty of Education and Society



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Stones, A., & Fraser-Pearce, J. (2022b). Is there a place for Bildung in preparing Religious Education teachers to support and promote epistemic justice in their classrooms? *Journal of Religious Education*, 70, 367–382.

<https://link.springer.com/article/10.1007/s40839-022-00187-5>

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Templeton World Charity Foundation: Big Questions in Classrooms Initiative

“Young people are curious about the world around them and their place within it. No single subject alone can answer the universe’s big questions, particularly those that bear on the human search for meaning, purpose, and truth.” The Big Questions in Classrooms (BQiC) initiative seeks to help students understand the value of different kinds of knowledge and explanatory frameworks.

BQiC seeks to develop teachers’ and students’ understanding and insight about “how knowledge works,” particularly in the domains of science education and religious education (RE) in England. We want to nurture their curiosity and their appreciation of how various forms of knowledge can come together to enrich our questioning, reasoning, and learning.”

<https://www.templetonworldcharity.org/our-priorities/big-questions-classrooms>

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Knowing Well in Religious Education

Project Report

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Foreword

Dr Kathryn Wright

Chief Executive,
Culham St Gabriel's Trust

When a teacher enters a learning space what are they doing and who are they being in that moment? This report sets out a new vision for the teacher of religion and worldviews (or RE) in terms of how they frame who they are and what they are doing in these spaces. It is a bold vision, one which goes to the heart of what education is for; for the authors, the teacher of religion and worldviews is tasked with a social responsibility to empower future generations to navigate our complex, multi religious, multi secular world.

This report leads us on a journey of discovery. Firstly, the authors make a claim for understanding the importance of epistemic literacy, in terms of critical engagement with truth claims, and through the interrogation of substantive and disciplinary knowledges. This, they argue will contribute to the ability of pupils to handle knowledge claims in their adult and present lives. However, this leads them to the realisation that an aim of literacy is not enough because some pupils are unable to access, recognise or navigate these knowledges. They are epistemically disadvantaged. The practitioner insights in the report exemplify this wonderfully, drawing on the real-world of the classroom.

The authors therefore advocate for epistemic justice particularly with children and young people in socially disadvantaged areas. Their research demonstrates that children who are epistemically disadvantaged tend to rely more on opinion, and found challenging knowledge claims uncomfortable. Those who were more epistemically literate were more critical, reflective and willing to challenge knowledge claims — vital if we are to interpret the world around us.

In the final episode of this journey, the authors assert that advocating for epistemic just is not enough; that teachers have a responsibility to go beyond providing opportunities or even enabling young people to know better, rather, they have a responsibility to expect them to do so. They make a bold claim, that epistemic responsibility should be the task of all educators. This has significant implications not only for the teacher of religion and worldviews, but potentially for all those working in education. Children and young people need to be able to justify their knowledge claims, and critique those of others, it is the responsibility of the teacher to equip them to do this.

As many readers will know, the word pedagogy is a derivative of the Greek, paidagogia meaning to lead a child. This report puts the emphasis back on the verb — to lead. The authors argue that it is a responsibility to lead children into epistemic literacy because this leads to justice. They argue that opening a door to epistemic literacy is not enough, we must lead them through it. We are metaphorically to take children and young people by the hand, and provide a pathway for them to meaningfully and critically engage with complex worldviews and big questions.

So, when a teacher enters a classroom what are they doing and who are they being? The authors put forward a powerful argument that the teacher is being the one who leads the child to epistemic literacy. In this moment, they are living out their social responsibility and enacting a move towards justice. ●

Introduction

What distinctive contribution does Religious Education make to the development of epistemic literacy in relation to big questions in religion and science?

This question has driven the research project reported here since its inception. We have tried to answer it by: critically reviewing literature; grappling with theory, including conceptualisation; and researching with school students and Religious Education teachers. This interwoven and iterative approach has, importantly, been complemented by our discussions with an expert advisory group. Throughout this project, discussions with the colleagues from the Religious Education (RE) community and beyond have been invaluable.

A key stimulus for this project was our hunch that RE has a distinctive contribution to make to developing epistemic literacy, in relation to big questions of meaning, purpose and concern. For the purposes of this project, we focus on questions that often sit at the nexus between religion and science. Such questions can be difficult for young people and adults alike to navigate. Building upon the work of UNESCO (<https://en.unesco.org/themes/literacy>) and Stordy (2015), we define epistemic literacy as

Competency and proficiency in the identification, interpretation, understanding, questioning, navigation and communication of knowledge.

Our shorthand for this is ‘knowing well’.

This project was not underpinned by a desire to ‘reinvent the wheel’. Indeed, we have found much practice that could be harnessed to contribute to the development of epistemic literacy. In some cases, it seems to be doing so already. However, RE is more likely to contribute to the development of epistemic literacy, if this is explicitly articulated as an aim of the subject. Key aims of this project have been to: identify and harness existing good practice; assess the relevance and value of epistemic literacy for young people, teachers and society; and, establish how far the development of epistemic literacy is viable as an aim of RE.

Through listening to teachers and students, and visiting schools, we have had the opportunity to explore the roles and understandings of knowledge in RE. Whilst we had certainly expected to be thinking, talking and writing about knowledge through the course of this project, we did not expect to find ourselves so focused on justice. Yet, early in our project journey, plural understandings of knowledge in schools (and society) lead us to concerns about the relationships between knowledge and epistemic (social) justice. Through the life of the project the importance of epistemic literacy for epistemic justice has become increasingly clear (and urgent).

We begin this report with a brief account of RE in England, followed by a discussion on contemporary discourses on knowledge in education and wider society. ►

◀ The *Project journey through publications*, presents a chronological account of how the project unfolded. The remainder of the report constitutes a more traditional logical account; presenting the logical steps through what has come to be our argument. There are inevitable areas of overlap in the logical and chronological accounts. Each works as a standalone piece, and readers might choose to read one or the other — we recommend both! We most strongly recommend the *Practitioner insights*, which feature towards the end of this report.

Our logical account begins by drawing upon Fricker (2007) to explain what we mean by epistemic injustice. A brief overview of our *Methodology* is then followed by our attempt to answer four questions:

- **What are students' and teachers' perspectives on big questions?**
- **What does epistemic injustice look like in secondary (Key Stage 3) RE?**
- **What is epistemic literacy, and how might it contribute to epistemic justice?**
- **What approaches to teaching and learning hinder, and what approaches might contribute to the development of, epistemic literacy of learners in RE?**

The *Practitioner insights* give a flavour of the existing impact of epistemic literacy in RE and point to the potential for further impact. They also demonstrate that, as ever and rightly so, the viability of epistemic literacy for RE is in the hands of practitioners.

We close the report by offering recommendations. ●

Religious Education in England

In England's state-funded schools, RE is part of the compulsory curriculum for all school-aged children and young people. Despite Dearing's recommendation in 1996, that 5% (roughly one hour a week) of curriculum time should be designated for RE, time for the subject varies greatly. Schools of a religious character generally meet or exceed the recommendation. Many others fall below this, with some offering no timetabled RE at all (NATRE 2017).

At a national level RE is required to 'reflect the fact that the religious traditions in Great Britain are in the main Christian whilst taking account of the teaching and practices of the other principal religions represented in Great Britain' (Department for Children, Schools and Families 2010). Beyond this broad national stipulation, specific RE curricula are determined according to school type. Community schools, funded through Local Authorities (LAs), are required to follow their Locally Agreed syllabus. Some schools of a religious character are also required to follow their Locally Agreed syllabus. Other "faith schools" have a syllabus determined by the school's governing body which usually prescribes a syllabus which conforms to both national requirements and the school's denominational identity. Academies and Free Schools receive their funding directly from the state and are not required to follow their Locally Agreed Syllabus. RE in Academies and Free Schools is determined by the type of funding agreement with the government. Many adopt their Locally Agreed Syllabus at least in part, with RE in Academies/Free Schools of a religious character reflecting denominational commitments (Jackson 2013; Department of Education 2012).

Across school types, many RE curricula include philosophy and ethics, which are taught both discretely and as part of the study of religious and non-religious perspectives. Building on such existing practice, and taking wider social and political contexts into account, the report of the Commission on Religious Education (RE Council 2018) presented a vision for the subject encapsulated in the proposed title of 'Religion and Worldviews'. ●

Contemporary discourses on knowledge, school education and Religious Education

Reforms to the school curriculum led by education secretary, Michael Gove, under the Conservative-Liberal Democrat coalition government (2010–2015), started a public discourse about the role of knowledge in schools. Introduced as an antidote to the perceived lack of rigour in the curriculum, Gove's changes reflected the strong influence of American education author, E.D. Hirsch, who prizes the development of 'cultural literacy' through 'core knowledge' acquisition as a gap filling process to solve social and economic inequalities (Hirsch 1987). Learning a list of national rivers soon became a famous example of this new 'knowledge turn' which was (and remains) simultaneously unconvincing to critics and a welcome return to traditional educational values for supporters. Curriculum reforms resulted in new specifications for General Certificates of Secondary Education and Advanced Levels (public examinations for secondary school aged pupils) in which the 'knowledge turn' was enacted through a greater focus on substantive knowledge. Curriculum content (over skills) increased as a result.

Then minister for schools, Nick Gibb, continued the turn to a "knowledge-rich" education with the introduction of learning techniques offered by cognitive science and a focus on assessment. Knowledge was now conceived as filling the attainment gap and "a driver of true meritocracy" that Hirsch promised (Gibb 2017, Gibb 2021). Knowledge booklets and organisers for subjects in schools is a reminder that the knowledge-rich culture has entered the education lexicon. This knowledge, often defined by exam board specifications or school frameworks for assessments, is perceived as core and vital to subjects.

A fuller discussion of the public discourses surrounding knowledge is beyond the scope of this report, but we can say something about the discourses on knowledge and authority seemingly brought about by Covid-19 in relation to science. "Science says", "Trust the science", "Don't trust science" typify phrases heard and read in populist coverage of the pandemic. The discourse erroneously indicates a reductive notion that 'science' is a unified voice, a single body of knowledge. Climate change, vaccinations and Artificial Intelligence similarly bring scientific perspectives and public opinion into a vibrant, diverse and populist discourse in which the authority of knowledge is debated in sensationalist terms, fuelling a 'click bait' economy in social media and rallying protest movements.

At the time of writing this report, the contestations of knowledge and expertise are in the public discourse in renewed contexts produced by some of the effects of Covid-19. In 2022, whilst campaigning for the role Prime Minister, Rishi Sunak, reached headlines following an interview in which he expressed regret over scientific experts being too "empowered" in relation to lockdown measures during the pandemic (Nelson, 2022). At the same time, epidemiologists were refuting Sunak's claims saying their expertise and advice were ignored in the early stages of the pandemic (Nicholson, 2022). Following teachers' assessments in the absence of public examinations, evidence has emerged that Advanced Level results from independent schools were correspondingly graded higher than those at state-funded schools. Aside from accusations that teachers were ►

◀ inflating students' grades and 'gaming the system' (Henry, 2022), the links between epistemic authority and justice are once more (that is, since our heavy reliance on experts during the pandemic) in the public eye. Disputation of knowledge and expertise has had, and continues to have, critical effects on health, lives, and livelihoods.

In their review of the literature on the 'post truth condition', Barzalai and Chinn identify epistemic crises in four areas: "not knowing how to know, fallible ways of knowing, not caring about truth (enough), and disagreeing about how to know truth" (Barzalai and Chinn 2020, 107), in which distrust, misinformation and rumours flourish today through social media in ways that are comparable to the Middle Ages. Meanwhile, warnings of 'fake news' prevail in many populist narratives that point to the degradation of the epistemic environment resultant of an increasing absence of reliability and security in epistemic institutions (Blake-Turner, 2020). Related in some ways, conspiracy theories have a long-standing relationship with epistemic authority. They intensify in times of crisis, rely on emotion, impact on decisions regarding one's health, and justify a disengagement from politics and knowledge institutions (Douglas and Sutton 2018). Although they range from a desire for unification, they are also seemingly contradictory (ibid.). Despite this range, there is unity in the acceptance of a grand conspiracy narrative, perhaps unsurprisingly given that people prefer simplistic over complex explanations (Lombrozo 2007), with explanations gaining greater "psychological value as they appear to explain more observations with fewer causes" (Preston and Epley 2009, 238). Arguably education rather than 'lazy thinking' is to blame where implausible claims are accepted, with a recent and large-scale study pointing to a lack of analytical and evaluative skills as enablers to accepting the implausible (Martire et al., 2020).

That educators of RE want their pupils to think critically when considering knowledge and truth claims is perhaps taken for granted in the assumptions of a liberal education. Indeed, the 'skills' of reflection, evaluation and analysis have been embedded in a typical RE curriculum for decades and they define the subject in many ways. The canonical pedagogical scholarship of critical RE (Wright 2007), conceptual enquiry (Erricker, 2010) and ethnographic or interpretive approaches (Jackson, 1997; Nesbit 2004) and, more recently, the notions of religious literacy (Hannam et al., 2020) and religion and worldviews literacy (Shaw, 2019), all highlight the crucial role that criticality plays in pupils' relationships with knowledge claims. Simultaneously, the instrumental 'community cohesion', or 'social harmony', has a (too?) strong footing in the perceived purpose of the subject and the subject's role in broader aims of school education. Conceived compatibly, criticality supports an informed community cohesion that depends on the tolerance of freedom of belief while "recognising and living alongside those whose beliefs are fundamentally incompatible with one's own" (Wright 2007, 334). On the other hand, opposition criticises the epistemic impoverishment that results from ignoring difference and highlights the erroneous instrumentalization of the subject through this perceived purpose (Hussain, 2018). ●

Project Journey through Publications and Conference papers

The publications written within the lifetime of the grant reflect the direction we have travelled with this research and, as previously mentioned, these texts are embedded within this report. Publications, conference papers and initial teacher education (ITE) workshops were part of an ongoing commitment to engaging peers, beginning teachers of RE and the RE community more widely. In addition to advisory board meetings and ongoing dialogue, this engagement has ensured the iterative dimension of our project included colleagues and student teachers who were not directly involved with our research and could provide new perspectives as our ideas developed.

The proposal for the project was the result of our involvement with “The New Biology: Implications for Philosophy, Theology and Education” project (International Society for Science and Religion, funded by Templeton World Charity Foundation 2015-2018). This was an empirical study in which six Science lessons and six RE lessons were designed and taught to the same group of year 9 and 10 students during a school term. The lessons were designed and intended to highlight the tacit and explicit presence of each subject in the other, that is, science lessons included aspects of the RE curriculum and vice versa. Two illustrative examples are 1) a Science lesson that explored the ethical implications and multi-disciplinary approach to managing a new disease, and 2) an RE lesson inviting imaginative responses to the different attitudes to scientific demonstrations in the eighteenth century depicted in a painting (*Experiment on a Bird in an Air Pump* Joseph Wright ‘of Derby’, 1768, National Gallery, London). The lesson plans and resources can be found at <https://www.issr.org.uk/projects/the-new-biology/>. Students took part in focus groups before and after the intervention of these lessons and we found in our analysis that there was a noticeable deficit in some students’ abilities to conceptualise and communicate their understandings of different types of knowledge, commitment and authority. Building on colleagues’ developments of notions of religious literacy, religion and worldviews literacy, epistemic insight and epistemic switching (Hannam et al. 2020, Shaw 2019, Billingsley et al. 2013, Gottleib and Wineberg 2012) we posited in a ‘position paper’ that students and teachers needed a specific literacy in ‘knowing’ and ‘knowledge’ that was simultaneously about knowledges ‘out there’ and personal knowledge (Pearce, Stones, Reiss & Mujtaba 2019).

Thus began the current project in which we sought to find out what, if any, distinctive role RE might play in the development of “epistemic literacy”. As we began this process, and throughout the project, we gave papers at conferences hosted by organisations including the [International Research Network for the Study of Science and Belief in Society](#), [Learning About Science and Religion](#) and the [Association of University Lecturers in Religion and Education](#). The conference papers and publications produced as part of the project chart a journey that we had not anticipated. Indeed, we began with the intention to investigate the viability of epistemic literacy as an aim for RE and ended with the conclusion that epistemic literacy is necessary for epistemic justice as a component of social justice. ►

◀ Interim findings revealed the ‘epistemic haves and have nots’ (Stones and Fraser-Pearce, 2021) which led us to take seriously the implications of these inequalities and the part that the RE community has to play in challenging them. Our involvement with UCL’s [Curriculum Subject Specialism Research Group](#) and collaboration with the Knowledge and Quality across School Subjects and Teacher Education (KOSS) Network with colleagues in the ROSE research group at the University of Karlstad and the HuSoEd research group at the University of Helsinki, led to an interest in the connection between the northern European principle of *bildung* and epistemic literacy. Our contribution to the KOSS book series published by Bloomsbury Academic (International Perspectives on Knowledge and Quality: Implications for Innovation in Teacher Education Policy and Practice eds. Hudson et al. 2022), provided us with the opportunity to relate Klafki’s *material bildung* and *formal bildung* (broadly understood as curriculum content and pedagogical selection and approach) to the possibility of epistemic literacy as a means to deconstruct content and pedagogy for the purposes of a more epistemologically transparent curriculum (Stones and Fraser-Pearce 2022a). Given the fact that RE contains both objective and subjective curriculum content (for example, one might learn *about* death rituals and reflect on one’s own experiences and relationship with death), epistemic literacy presents the opportunity to relate different ways of knowing to each other in a non-hierarchical but discerning way. Such discernment is identified as fundamental to removing the conflation of opinion with knowledge, for example. This is explored further in the later paper *Is there a place for Bildung in preparing Religious Education teachers to support and promote epistemic justice in their classrooms?* (Stones and Fraser-Pearce 2022b), where we present readers with an account of *bildung*:

Bildung (loosely translated as formation) is deemed to have foundations in Classical Greek and Roman education, humanism, the European Enlightenment and modern liberal education. It espouses the idea that education creates order on oneself, one’s relations to the world and thus leads to responsibility (Klafki 1995). This ‘ordering’ and responsibility are considered to emerge from a relationship between the intellectual and moral aspects, for which the academic disciplines are a resource and vehicle (Deng 2018).

Epistemic literacy is thus understood as pertinent for the development of students *and* teachers, and, therefore, should be included in teacher preparation. The teacher’s awareness of their own epistemic biases and preferences is as fundamental to the epistemic health of the classroom and curriculum as that of the student. We conclude our most recent publication with an explanation of how student teachers might engage with Rawls’ *Veil of Ignorance* (Rawls 2005) as a way in to understand one’s own and others’ epistemic tendencies. This is framed as the teacher’s own *bildung* as it requires self- knowledge (and the implications for one’s relations to the world) and insights into others that leads to the teacher’s pedagogical responsibility for epistemic literacy as an essential component of epistemic (social) justice. ●

Publications and conference papers

Pearce, J., Stones A., Reiss, M., J., & Mujtaba, T., (2021). **'Science is purely about the truth so I don't think you could compare it to non-truth versus the truth.' Students' perceptions of religion and science, and the relationship(s) between them: religious education and the need for epistemic literacy.**

British Journal of Religious Education, 43, (2), 174-189.

<https://www.tandfonline.com/doi/abs/10.1080/01416200.2019.1635434?journalCode=cbre20>

Abstract

There already exists a large knowledge base about teaching and learning related to the origins, diversity and history of life on Earth. We know less about teaching and learning related to wider issues pertinent to both religion and science. In our research with 40 students in six secondary schools in England, we looked at wider issues of student perceptions of religion and science. Our study involved an intervention of six lessons in Science and six in Religious Education (RE). Issues of philosophy, including ethics, were raised in Science lessons. The RE lessons dealt with a variety of contexts that highlighted the question of the relationship(s) between religion and science. In both pre- and post-intervention interviews, we found many instances where students used language that conveyed a misconception of the epistemic distinctions between religion and science. Students referred to 'truth', 'theory' and 'facts' interchangeably when discussing religious and scientific knowledge. We argue that RE needs to attend to epistemic literacy if we are to both avoid epistemological misconceptions and enable students to develop insights into the specific knowledge forms manifested in religion(s).

Stones, A., & Fraser-Pearce, J. (2021). **Some pupils should know better (because there is better knowledge than opinion). Interim findings from an empirical study of pupils' and teachers' understandings of knowledge and big questions in Religious Education.** *Journal of Religious Education*, 69, 353–366.

Abstract

In this paper, we draw on interim findings of our research project on Religious Education (RE), knowledge and big questions. We have found Miranda Fricker's concept of epistemic injustice useful in our analysis — that is, the notion that a person can be wronged “specifically in their capacity as a knower (Fricker 2007, 1). In interviews with Key Stage 3 pupils (aged 12–14) we found that for many pupils, their capacity to know was hindered by the prioritisation of respect for opinion. Where opinion is considered something not to be questioned, this seems to be a key indicator of epistemic disadvantage while some pupils valued and could employ criticality when considering knowledge claims (including opinions). Epistemic advantage in this way exacerbates epistemic injustice, broadening a gap between the epistemic haves and have-nots. This research is part of a larger project where we attempt to answer the question: 'Does Religious Education have a distinctive contribution to make to the development of ►

◀ epistemic literacy?'. We begin with our account of epistemic literacy underpinned by Young's powerful knowledge (Young and Muller 2010) and contextualise our data with discourses about knowledge and school education. We focus largely on the emergent theme of (respect for) opinions and we argue that the prioritisation of respect in RE is (for some pupils) a barrier to knowledge. We go on to explore why this matters for individuals, society and RE.

Stones, A. & Fraser-Pearce, J. (2022a). 'Epistemic literacy as an aim for religious education: Implications for initial teacher education'. In B. Hudson, N. Gericke, C. Olin-Scheller and M. Stolare (eds), *International Perspectives on Knowledge and Quality*. London: Bloomsbury, 87–107.

Introduction

Drawing on notions of powerful knowledge (Young and Muller 2010, Young 2014), German and Nordic traditions of Bildung-informed didaktik and Klafki's (1995) categorial Bildung, we present the case for epistemic literacy as a conceptual framework for teachers and students to develop a more nuanced understanding of the nature of knowledge than epistemology provides. Epistemic literacy describes the ability to use this knowledge to understand one's personal epistemology and communicate critically through appropriate disciplines. It also provides an approach to cultivate capabilities that extend beyond school.

We define epistemic literacy as the ability to appreciate and recognize the distinct forms, frameworks and systems of knowledge, method, language and data that pertain to particular disciplines and personal experience. If students and teachers are to avoid epistemological misconceptions and develop insights into the specific knowledge forms presented in Religious Education (RE) in England's secondary school curriculum, we argue that they should be given opportunities to develop epistemic literacy to help navigate the challenging and epistemologically complex questions that exist in the interfaces between subject disciplines. In this chapter, we pay particular attention to the RE curriculum area of religion and science as this is where the need for epistemic literacy manifests in sharp relief due to the ontological, epistemological and affective nature of the issues and questions raised. This conceptual framework is proposed as a tool for transformation from RE's parent disciplines of the academy to the school subject, as well as a principle or aim that one might develop through the subject.

The genesis of epistemic literacy is the result of an empirical study, while its rationale is theoretical. This chapter attempts to reconcile both of these aspects of the concept and explore the implications for teacher education. We consider epistemic literacy to be an aspect of powerful professional knowledge (Furlong and Whitty 2017) that is crucial for decision-making inside and outside the RE classroom. In doing so, we aim in particular to address KOSS research question 3, which focuses on how the nature of teachers' powerful professional knowledge should be characterized and ►

◀ the implications this holds for teacher education policy and practice. We argue that teacher education policy and practice need to recognize the significance of teachers' and students' subjective relationships to different types of knowledge in order to support the development of epistemic literacy.

The chapter begins with an overview of RE in England to familiarize the reader with the subject in question. We then introduce complementary notions of powerful knowledge and Bildung-informed didaktik to frame the relationships between everyday and expert knowledge in relation to school subject, student and teacher. The RE curriculum area of 'Big Questions' in religion and science is a case study to identify the need for a nuanced approach to knowledge that contextualizes a need for epistemic literacy. A discussion of the concept of epistemic literacy ensues before it is considered as a tool for transformation, an aim for the subject and, finally, a principle for teacher education.

Stones, A., & Fraser-Pearce, J. (2022b). **Is there a place for Bildung in preparing Religious Education teachers to support and promote epistemic justice in their classrooms?** *Journal of Religious Education*, 70, 367–382.

<https://link.springer.com/article/10.1007/s40839-022-00187-5>

Abstract

This article draws on an empirical research project in which we explore the roles and understandings of knowledge in Religious Education (RE). Plural understandings of knowledge in schools (and society) lead us to concerns about the relationships between knowledge and social justice. We define epistemic literacy as the capability to recognise, and critically use, different types of knowledge. We also clarify that one's own relationship with knowledge(s) is significant and is, therefore, important for students and teachers to develop to respond to the epistemically plural RE curriculum and classroom. Drawing on literacy frameworks to identify the need for non-hierarchical conceptualisations of knowledge that include the expert and everyday (Hannam et al., 2020, Shaw 2019, Vernon 2020), we acknowledge the need for a particular disposition when approaching knowledge about religion and worldviews. Building on the analysis of our empirical study and subsequent developments of epistemic literacy, we revisit the notion of epistemic justice (Fricker, 2007) and present a theoretical justification for the experiential preparation of teachers that draws on Biesta's (2002) reformed Bildung of encounter and Rawls' "veil of ignorance" (Rawls 2005).

**What emerges from these reflections on the future of Bildung is, therefore, an image of a learning society conceived as a society in which the real encounters with who and what is other are a constant and continuous possibility.
(Biesta 2002, 350)**

Selection of conference papers

“What distinctive contribution does Religious Education make to the development of epistemic literacy in relation to Big Questions in religion and science?”

2019, KOSS Symposium, IOE, UCL’s Faculty of Education and Society, 2019.

“Science, Religion and Other Animals.”

LASAR Symposium, Canterbury Christ Church University, 2020, Tamjid Mujtaba, Emma Newall, Michael Reiss, Jo Pearce, Alexis Stones and student teachers from the PGCE RE at IOE.

“Epistemic literacy” (initial findings, interim findings, recommendations for teacher education, report launch)

2019, 2020, 2022, 2023 Association of University Lecturers in Religion and Education, Jo Fraser-Pearce and Alexis Stones, also with Jo Kinnaird.

“Respect as a barrier to powerful knowledge in RE?”, 2021, Culham St Gabriel RE-Xchange, Jo Fraser-Pearce and Alexis Stones.

“Knowing better - navigating knowledges in the RE classroom”

2022, recorded as part of Culham St Gabriel’s Trust RExChange conference.

<https://vimeo.com/767245021>

“Religious Education for Epistemic Literacy and Justice”

2023, IOE, UCL’s Faculty of Education and Society, Farid Panjwani (Keynote) with Jo Fraser-Pearce and Alexis Stones.

Through the life of the project the importance of epistemic literacy for epistemic justice has become increasingly clear (and urgent).

What is epistemic injustice?

Fricker describes epistemic injustice as the wronging of someone “specifically in their capacity as a knower” (Fricker 2007, 1). She identifies “social power” as the unjust effects of a structural monopoly of epistemic authority experienced at individual levels as either an excess or deficit of credibility. This disparity is linked to perceived “identity power” which operationalises “power that depends in some significant degree upon such shared imaginative conceptions of social identity” (Fricker 2007, 130). It is not difficult to imagine the demonstration of this in the teacher’s epistemic power and the implicit communal monopoly of those who project a similar identity, perhaps through language or traits that suggest confidence.

Fricker goes on to recognise the significance of “hermeneutical injustice” as result of “hermeneutical marginalisation” in which a minority group or individuals do not contribute to meaning making in the epistemic sense. This can be at a local, global, individual and group level. This marginalisation is furthered by “testimonial injustice” and “pre-emptive testimonial injustice”. The former describes the event of someone not being believed due to prejudice, and the latter is when a person (or people) deemed untrustworthy is not even asked. “Testimonial silencing” is a self-silencing that results from the awareness of one’s lack of credibility due to the injustices described here.

Like many areas and aspects of formal and informal education, RE is susceptible to epistemic injustice through its policy, curriculum, pedagogies, disciplines, teachers, students, school structure and subject status, time allocation, and perceived nature(s) and purpose(s) of the subject. Following Holt’s (2019) work, which acknowledges the importance of including religious and non-religious traditions in the RE curriculum that extend beyond the usual “big six” religions, it matters what voices, histories and ontologies are included and excluded from the RE curriculum. But is a change to curriculum content enough?

Assuming RE moves towards a worldviews and disciplinary-focused curriculum, which seems likely, we must be alert to the possibility of epistemic injustice. Some discussions around knowledge claim that disciplines have power and potential for social justice through their facilitation to imagine the not yet imagined (Young and Muller 2010, Deng 2021). The disciplines associated with RE, however, are prone to a homogenization of discourse in the curriculum and classroom that may exclude diverse perspectives. Theology, Philosophy and Social and Human Sciences are held by advocates of a religion and worldviews curriculum to maintain academic rigour for the subject (Commission on Religious Education 2018, Ofsted 2021, Norfolk Locally Agreed Syllabus 2019). In their analysis of values in the curriculum, Mitchell & Stones (2022) point out that these ‘parent disciplines’, founded in the academy, are built on colonial foundations and values that sought to categorise, order and examine through a Christian, heterosexual, European, male lens. ●

Methodology

In this project we wanted to find out how knowledge is used and understood by students and teachers in RE classrooms. In order to do so we conducted interviews with RE teachers and Key Stage 3 students, observations of Key Stage 3 RE lessons, and an online RE teacher survey. We visited and observed lessons in eight contrasting schools around England and interviewed about three teachers, and five or six student groups, in each school — amounting to 20 teachers and 36 groups of students. Participating schools included: rural, suburban and urban schools; boys, girls and co-educational schools; schools of religious character and ‘common schools’; independent, grammar and comprehensive schools; and schools from a range of English counties.

We were particularly concerned with how knowledge is handled in RE in relation to the kinds of big questions which relate to religion and science. All interviews began by presenting participants with examples of what we consider to be big questions:

Why did the universe begin?

Is there life after death?

How do we know what being good or bad is?

How do we know whether something is right or wrong?

How do you know if something is true or false?

With the benefit of hindsight, we now notice the easy fit of the latter three questions with the polarisation with which we have become concerned. We would express these in different ways now, resisting the draw of the simple and coherent (Lombrozo, 2007) and the notion of an either/or explanatory space (Preston & Epley, 2009). Nevertheless, our initial expression is perhaps a symptom of the ubiquity of polarisation, and/or a habit nurtured by our own school education. We are surmising here but it’s worth noting, firstly, that either might make for hard habits for teachers to break; and secondly, that this emphasises the importance of recognising this as we prepare RE teachers.

◀ The big questions listed above remained on display during the interviews (each on a sheet of A4 paper), as we asked a range of questions relating to the nature of big questions. First, we asked “what makes a question a big question?”. The same question was asked of survey respondents, although we did not precede the survey question with examples of big questions.

We began interviews by focusing on the nature of big questions. On turning to knowledge, we asked students:

What kind or kinds of knowledge would you need to answer big questions?

How would you know you are using the right kind of knowledge? (Knowledge you could rely on/trust?)

We asked teachers:

What kind or kinds of knowledge would/do students need to answer big questions?

How would they know if they are using the right kind of knowledge? (Knowledge they could rely on/trust?)

We did not present an understanding of ‘knowledge’ to participants (even when they asked), as we wanted to find out about their understandings and interpretations.

Ethical approval was obtained for the project through the usual university process. Interviews were arranged by teachers at times convenient to participants and in places where interruptions were minimal. Voluntary informed consent was obtained by all participants, and parental/carer permission obtained for students. We took care to give all participants the opportunity to ask any questions immediately in advance of commencing interviews, and made it clear that they could withdraw from part or all of the interview at any time without consequence. No unexpected ethical issues arose during the course of the research. ●

The teacher's awareness of their own epistemic biases and preferences is as fundamental to the epistemic health of the classroom and curriculum as that of the student.

What are students' and teachers' perspectives on big questions?

In interviews, all individual teachers and student groups defined big questions in terms of their answers — that is, in terms of whether they can be answered, how they might be answered, and the kinds and numbers of answers they might have. At least initially, most of the participants who said big questions cannot be answered conflated the possibility of answering a question with the possibility of there being an answer. In some interviews, we explored the notion that there are no answers: did participants mean that there are no answers, or is it possible that there is an answer but it is not possible to know it? Some agreed the latter might be the case. Some participants said that answers to big questions matter; that they have an impact on our lives. Big questions were commonly understood by our participants as: having been around for a long time; questions that everyone has; taking a long time to answer; and, difficult. All of the teachers and most of the students said they find big questions interesting. A minority of students said they did not find them interesting and did not enjoy talking about them (although the students in one of the groups professing this engaged in the discussion enthusiastically). Most participants agreed that the questions matter even though they are really difficult (or even impossible) to answer. One student was of the view, in relation to big questions, that “if it doesn't affect you, don't worry about it”.

None of the participants took issue with the examples of big questions we offered, and participants expressed broad agreement over the nature of big questions. Participants suggested their own questions (listed below) in response to being asked for examples of big questions other than those we had offered. Not all respondents expressed the questions in exactly the same words — for example, variations of ‘Is there a God?’, include ‘Does God exist?’ and ‘Is God real?’. Where we are sufficiently confident of a common meaning, and for ease and clarity of presentation, we have presented a single version of the question below. Where we are less confident of a common meaning, or where we think the variation is significant, we have retained distinct wording. To illustrate this, we have not included ‘Is an idol a god?’ as a variation of ‘What is God?’. An example of the latter is found in our distinction between ‘Did God create the universe?’ and ‘Did God create the universe or was it the big bang?’. The distinction is significant because the second variation only allows for two possible answers.

This reduction of options by the time students are 12–14 years old is reminiscent of what Ashley (2005) calls “early closure”. He offers an example from a 14-year-old research participant: “I don't want to hear anything more about the environment because I learned everything I need to know at primary school” (Ashley 2005, 190). Although this student refers to environmental education, the point is surely transferable to other subjects. As already noted, students and teachers understand big questions as both important and difficult. Given the gravity of these questions, “early closure [should be] prevented and [learning should continue] to the point at which the learner is able to marshal a wide range of arguments of increasing sophistication” (Ashley 2005, 192). This would not negate students (or any of us) offering interim responses, but it would mean that the process of reaching a conclusion looked more like an “extended project” (Ashley 2005, 192) than a sequence of lessons. ►

◀ ‘Did God create the universe or was it the big bang?’ was suggested in eight student group interviews whereas ‘Did God create the universe?’ was offered in one student group interview. Although the latter only states one option (that God created the universe), it does not limit other possible options and therefore does not indicate “early closure” in the way the former (with only two options) does. Moreover, the latter does not indicate a conflict model of science and religion, or as Preston and Epley (2009) put it, a model in which science and religion compete for explanatory space. Whereas the former exemplifies such an understanding.

Big questions suggested by multiple interview participants:

Is there a God? (Suggested in 20 of the 36 student groups and by eight out of 20 teachers)

What is the meaning and purpose of life?/Why am I here? (Eight student groups and three teachers)

What is God? (Six student groups and two teachers)

Did God create the universe or was it the big bang? (Eight student groups)

If God is good, why do bad things happen? (Five student groups, one teacher)

What does it mean to be human? (Two student groups, four teachers)

How were humans brought into existence? (Five student groups)

Who is the right God?/What is right the religion? (Four student groups)

Do aliens exist? (Four student groups)

How do we lead a good life? (Four teachers)

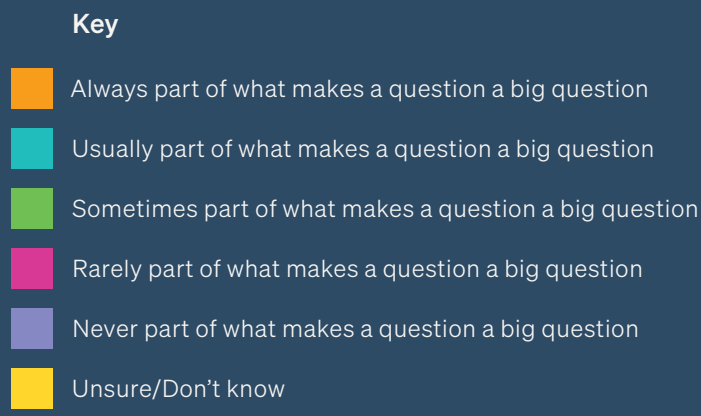
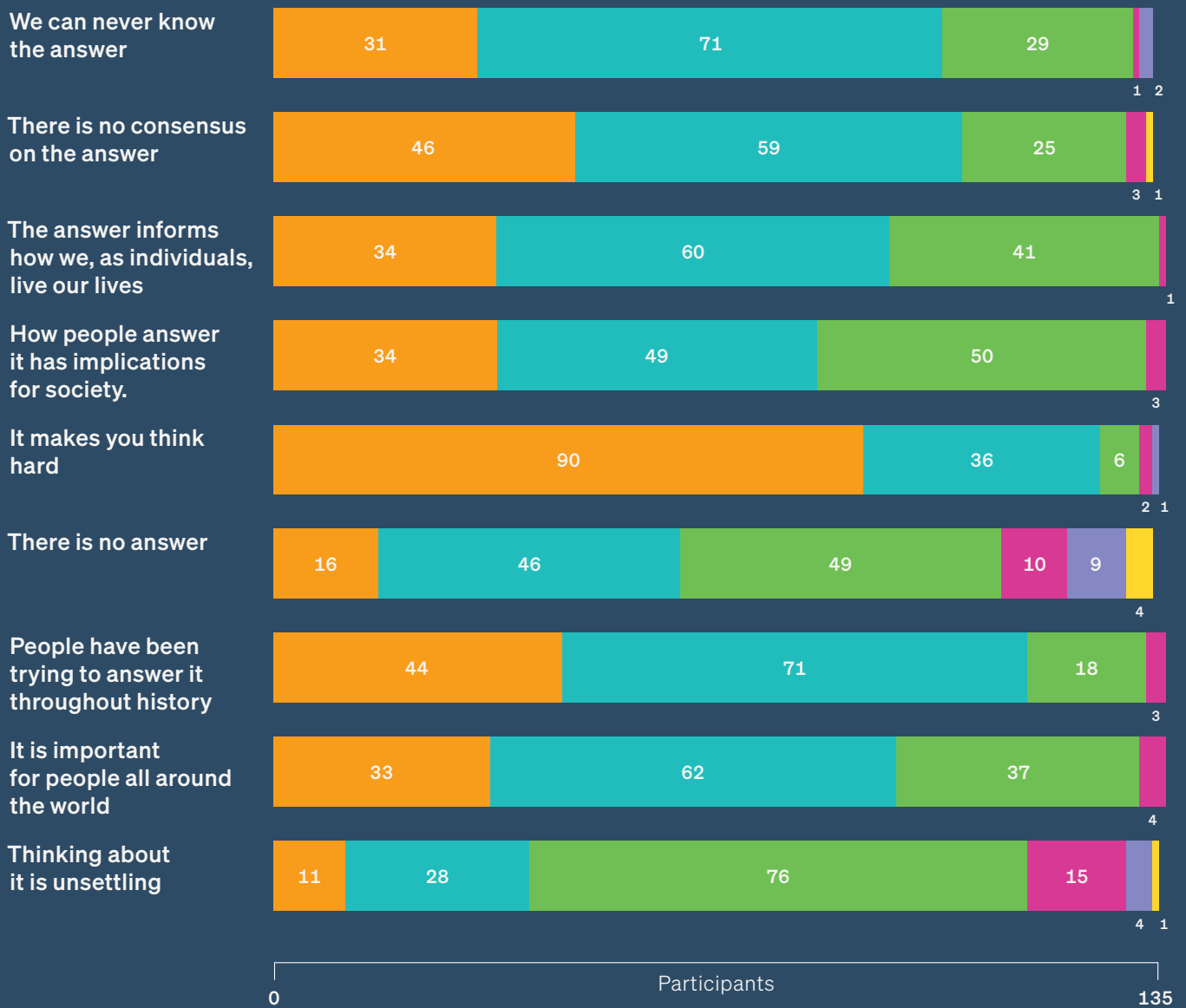
Is this life/world we experience real? (Three student groups/one teacher)

What does it mean to know?/How do we know? (Three teachers)

Did the chicken or the egg come first? (Three student groups)

The questions teachers and students offer are not trivial even if some seem so at first. For example, one of the students who offered the chicken and egg conundrum used this as a springboard to raise questions about the beginning and development of animal life. Another student (in a different school) gave it as an example of an impossible big question and compared it to “what came before God?”.

Unlike interviewees who could respond freely, survey respondents were presented with nine possible identifiers of big questions. They were asked to place them on a five-point Likert scale from “always part of what makes a question a big question” to “never part of what makes a question a big question”, or to select “Don’t know/unsure”. One hundred and thirty-six participants responded to this survey question. ●



What does epistemic injustice look like in secondary (Key Stage 3) RE?

In this section, we draw on our findings to paint a picture of epistemic injustice in Key Stage 3 RE. It is important to say that we found plenty of good practice which seemed to enable epistemic literacy and therefore promote epistemic justice in schools. Here we focus on examples from our data which illustrate epistemic injustice.

We were first alerted to the possibility of epistemic inequities between classrooms when we found that some students and a few teachers conflate knowledge and opinion. Having noticed the serious nature of the big questions offered by students, as well as the fact that they consider big questions to be difficult and important, we were surprised that opinion was frequently cited by students as the main kind of knowledge needed to answer big questions. The word ‘opinion’ appears 743 times in the dataset. Although not all 743 are instances of conflation, we were surprised at the frequent mention of opinion. A minority of students were able to distinguish between knowledge and opinion. Those students who conflate knowledge and opinion might be described as epistemically disadvantaged, and those able to make the distinction as epistemically advantaged — or, they might be described, respectively, as the epistemic have-nots and the epistemic haves.

Examples of epistemically disadvantaged students:

Interviewer: How do you decide whether you’ve come up with the right answer to a big question?

Student: “Your opinion.”

“Maths doesn’t have your opinion, it’s what’s right and wrong, the answer is right or wrong. But in RE there is no right or wrong, it’s your opinion.”

“Because everyone’s allowed to have like their own opinion. So, I guess the only real knowledge you need [to answer big questions] is your own opinion.”

Because everyone’s allowed to have like their own opinion. So, I guess the only real knowledge you need [to answer big questions] is your own opinion.

Our review of literature had led us to anticipate particular kinds of responses — for example, we were anticipating that at least some participants would subscribe to a conflict model of science and religion where both compete for the same explanatory space (Preston & Epley 2009). We were not prepared for the prevalence of opinion as (often decisive) knowledge. We argue that individuals who prioritise opinion in answering big questions, and are reluctant to challenge opinions, are at an epistemic disadvantage. Where such an understanding of (or relationship with) knowledge has been intentionally nurtured, this constitutes epistemic injustice. Fricker’s words bear repeating: “a distinctively epistemic kind of injustice... wrong done to someone specifically in their capacity as a knower” (Fricker 2007, 1).

One might suppose that these attitudes to opinion and knowledge simply constitute lazy thinking, but there is nothing in the data to suggest this. The data suggests that the prioritisation of opinion results in part at least from a well-intentioned but, we ►

◀ argue, miseducational (mis)understanding of the purpose of RE. In the words of one of the students:

RE is there to teach you to respect other religions and their beliefs.

For most of our student participants, to respect is to refrain from questioning knowledge claims. As evidenced in the following interview excerpt, this aversion to challenging opinion can extend to students comfortably describing a single claim to knowledge as at once being “right” and “wrong”:

Student one: “So to science your opinion [that the earth is flat] would be wrong, but no opinion is actually wrong.”

Student two: “... unless it is, like ... an opinion about someone, like not a very nice opinion.”

The exception expressed by student two reinforces the primary concern with respect: opinions should be respected unless those opinions themselves are disrespectful. In such cases, the key criterion for assessing knowledge claims seems to be a moral one. Whilst we commend students for their desire to respect, we question whether a refusal to genuinely engage with claims to knowledge, and therefore to take seriously the people who make them, is respectful at all? Following Barnes, we argue that RE should enable students to take differences in knowledge claims seriously. There is a crucial distinction to be made between respecting people because they are fellow human beings and misconstruing respect as uncritical engagement with their claims to knowledge (Barnes 2009).

We are also concerned that the prioritisation of opinion as knowledge which stems from “respect”, constitutes a kind of limited epistemic practice which is akin to early closure (Ashley, 2005). Rather than being prepared for adult life, and indeed enabled for their current lives, such limited epistemic practice may well leave young people epistemically incapacitated when they leave school. The social injustice of this becomes apparent when we consider that not all students seem so deprived. In the excerpt below, the second student demonstrates a higher level of epistemic literacy than the first — that is, he demonstrates a more advanced understanding of how knowledge works, and can use relevant language more precisely:

Interviewer: Can people’s ideas, beliefs on these questions be wrong?

Student one: No. It’s their decision.

Interviewer: You mentioned things like flat earth earlier. If my belief is that the earth is flat, is that right then?

Student one: Well, I might say it’s wrong. But in your opinion it’s right, so it’s right.

Student two: That’s like taking a scientific approach but not following the scientific part of it.

Student one: I don't think that's wrong.

Interviewer to student two: Say something more about that?

Student two: Because if you're using the scientific approach, you've got to say facts about science. You can't be saying made up stuff and saying it's fact.

We consider students displaying such levels of epistemic literacy to be epistemically advantaged in relation to the majority of students we spoke to. In the following examples, the first student precisely distinguishes between terms, whilst the second presents a relatively sophisticated account (he was 12 years old) of specialist knowledge.

Opinions are what you believe, knowledge is what you've been taught, and facts are what is actually true.

How to throw a normal jab, right, and an uppercut... [T]hat's the knowledge on boxing... [H]e trained more, and he knew more about boxing and what to do. So his knowledge helped him.

As seems to be the experience of the student below, when RE enables the development of epistemic literacy, it is likely to make the big questions harder rather than easier to answer:

I've definitely thought about [big questions] a lot more, since doing them in [RE]... I always used to have my own answer and think that nothing could disprove it... But now I hear lots of evidence, it's really hard to make a decision now.

If data from interviews tell us what epistemic injustice sounds like, then it follows that observations can tell us what it looks like in the classroom. We know from our experience and research that the following scenarios are relatively common in RE classrooms: approximately 30 young teenagers are presented with a big question or issue in the abstract and are asked to choose (often publicly) between two options — agree/disagree, for/against, right/wrong.

Through the course of this project, for which we personally conducted all classroom observations, we observed examples of these activities where students had to publicly indicate whether they were “for” or “against” an issue relating to medical ethics by standing in the “for” or “against” line. Other adaptations included students being asked to vote (with little or no discussion) on which arguments should “win”. These kinds of activities contribute to epistemic injustice, or do wrong to students in their capacities as knowers (Fricker, 2007), as they neither encourage nor enable sufficiently nuanced or sensitive engagement with the complexities and realities of the issues at hand; they promote reductive evaluation and uninformed decision-making. Such approaches can foster a performative dimension to decision-making with potentially divisive consequences that can overshadow authentic engagement. In turn, they fail to prepare students to handle such issues and questions when they arise in their own lives. ►

◀ Some of the activities in which students were encouraged to engage with differing positions did little to enable appropriate engagement, as indicated in the excerpt below, from our fieldnotes:

Lesson title: 'Miracles'...

The teacher introduces the lesson: "Some of you might agree with miracles, and some of you might be against them, and that's okay."...

Teacher asks class: "What is a miracle?". Some students offer definitions (e.g., "the impossible happens") and some examples (e.g., "when you pray for something to happen and then it does", and "it's a miracle Mum didn't burn the turkey on Christmas Day"). Neither teacher nor students distinguish between definitions and examples, or between different kinds of examples...

The teacher walks around the room whilst students are on task writing about whether or not miracles happen. He reminds students to include "both views". Again, he is suggesting that there are two polar views, one or the other...

(Fieldnotes, Year 7 RE lesson "a")

There are a few ways in which this lesson could disadvantage students in their capacities as knowers, or contribute to epistemic injustice (Fricker 2007). First, in the lack of precision of the language used in the introduction to the lesson. Unlike in the excerpt above, 'agree' is usually contrasted with 'disagree', and 'for' with 'against'. It is more usual to refer to 'believing in', rather than 'agreeing with' miracles, and it is not clear what it might mean to 'be against' miracles. We recognise that the students would have understood what this teacher meant. Nevertheless, we do not think we are being pedantic here; as we elaborate in the next section, literacy matters. Secondly, by making the students' interpretations explicit, the teacher could have supported students in understanding there are a range of ways of thinking about and answering this question (and, therefore, other questions). Not to do so permits epistemic injustice as students work towards conclusions without an understanding of what frames of reference (perhaps literal, symbolic, theological, or an idiom) are in play. Finally, as we note in the excerpt itself, students are encouraged to think in terms of polar views.

In this section, we have drawn on our data to illustrate what epistemic injustice looks and sounds like. To do so, we have mainly focused on examples of epistemic disadvantage. Our data also includes examples of epistemic advantage. Indeed, it is the nurture of epistemic advantage for some (the haves) and of epistemic disadvantage for others (the have nots) which make this a justice issue. Above we note that literacy matters. Next, we elaborate by explaining both what we mean by epistemic literacy and the contribution we think it has to make to epistemic justice. ●

What is epistemic literacy, and how might it contribute to epistemic justice?

The adjective 'epistemic' means 'relating to knowledge and knowing'. UNESCO define 'literacy' "as a means of identification, understanding, interpretation, creation, and communication in an increasingly digital, text-mediated, information-rich and fast-changing world." (<https://en.unesco.org/themes/literacy>).

As Stordy discusses in his taxonomy of literacies (2015), the practice of qualifying the noun 'literacy' with an adjective can be seen in a range of fields:

The 1980s witnessed the fracturing of literacy into various subject literacies. These essentially meant competence or proficiency in some associated subject area... For example, being maths literate or environmentally literate meant that a person knew how to operate the language of the subject well enough to make sense of it. It also saw the origins of literacies ... that attempted to encapsulate ... skills and competencies... For example, the concept of computer literacy became increasingly prevalent to encapsulate the skills and competences necessary to effectively use computers... (Stordy 2015, 457)

Following Stordy (2015) and building upon UNESCO, we define 'epistemic literacy' as:

Competency and proficiency in the identification, interpretation, understanding, questioning, navigation and communication of knowledge.

Our shorthand for this is ‘knowing well’

We draw upon a range of discourses to clarify the meaning and functionality of epistemic literacy, including religious literacy, epistemic switching and capabilities. Religious literacy, according to Hannam et al., (2020), emphasises the importance of the educator’s role in including language and tradition that are beyond the “dominant” language and discourse. Shaw’s formulation of “religion and worldview literacy” (2019), on the other hand, identifies the need for the educator’s and student’s reflexivity, and the development of a disposition of tact and insight informed by (1) knowledge of the actual religious and non-religious landscape, and (2) a nuanced grasp of what the category of religion and worldview entails.

As a response to the research and development of “epistemic insight” by Billingsley et al., (2013) which opens up discussions around the different types of knowledge across subject disciplines, we recognise the importance of the work of Gottlieb and Wineburg (2012). They make the case for “epistemic switching” by citing examples of when their participants unconsciously “switched” between their religious, social and academic identities in response to various stimuli. They stress:

**The idea that epistemology and identity can affect each other not only vertically (by providing the cognitive conditions for holding particular beliefs about knowledge or the self) but also horizontally (by triggering different kinds of identification and belonging as the context shifts) has potentially radical implications for theories of both identity and epistemology... relations between these two seemingly distinct constructs may be much closer than has been previously assumed.
(Gottlieb and Wineburg 2012, 117–118)**

‘Epistemic literacy’ responds to the Gottlieb and Wineburg’s invitation to develop “theories of learning [that] extend beyond the “merely” academic to touch on practical concerns about how to educate real people about things that matter” (ibid. 118).

Our account of epistemic literacy also owes much to Michael Young and colleagues’ discussions around Powerful Knowledge (Young & Muller 2010, Young & Lambert 2014, Deng 2021) which, broadly speaking, describe the notion that certain disciplinary kinds of knowledge are ‘powerful’ in the sense that they take people beyond their everyday knowledge. Thus, schools and disciplines should provide epistemic environments in which expert knowledge can be encountered and developed as a matter of social justice.

The “capabilities approach”, as conceived by Nussbaum and Sen (Nussbaum 2011, Sen 1999) and incorporated into the Geocapabilities project (Young & Lambert 2014, Lambert et al., 2015, www.geocapabilities.org), is also crucial to our understanding of the role of epistemic literacy and its relationship with epistemic justice. In the same way as Fricker sees epistemic justice as a capability (Fricker 2007), epistemic literacy is necessary for the handling of knowledges during school years and beyond. Furthermore, epistemic literacy relates strongly to Nussbaum’s capabilities regarding health and ►

◀ the ability to make informed judgements. This relationship is reflected in concerns over sources of knowledge (conspiracy theories and 'fake news' for example) as well as contestation of expert advice, as previously mentioned.

Vernon reconciles the tension between a constructivist Vygotskian approach and the distinction of expert knowledge in her proposal that acknowledges the significance of the 'epistemic self'. She calls educators to implement a dialectical and iterative approach to everyday and expert knowledge. Vernon's proposal recognises the epistemic world of learners, and the conceptual world of subjects; she sees them as generative only if educators are able to bring these into relationship (Vernon 2020). This echoes our concern that developing epistemic literacy includes fostering the capability to competently navigate a range of diverse claims to knowledge in order for epistemic justice to emerge. ●

What approaches to teaching and learning hinder, and what approaches might contribute to the development of, epistemic literacy of learners in RE?

Our findings indicate that students' and teachers' conflation of terms suggest a confusion relating to distinctions between knowledge, belief and opinion. This constitutes a deficit of epistemic literacy. We also saw and heard examples of some teachers offering simplistic taxonomies of relationships between religion and science that loosely cohere with Barbour's conflict, harmony, integration, independence model (Barbour 1990) and offer binary either religion or science understandings. Indeed, as we note above, even some of the big questions we presented to participants offer binary understandings — it seems it's an easy trap to fall into, even for those of us engaged in work seeking to move RE beyond erroneous polarisations. Our recommendation to be alert for and wary of overly simplistic taxonomies and binaries, is one that we as authors must take care to heed.

The following is an excerpt from our fieldnotes written during our observation of a year 7 RE lesson.

Lesson title: 'Creation: science or religion?'...

Learning objective: 'To understand different opinions on how the world was made'...

Teacher's verbal instruction for starter activity: 'On your table, can you think of a logical explanation of how the world was made? You've got 90 seconds'. Student responses included: 'the big bang', 'I don't know', and 'Jesus'...

The teacher moves on to the next slide which listed the 'different viewpoints' they would be looking at in the lesson: 'Big Bang Theory', 'Hindu creation story', 'Genesis'. The teacher describes Genesis as 'what Christians believe' and follows this up with 'you can decide what you believe; you might want to take bits from all'. She then plays the three YouTube videos in turn. The 'Big Bang' video is difficult to access, complicated and serious in tone. The two religious accounts are more accessible, with the account of Genesis (1) being very simplistic — quite babyish in fact. The two religious accounts posed no challenge to students, whereas the scientific account was inaccessible...

Following the input of the videos, the next slide included the main task of the lesson: 'In pairs, create a presentation on how you think the world was made'. The teacher verbally elaborated: 'Come up with a sensible explanation of how the world was made'...

Towards the end of the lesson, students present their explanations in pairs. This consists in them showing pictures they have created, accompanied by brief statements. For example:

Student 1: 'The world was made from two asteroids crashing together.'

Student 2: 'God started everything then the space things happened.'...

Teacher: 'So, a combination of religion and science?'

Student 2: 'Yes.'

Student 3: 'We think the world was created by God.' [These students then quote part of Genesis account.]

Student 4: 'We think God created the world.' [Student's quote from Genesis.]

Teacher: 'So you think that it's purely what's in the Bible? No big bang or anything?'

(Fieldnotes, Year 7 RE lesson 'b')

The specific ways in which we think this lesson hinders epistemic literacy point to the ways in which it could be promoted and supported. We mentioned imprecise language earlier in the report and see it again here. The imprecise language which, for example, suggests that science might explain 'creation' or that different viewpoints constitute 'opinions' presents a hindrance. Our definition of epistemic literacy requires competent use of language, and this requires precision. The lesson materials present science as (too) complex and religion as simplistic. Both religion and science were presented in reductive terms and mostly as binary opposites.

It is difficult to see how (this was the first lesson on science and religion). In so far as we saw, they were not given the opportunity to develop any epistemic literacy to support their grasp and navigation of the different knowledge structures, methods and criteria that scientific and religious explanations draw on. Students' voices and testimony were not heard, and hermeneutic justice was replaced with a curated and reductive representation of scientific and religious explanations aimed at students choosing one explanation.

This lesson points to potential pitfalls of the abstract in RE. Whilst we recognise the relevance and appropriateness of the abstract, depending on the learning intentions of the lesson, they can lend themselves to sanitised and essentialised accounts that bely the lived realities of religion. Following Smith et al., (2018), students should be enabled to develop understandings of religion as a "multifarious, complex, social phenomena" (Smith et al., 2018, p. 1). Smith et al. refer to Panjwani and Revell's (2018) observation of educational 'essentialisation' of religion that reifies the abstract idea of, for example, a Muslim through a constructed idea of a member of Islam, as if there were only one type of Muslim.

The simplification, sanitization and essentialisation of religion can arise out of the seemingly laudable aim of community cohesion through RE. This kind of ►

◀ instrumentalization is miseducational in its constructions of religion(s) and the resultant obstruction of teachers' and students' understandings of different kinds of knowledge that inform the complexities of, for example, affiliative, heritage-related, and intersectional identities. Where such inauthentic accounts of religion are the mainstay of RE, students who identify with religions and worldviews in other ways, are not enabled with the literacy to make sense of this aspect of who they are - are not supported in placing themselves in the "multifarious, complex, social phenomena" (Smith et al., 2018, 1) of religion and worldviews. They are not supported in understanding how themselves and others make sense of who they are, of their place in the world, and of the world and life itself.

Hussain (2018) argues that RE should dispense with its responsibility for community cohesion as this instrumentalisation is at the expense of the subject's academic rigour. In response to this perceived dichotomy of pro-social aims or academic rigour, following Deng (2020, 2021, 2022), we have turned to German and Nordic understandings *Bildung* (loosely translated as formation) to seek out the moral and intellectual 'powers' of RE through epistemic literacy.

Bildung espouses the idea that education creates order on oneself and one's relations to the world and thus leads to responsibility (Klafki 1995). This 'ordering' and responsibility are considered to emerge from a relationship between the intellectual and moral aspects, for which the academic disciplines are a resource and vehicle (Deng 2018). Klafki (1995) distinguishes between content (what he refers to as material *Bildung*) and the presentation or pedagogical interpretations of content that students can relate to (formal *Bildung*). Part of the teacher's role is to relate the content to the pedagogy, fostering an understanding of what Klafki calls 'epoch-typical problems', or contemporary challenges such as war, climate change, famine and social injustice.

Our findings indicate that the instrumentalisation of RE (to foster respect), combined with a lack of epistemic literacy and confidence, in some (but, importantly, not all) schools is resulting in wrong being done to students in their capacities as knowers (Fricker 2007). In Klafki's terms, we might describe epistemic injustice as an 'epoch-typical problem' for RE. Having interviewed teachers who are aware of their own epistemic biases and how these influence their practice, it seems clear that the teacher's development of their own epistemic literacy is a necessary precursor to providing RE which aims to develop the epistemic literacy of students. ●

The disciplines associated with RE, however, are prone to a homogenization of discourse in the curriculum and classroom that may exclude diverse perspectives.

Practitioner Insights

Niamh Fitzgerald

ECT1, UCL RE PGCE 2021-22

I would like to be able to focus more on epistemic literacy as a teacher than I do. Whilst studying for my PGCE I placed epistemic literacy as one of my central aims for RE teaching. However, due to the lack of time given to planning as well as entering into a department with its own established schemes of work, my focus on epistemic literacy has waned. Due to the prevalence of a particular religion in the classroom, my focus has largely been on de-essentialising religion for my students — which in itself is a stepping-stone to more vigorous discussions surrounding epistemic literacy.

Despite this, I would not rule out epistemic literacy as a viable aim for RE. I would say that it will take time and commitment from subject teachers to redesign schemes of work to embed opportunities for developing epistemic literacy consistently across students were enabled to critique or move beyond their everyday knowledge they had before the lesson Key Stages. If we are able to imbue epistemic literacy into a spiral curriculum, then the change can start from an earlier age so good ‘epistemic hygiene’ is taught throughout a student’s school journey and is seen as a wider aim of education as a whole.

In terms of the relationship between epistemic literacy and justice, I can see in my classroom that the prevalence of conspiracy theories and the inability to critically engage with a belief is a real issue which prevents students from moving towards the Critical Realist model. Any attempts to impose a critical realist pedagogy without recognising the reality of diverse epistemic literacy rates in the classroom would mean that you automatically lose certain students who will not critically engage with their own beliefs, let alone the beliefs of others. If we want critical realism to play any role in RE then epistemic literacy must become a solid foundation for the subject. Otherwise, there will be no meaningful engagement with beliefs from students as they stand in a subjective bypass where all opinions and beliefs are treated as epistemically equal. Without continuing to advocate for epistemic literacy then RE risks becoming plagued by a Popper style paradox of tolerance, and the ‘big questions’ that make RE the subject where you can shape identity forming beliefs becomes nothing more than an echo chamber.

Karolos Galazoulas

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Epistemic literacy (EL) provides a concrete, open-ended goal that enables RE to re-identify itself. From a philosophical perspective, EL represents a framework where students are introduced to the competing nature of knowledge claims and where the corresponding duty to justify becomes intelligible. Moreover, from a teacher’s point ►

◀ of view, EL mediates between teachers' 'expert' and students' 'everyday' knowledge in that it allows for the inclusion of the latter without eroding the former. My views on EL have developed during this year. I have sought to build on EL by connecting it with an appropriate RE pedagogy. I have found that some goals can be achieved by attending to Jan Derry's inferentialism (Derry 2017) as the means whereby students are introduced in the space of reasons, which constitutes the possibility of comparing, assessing, and evaluating knowledge claims. This shift to the justificatory aspect of knowledge claims fleshes out the idea of the 'social construction' of knowledge so that the latter retains its 'objectivity' whilst not losing sight that knowledge is ultimately a human production. Furthermore, Stones & Fraser-Pearce (2021, 2022) point to the fact that 'knowledge' should not be represented as static, and, rather, RE should "develop learners' capabilities" that enable them to develop further knowledge. Developing pupils' consciousness of the inferential techniques, along with introducing them to the game of giving and asking for reasons, is one way in which capabilities for lifelong learning become present. Finally, EL has contributed to my awareness of the inherent power that lies in knowing — a power that is exacerbated in classroom contexts — and the injustices that such power imbalance creates. I have sought to bridge those gaps in my classrooms by explicitly teaching my students the differences between knowledge and opinion, namely the gradual transition from doxa to knowledge via justification, reasonability, and truth.

Joe Kinnaird

Experienced RE teacher and mentor

Is epistemic literacy a viable aim/approach for RE?

I think epistemic literacy is an essential aim for RE. In RE lessons, students explore a range of answers to big questions such as 'Does God exist?', "Why do we suffer?" and 'How do we know what is right and wrong?'. When students encounter religious or non-religious responses to these questions, it is important for students to recognise the origin of these answers. Moreover, epistemic literacy enables students to assess and critique sources of authority e.g. is this a reliable source of knowledge? what inconsistencies does this source of knowledge have? I think this skill can be applied not just to sources of authority within religions, but also the sources of authority which the student draws upon. As students formulate or articulate their own responses to big questions, epistemic literacy is the tool that allows them to reflect on where they acquire their knowledge from.

Have your views of epistemic literacy developed since you were introduced to the idea?

Since being introduced to the idea, epistemic literacy is something I am more conscious of in the classroom. During discussion of big ideas, a more common question has been 'How do you know that?' or 'Why would X claim this?'. I feel that these sorts of questions are vital in the RE classroom as to do so leads to far deeper knowledge. ►

◀ I want students to be able to articulate why believers have certain views and what sources of knowledge are drawn upon in the responses that religious believers may give to big questions.

If there are any changes/developments, what do you think has influenced these?

The influence has been a result of continuing to think more about what we envisage a student of religious education to know and do by the end of their time studying the subject. I would want students to have had the opportunity to have an understanding of a multitude of different religious belief systems, the origins of these beliefs and how these beliefs are reflected in the lives believers lead today. Epistemic literacy serves as an umbrella for all of these aims as it is the tool by which students can articulate where the knowledge comes from which informs everything they have encountered in their religious education.

Are you able to say something about relationship(s) between epistemic literacy and social justice (including epistemic justice)?

As RE teachers, we have a responsibility to ensure that we develop the epistemic literacy of all students. The claims which students encounter in lessons should not be presented in isolation - time needs to be given to explore what knowledge or source of authority is underpinning the claim. Otherwise, the claims they encounter can seem groundless and arbitrary. Some students may arrive at our lessons with differing degrees of ability to differentiate between knowledge, faith, opinion etc. The RE classroom serves as a space where the distinction between these three ideas can be interrogated. Outside of the RE classroom, epistemic literacy is a tool by which young people can begin to assess the hierarchy of sources of authority for knowledge in their own lives e.g. conscience, parents, religion, media, AI. Every young person has their own worldview and to be epistemically literate is a tool by which they can settle on more informed positions on what they know and why.

Shammi Rahman

**Race Equality Adviser for HFL Education,
formerly known as Herts for Learning**

Is epistemic literacy a viable aim/approach for RE?

Yes, it is a viable approach but only if teachers receive education in this area and given that 51% (according to NATRE research) of RE teachers teach or lead a subject other than RE, this will be a challenge. Also, as the subject encourages personal reflection lessons should include the values and beliefs of students being taught as personal transformation plays an incredibly important role in the subject. As an RE teacher of 18 years, I know this is achievable if teachers are given the tools and develop the confidence to promote student's epistemic literacy. This also requires consistency in teaching and relationship building within the classroom between all the students ►

◀ to develop the trust needed to allow young people to feel secure that they won't be judged for their honesty otherwise they will and do suffer epistemic injustice and are put at a disadvantage because they are in the minority in the classroom.

Have your views of epistemic literacy developed since you were introduced to the idea?

This research has eloquently expressed what I have been feeling for a long time. There is a clear distinction between justified belief and opinion and the recent changes in GCSE RE and A Level assessment criteria have highlighted the importance of this but it does not mean all teachers understand the significance of training students well to enable them to achieve this. Particularly now working in anti-racism, I have come to realise that my previous good intentions for respecting opinions has been a barrier to knowledge and progress for others and myself. In the fear of offending colleagues, I have held back from expressing ideas and concerns that could have been helpful in challenging the way we deal with prejudices and marginalisation in educational settings. I agree that opinions need to be based on well thought through ideas and if as adults we are not practising this, then how are we to get young people to do it. They need exposure to ideas that don't all come from texts studied but personal experiences matter too as they are shaped by cultures, upbringing and values that represent the diverse make up of British children who come from all walks of life.

If there are any changes/developments, what do you think has influenced these?

Yes, pupils do connect with what they are learning through their own experiences and if those experiences are ignored in the classroom or suppressed, how are they to build on what they know? How are they going to get closer to specialist knowledge and appreciate it if they cannot connect. For example, in History, if pupils are only being taught White European history or in RE only learning about one or two worldviews with a sprinkle of other worldviews, there is no balance of both exposure and respect for critical views. So changes are happening but in my view it is slow and needs to be discussed more in relation to the impact on young people. If there is any change that I am seeing, that is that many pupils are hindered by the prioritisation of respect for opinion and sometimes stay quiet because their opinions and understanding of the world are in complete conflict with the culture that they are exposed to in school environments, especially in schools where education of cultures and RE not valued.

Are you able to say something about relationship(s) between epistemic literacy and social justice (including epistemic justice)?

Schools and education certainly play an important role in supporting social justice but not when they present children with an ethnocentric curriculum that gives them access to a selective powerful knowledge. A search for truth in RE goes beyond western scholarship and although I believe it is vital for understanding the beliefs and changes in this culture and society, restricting knowledge to mainly one religion or worldview is damaging. Children need exposure to different worldviews and the richness of other traditions as well as western traditions to be inspired. An epistemically ►

◀ plural classroom in which existential questions are met with diverse references, associations and experiences are absolutely essential so that we promote psychological safety in the classroom and a move to decolonisation of the RE curriculum.

Given that there is a crisis of lack of RE teaching in schools, limited epistemic practice is already happening in schools and we are seeing lots of young people epistemically incapacitated or influenced by social media which is where they are getting their knowledge. This creates a different type of social injustice and maybe risks encouraging the disrespect of ideas, thoughts and opinions that don't fit a particular worldview? In the fear of avoiding personal criticism or challenging ideas to encourage critical engagement, we are politely avoiding talking about real problems, a bit like challenging systemic racism in education because we are avoiding engaging critically.

Community cohesion does play an important role (in my view) in the subject and helps develop an informed community that can understand the complications of tolerance of freedom of belief. Epistemic impoverishment is an issue that needs to be addressed not just in RE but other subject disciplines.

Luke Roger

PGCE RE, UCL, 2022-23

As a trainee teacher of RE, the idea of respect as “uncritical acceptance” (Stones and Fraser-Pearce, 2021) disadvantaging epistemic have-nots really resonated in the classroom. I have mostly taught KS3 this year and find prompting student discussion beyond “Well, that’s her opinion!” can be challenging, as students can for good reason be reluctant to criticise each other.

In my current school, there are many Christian and Muslim students who when discussing attitudes to creation for example cite a parent or the Bible or Quran as foundational for their belief. Clearly such beliefs are tied to identity and even treating such views as being open to further enquiry is sensitive. I have found disciplinary lenses can help here, so we beginning to explore issues from a historical perspective, or a philosophical or theological perspective can be useful. “What might a theologian say about that?” is a difficult question for a 12 year-old of course, but building towards an understanding of different perspectives and alternative ways of knowing seems a really useful aim for RE. Many students have low regard for RE. One described knowledge in RE as being akin to “gazing into a crystal ball” and I think developing literacy in philosophical, historical and social scientific disciplinary knowledge in relation to RE is also a way to make the subject more respectable and robust for non-religious students.

Coming from a background of teaching in higher education, what has really struck me at Key Stage 3 has been the great difficulty that many students have in going beyond their own initial view. Stones and Fraser-Pearce (2021, 363) quote a 12 year- ▶

◀ old epistemically-advantaged student as saying: “I always used to have my own answer and think that nothing could disprove it ... But now I hear lots of evidence, it’s really hard to make a decision now.” There seems to be a really strong reflex for many pupils at KS3 to set a position and defend it in the way that this student says he used to. In feedback to written work, I have been surprised how hard students find it to answer the prompt, “What might be a strong argument against what you have said?” The ability to recognise what is and is not arguable, as well as the ability to contemplate a viewpoint without subscribing to it seem really fundamental here and are both aspects of epistemic literacy. The latter ability seems close to what Iris Murdoch calls “unselfing,” relieving oneself of ego and thereby becoming able to behold the other, and thereby the world (1970, 82).

I have also been struck by how many students will cite unreliable information in their writing. One untrue report of a supposedly satanic carnival in Brazil being followed by catastrophic flooding was used by many students across year 8 as evidence for the existence of God in an essay. With the rise of chatbots and short-form social media, this seems to be an area where epistemically disadvantaged students will be at serious and increasing risk of harm from misleading information and so is an important area of epistemic justice.

Kristian Smith

ECT1, UCL RE PGCE 2021-22

The aim of developing epistemic literacy for RE should be considered fundamental to the future of the subject. In the time I have spent as an ECT1 I have doubled down on this view, partly due to the context of overwhelming information which young people are exposed to daily, and partly from the dogmatism I’ve experienced in the classroom surrounding moral and philosophical issues. Thankfully, I have found there to be an ample number of opportunities within the current curriculum to explore the development of epistemic literacy, as well as the opportunity to develop an epistemology scheme of work for next year.

The context of working in a diverse all-boys school has presented both benefits and challenges to the development of epistemic literacy and social justice. Amongst many of my classes there is an eagerness to contribute, question and challenge both myself and one another which is positive for the most part, however, there can be the problem of a ‘winning’ culture of knowledge claims made by students. This is part of a wider debating culture the school and me are beginning to challenge because of the detrimental effects it can have on both social and epistemic justice.

I have found my attempts to decrease the disparity between the epistemically disadvantaged and the advantaged, rely heavily on challenging essentialisations and misconceptions of topics, using clear language and lines of questioning in every ►

◀ lesson and making comparisons between different ways of thinking/knowing to further students' epistemic understanding. Our curriculum specifically helps to facilitate this possibility since we structure KS3 thematically and study the relationship between religion and science across the year groups.

One of the most important exercises I have found to be effective for understanding my students and developing their epistemic literacy is upon the completion of a topic, we have a P4C style philosophical inquiry, where students come to the circle informed of religious and non-religious perspectives on topics such as capital punishment, and we have an open discussion about ideas and ways of thinking and knowing. Students then complete a reflection and set of evaluation questions based upon the inquiry and their learning. It is through a critical realist approach they are informed initially, followed by the inquiry and reflection teaching students to challenge their initial understandings, and consider the value of what others have to say and where they might be coming from that they then begin to think and act more cohesively and empathetically, which overall I see as the foundations for social justice. ●

‘It is a bold vision,
one which goes
to the heart of what
education is for’

Kathryn Wright
Chief Executive
Culham St Gabriel’s Trust

Recommendations

These recommendations are aimed at teachers, both in terms of practice and pedagogical thinking. Implications for teacher educators and other RE professionals are, we hope, easily derived.

- **Some of the ways in which RE is susceptible to epistemic injustice can be influenced by teachers in their classrooms — for example, curriculum, pedagogy, disciplines, and the perceived nature and purpose of the subject. Following Holt (2019), we recommend that teachers take this into account when selecting content and pedagogical approaches for the classroom.**
- **The multi-disciplinary underpinning and nature of RE brings with it the risk of blurring the lines between different kinds of knowledge, including disciplines, in teaching and learning. We recommend that:**
 - teachers are explicit about the kinds of knowledge in use in the classroom (we suggest the metaphor of “showing the strings” of the kinds of knowledge in use)
 - students are enabled and encouraged to identify, select and apply appropriate kinds of knowledge/disciplinary approaches to, for example, answering questions of meaning and purpose.
- **Given the ubiquity of the simplistic polarisation of views in popular discourses to which we are all exposed, it is easy to fall into binary, either/or understandings of perspectives. That this can feed into classroom practice is exemplified when students are asked to “be sure to include both views”, or to decide if they are “for or against”. We recommend that teachers create activities and use language which resist the temptation of the binary and support young people in understanding the nuances of religion(s) and worldviews.**
- **In his work on “early closure” Ashley offers an example from a 14-year-old research participant: “I don’t want to hear anything more about the environment because I learned everything I need to know at primary school” (Ashley 2005, 190). We recommend that teachers guard against such “early closure” in RE, particularly in relation to big questions, by asking students for interim/tentative (rather than conclusive) responses in what should be experienced more as an “extended project” (Ashley 2005, 192) than a lesson, or sequence of lessons.**

- We found that a large number of the students we spoke to not only conflated knowledge and opinion but were also reluctant (perhaps unable) to critically engage with the opinions of others. The data suggests that the prioritisation of opinion results in part at least from a well-intentioned but, we argue, miseducational (mis) understanding of the purpose of RE. In the words of one of the students:
 - RE is there to teach you to respect other religions and their beliefs.
- For most of our student participants, to respect is to refrain from questioning knowledge claims, including opinions. Following Barnes (2009), we recommend that teachers support students in understanding that there is a crucial distinction to be made between respecting people because they are fellow human beings and misconstruing respect as uncritical engagement with their claims to knowledge.
- We have argued that precision of language matters. The conflation of terms such as “knowledge”, “belief” and “opinion” hinders epistemic literacy, whereas being able to use them in their distinctive ways enables us to say more. Asking students how the universe was “designed” or “created”, is similarly obstructive to the development of epistemic literacy. We recommend that teachers use language precisely, and enable young people to do so.
- We recommend that, when planning lessons, teachers consider how they will enable students to critique or move beyond the everyday knowledge they had before the lesson.
- Enable and encourage students to recognise and critique simplistic, sanitised and/or essentialist representations of religion and worldviews.
- We recommend that teachers consider their own epistemic biases (perhaps influenced by their own education) and how these influence their practice, as it seems clear from our research that the teacher’s development of their own epistemic literacy is a necessary precursor to providing RE which aims to develop the epistemic literacy of students.
- We recommend that neither knowledge claims nor big questions should be presented in isolation or in the abstract. Rather, following Joe Kinnaird’s practitioner insight, students should be enabled to explore and grapple with them in context and in relation to the knowledge and sources of authority underpinning them.
- We recommend that RE endeavours, at the earliest possible age, to contextualise the relationship between religion and science in new areas that raise new questions for students and draws the focus away from students’ perception of a competitive

relationship through rehearsed topics like accounts of the origins of life. Medical ethics and artificial intelligence, for example, provoke discussions about the nature and value of life, questions around what it is to be human, and critical engagement with the urge for progress.

- **We recommend that teachers recognise there is a duty of care towards students with, for example, creationist beliefs who must be (and also feel) included in school. Despite official guidance that encourages science teachers in England to explore scientific evidence in relation to creationism if they feel comfortable (Department of Children, Schools and Families 2007), it is likely that creationism is most likely to be discussed explicitly in RE. Teachers are advised to be mindful of the different epistemic cultures in different subject classrooms and to see this as an opportunity to promote and develop epistemic literacy.**
 - Some of the students we spoke to expressed the view that the same knowledge claim could at once be accepted in an RE lesson and rejected in a Science lesson. This suggests compartmentalised thinking due to subject delineation in schools. To counter this, RE teachers might consider planning with colleagues across the curriculum.

RE should equip learners with epistemic literacy to enable lifelong capabilities for navigating the knowledge(s) relating to big questions that religion(s) and worldviews seek to answer.

In suggesting this aim, we are advocating an ethic of RE rather than a particular pedagogy or curriculum. We are familiar enough with at least some existing pedagogical approaches to know that they encompass accounts of what it means to know well and therefore of how to enable learners to develop better knowledge. We hope to have convinced readers that enabling young people to know better matters for young people. Epistemic literacy matters for society because of the dangers of a credulous populace (Clifford 1877, Haack 2015). Therefore, we contend that RE has a responsibility to go beyond enabling young people to know better and should expect them to do so. ●



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Advisory group

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References

- Ashley, M. (2005). Tensions between indoctrination and the development of judgement: The case against early closure. *Environmental Education Research*, 11, (2), 187–197.
- Barbour, I. G. (1990). *Religion in an age of science*. San Francisco: Harper & Row.
- Barnes, L. P. (2009). *Religious Education: taking religious difference seriously. Impact Series, No. 17*. London: Philosophy of Education Society of Great Britain.
- Barzilai, S., & Chinn, C. A. (2020). A review of educational responses to the “post-truth” condition: Four lenses on “post-truth” problems. *Educational Psychologist*, 55, (3), 107–119.
- Biesta, G. (2002). Bildung and Modernity: The Future of Bildung in a World of Difference. *Studies in Philosophy and Education*, 21, 343–351.
- Billingsley, B., Taber, K. S., Riga, F., & Newdick, H. (2013). Secondary school students’ epistemic insight into the relationships between science and religion: A preliminary enquiry. *Research in Science Education*, 43, (4), 1715–1732.
- Blake-Turner, C. (2020). Fake news, relevant alternatives, and the degradation of our epistemic environment. *Inquiry: an Interdisciplinary Journal of Philosophy*.
- Clifford, W. K. (1877). The ethics of belief. In L. Stephen & F. Pollock (Eds.), *The Ethics of belief and other essays* (pp. 70–96). Watts & Co.
- Commission on Religious Education. (2018). *Final Report, Religion and Worldviews: The Way Forward. A National Plan for RE*. Available online: <https://www.commissiononre.org.uk/final-report-religion-and-worldviews-the-way-forward-a-national-plan-for-re/> (accessed on 9 May 2023).
- Deng, Z. (2018). Pedagogical content knowledge reconceived: Bringing curriculum thinking into the conversation on teachers’ content knowledge. *Teaching and Teacher Education*, 72, 155–164.
- Deng, Z. (2020). *Knowledge, Content, Curriculum and Didaktik: Beyond Social Realism*. Abingdon: Routledge.
- Deng, Z. (2021). Constructing “powerful” curriculum theory. *Journal of Curriculum Studies*, 53, (2), 179–196.
- Deng, Z. (2022). Powerful knowledge, educational potential and knowledge-rich curriculum: pushing the boundaries. *Journal of Curriculum Studies*, 1–19.
- Department for Children, Schools and Families. (2010). *Religious Education in English Schools: Non-Statutory Guidance*. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/190260/DCSF-00114-2010.pdf (accessed on 9 May 2023).
- Department for Education. (2012). *Religious Education (RE) and Collective Worship in Academies and Free Schools*. Available online: <https://www.gov.uk/government/publications/re-and-collective-worship-in-academies-and-free-schools/religious-education-re-and-collective-worship-in-academies-and-free-schools> (accessed on 9 May 2023).
- Derry, J. (2017). An introduction to inferentialism in mathematics education. *Mathematics Education Research Journal*, 29, 403–418.
- Douglas, K. M., & Sutton, R. M. (2018). Why conspiracy theories matter: A social psychological analysis. *European Review of Social Psychology*, 29, (1), 256–298.
- Erricker, C. (2010). *Religious education: A conceptual and interdisciplinary approach for secondary level*. Oxon: Routledge.
- Fraser-Pearce, J., & Stones, A. (2022). *Knowing better - navigating knowledges in the RE classroom*, Recorded as part of Culham St Gabriel’s Trust REXChange conference on 7th–8th October 2022 <https://vimeo.com/767245021>
- Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford: Oxford University Press.
- Furlong, J., & Whitty, G. (2017). Knowledge Traditions in the Study of Education. In G. Whitty & J. Furlong (eds), *Knowledge and the Study of Education: An International Exploration*. Didcot: Symposium, 13–57.

References

- Gibb, N. (2017). *England's education reforms*. Department for Education. Crown Copyright. Available online: <https://www.gov.uk/government/speeches/nick-gibb-englands-education-reforms> (accessed on 9 May 2023).
- Gibb, N. (2021). *The importance of a knowledge-rich curriculum*. Department for Education. Crown Copyright. Available online: <https://www.gov.uk/government/speeches/the-importance-of-a-knowledge-rich-curriculum> (accessed on 9 May 2023).
- Gottlieb, E., & Wineburg, S. (2012). Between Veritas and Communitas: Epistemic switching in the reading of academic and sacred history. *Journal of the Learning Sciences*, 21, (1), 84–129.
- Haack, S. (2015) Credulity and Circumspection: Epistemological Character and the Ethics of Belief. Proceedings of the American Catholic Philosophical Association, 2015, University of Miami Legal Studies Research Paper No. 16–3.
- Hannam, P., Biesta, G., Whittle, S., & Aldridge, D. (2020). Religious literacy: A way forward for religious education? *Journal of Beliefs & Values*, 41, (2), 214–226.
- Henry, J. (2022). *Private schools in England accused of 'gaming the system' on lockdown exam results*. Available online: <https://www.theguardian.com/education/2022/aug/28/private-schools-england-gaming-system-lockdown-exam-results-gcse-a-level-grades> (accessed on 9 May 2023).
- Hirsch, E. D. (1987). *Cultural literacy: What every American needs to know*. Houghton Mifflin.
- Holt, J. (2019). *Beyond the Big Six Religions: Expanding the Boundaries in the Teaching of Religion and Worldviews*. Chester: University of Chester Press
- Hussain, Z. (2018). 'Postscript: Purposing RE for a better future'. In M. Chater & M. Castelli (eds), *We Need to Talk about Religious Education: Manifestos for the Future of RE*. London: Jessica Kingsley.
- Jackson, R. (1997). *Religious education: An interpretive approach*. London: Hodder.
- Jackson, Robert. (2013). Religious education in England: The story to 2013. *Pedagogiek*, 33, 119–35.
- Klafki, W. (1995). Didactic analysis as the core of preparation of instruction (Didaktische Analyse als Kern der Unterrichtsvorbereitung). *Journal of Curriculum Studies*, 27, (1), 13–30.
- Lambert, D., Solem, M., & Tani, S. (2015). Achieving human potential through geography Education: A capabilities approach to curriculum-making in schools. *Annals of the Association of American Geographers*, 105, (4), 723–735.
- Lombrozo, T. (2007). Simplicity and probability in causal explanation. *Cognitive Psychology*, 55, 232–257.
- Martire, K. A., Grown, B., Bali, A. S., et al. (2020). Limited not lazy: A quasi-experimental secondary analysis of evidence quality evaluations by those who hold implausible beliefs. *Cognitive Research*, 5, (65).
- Mitchell, D., & Stones, A. (2022). Disciplinary knowledge for what ends? The values dimension of curriculum research in the Anthropocene. *London Review of Education*, 20, (1).
- Murdoch, I. (1970). *The sovereignty of good*. London, Routledge.
- NATRE. (2017). *The State of the Nation: A report on Religious Education Provision Within Secondary Schools in England*. Available online: <https://www.natre.org.uk/uploads/Free%20Resources/SOTN%202017%20Report%20web%20version%20FINAL.pdf> (accessed on 9 May 2023).
- Nelson, F. (2022). *The lockdown files: Rishi Sunak on what we weren't told*. Available online: <https://www.spectator.co.uk/article/the-lockdown-files-rishi-sunak-on-what-we-werent-told> (accessed on 9 May 2023).
- Nesbitt, E. (2004). *Intercultural education: Ethnographic and religious approaches*. Eastbourne: Sussex Academic Press.
- Nicholson, K. (2022). *Experts Are Calling Out Rishi Sunak For His 'Nonsense' Attacks On The Covid Lockdown*. Available online: https://www.huffingtonpost.co.uk/entry/scientists-attacked-rishi-sunak-attacks-on-covid-lockdown_uk_63074a08e4b00c150d681987 (accessed on 9 May 2023).

References

- Norfolk Agreed Syllabus. (2019). *A Religious Education for the Future: Understanding religion and worldviews for a life in a changing world*. Available online: <https://www.schools.norfolk.gov.uk/-/media/schools/files/teaching-and-learning/religious-education-agreed-syllabus/norfolk-religious-education-agreed-syllabus-2019.pdf> (accessed on 9 May 2023).
- Nussbaum, M. (2011). *Creating capabilities: The human development approach*. London: Belknap Press.
- Ofsted. (2021). Research Review Series: Religious Education. Available online: <https://www.gov.uk/government/organisations/ofsted> (accessed on 9 May 2023).
- Pearce, J., Stones A., Reiss, M., J., & Mujtaba, T., (2021). 'Science is purely about the truth so I don't think you could compare it to non-truth versus the truth.' Students' perceptions of religion and science, and the relationship(s) between them: religious education and the need for epistemic literacy. *British Journal of Religious Education*, 43, (2), 174-189. <https://www.tandfonline.com/doi/abs/10.1080/01416200.2019.1635434?journalCode=cbre20>
- Preston, J., & Epley, N. (2009). Science and God: An automatic opposition between ultimate explanations. *Journal of Experimental Social Psychology*, 45, 238–241.
- Rawls, J. (2005). *A theory of justice*. Cambridge, MA: Belknap Press.
- Sen, A. (1999). *Development as freedom*. Oxford: Oxford University Press.
- Shaw, M. (2019). Towards a religiously literate curriculum: Religion and worldview literacy as an educational model. *Journal of Beliefs & Values*, 41, (2), 150–161.
- Stones, A., & Fraser-Pearce, J. (2021). Some pupils should know better (because there is better knowledge than opinion). Interim findings from an empirical study of pupils' and teachers' understandings of knowledge and big questions in Religious Education. *Journal of Religious Education*, 69, 353–366. <https://link.springer.com/article/10.1007/s40839-021-00155-5>
- Stones, A. and Fraser-Pearce, J. (2022a). 'Epistemic literacy as an aim for religious education: Implications for initial teacher education'. In B. Hudson, N. Gericke, C. Olin-Scheller and M. Stolare (eds), *International Perspectives on Knowledge and Quality*. London: Bloomsbury, 87–107.
- Stones, A., & Fraser-Pearce, J. (2022b). Is there a place for Bildung in preparing Religious Education teachers to support and promote epistemic justice in their classrooms? *Journal of Religious Education*, 70, 367–382. <https://link.springer.com/article/10.1007/s40839-022-00187-5>
- Stordy, P. (2015). Taxonomy of Literacies. *Journal of Documentation*, 71(3), 456–476.
- Vernon, E. (2020). Teaching to the epistemic self: Ascending and descending the ladder of knowledge. *The Curriculum Journal*, 31,(1), 27–47.
- Vygotsky, L. S. (1987). In R. Reiber & A. S. Carlton (Eds.), *The collected works of L.S. Vygotsky*. (Vol. 10). Plenum Press.
- Wright, A. (2007). *Critical Religious Education, Multiculturalism and the Pursuit of Truth*. Cardiff: University of Wales Press.
- Young, M. (2008). *Bringing knowledge back in*. Routledge.
- Young, M., & Lambert, D. (eds). (2014). *Knowledge and the future school: curriculum and social justice*. London: Bloomsbury.
- Young, M., & Muller, J. (2010). Three scenarios for the future: Lessons from the sociology of knowledge. *European Journal of Education*, 45, (1), 11–27.
- Young, M. (2014). *Knowledge and the Future School*, London: Bloomsbury.
- Young, M. (2015). Powerful knowledge as a curriculum principle. In M. Young & D. Lambert (Eds.), *Knowledge and the future school: Curriculum and social justice*. Bloomsbury.

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Knowing Well in Religious Education

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Templeton World Charity Foundation
Big Questions in Classrooms

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