

Christian Meditation in Schools: Review of Related Evidence

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This literature review was prepared for The World Community for Christian Meditation (WCCM) by Professor Anne Graham and Julia Truscott of the Centre for Children and Young People (CCYP), Southern Cross University, Australia.

The views expressed in this publication do not represent any official position on the part of Southern Cross University, but the views of the individual authors.

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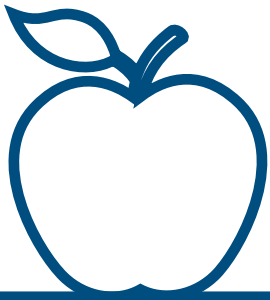
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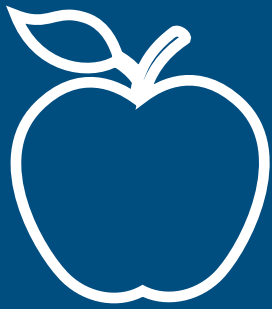
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Background & Purpose of this Evidence Review

The World Community for Christian Meditation (www.wccm.org) is an international community of meditators – a ‘monastery without walls’. The community is open to meditators from all backgrounds, cultures and faiths. The community is a not-for-profit organisation registered as a Charitable Integrated Organisation (CIO) with the Charity Commissioners in England and Wales. The WCCM operates from a Head Office in London and has an international Retreat Centre in France. It is also represented in over 100 countries worldwide. The community is led by a Guiding Board, Executive Committee and Board of Trustees who collectively provide direction for the life and mission of the community, which is “to communicate and nurture meditation as passed on through the teaching of John Main, in the Christian tradition, in the spirit of serving the unity of all.”

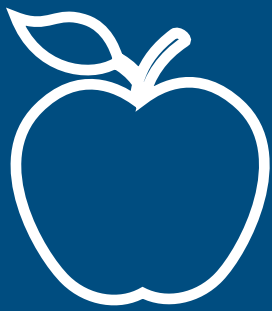


**The World Community
for Christian Meditation**

A growing area of interest for the WCCM over the past 20 years has been supporting opportunities for children and young people to experience Christian meditation at school. As of 2016, Christian meditation was being practised in schools in 29 countries, from Australia to Belgium, Malaysia to Mexico (WCCM, 2016). Given the widespread uptake, the WCCM sought to collate the existing research evidence on the benefits and challenges of school-based programs as a basis for identifying future research directions. Such research will help to guide the development of best practice approaches to Christian meditation in the school context, including support resources to help schools and students sustain their practice. This document collates and summarises the research evidence located to date. A full-colour condensed version is also available, which summarises the key findings from this review.

**An international community
of meditators - a ‘monastery
without walls’**

For further information about Christian meditation programs in schools please contact the WCCM. **T:** (+44) 20 7278 2070 **E:** welcome@wccm.org **W:** www.wccm.org



Introduction: Why Meditation in Schools?

Children and young people's wellbeing has become a considerable concern worldwide, with rising reports of issues such as ADHD, obesity, youth anxiety and depression, self-harm, youth suicide, and school stress (see, for example, ARACY, 2018; The Children's Society, 2018; Young Minds, 2017). Many factors of 21st century life are perceived to be colluding to compromise children and young people's wellbeing. Contributing factors include the rapid pace of life, accelerated and intense information-transmission, lengthy group childcare, increasingly virtual relational communication, prolonged exposure to digital media, reduced 'free' time (particularly outdoors), increased individualism and academic pressure, the market-driven, competitive education system, and heightened parental anxiety (intense information-transmission, hyper-vigilance, new risks, reduced relevance of intergenerational knowledge) (ARACY, 2018; Bernardi, 2009 cited in O'Donnell, 2015; Centre for Education Statistics and Evaluation, 2015; The Children's Society, 2018; Wyn, 2007; Young Minds, 2017). Indeed, while wellbeing is experienced at a personal level, it is a multi-dimensional concept impacted upon by personal relationships, community, cultural and societal factors. The following definition from the World Health Organisation (WHO, 2001) seeks to reflect this multi-dimensional understanding:

“Children and young people's wellbeing has become a considerable concern”

Wellbeing is present when a person realises their potential, is resilient in dealing with the normal stresses of their life, takes care of their physical wellbeing and has a sense of purpose, connection and belonging to a wider community. It is a fluid way of being and needs nurturing throughout life.

Given the universality of many of the above influencing factors, schools are frequently identified as the primary avenue by which to seek to provide broad-spectrum wellbeing support (McCallum and Price 2010; Roffey 2012; Spilt, Koomen and Thijs 2011; Thomas, Graham, Powell and Fitzgerald 2016). Indeed, as key sites for human growth and

development, they are increasingly being positioned not just as academic institutions but as centres for human flourishing. Supporting children and young people's wellbeing in the present, and developing their understanding and to manage their own wellbeing, both

“[Schools are] key sites for human growth and development...not just academic institutions but centres of human flourishing”

now and in the future, are key aims of many contemporary education systems. Such aims are ambitious given competing demands on schools as a result of increased marketisation, accountability, testing and reporting, especially in Western educational contexts (Brown, 2018; Department of Education and Skills, Ireland, 2018; Education Services Australia, 2018; Young Minds, 2017).

One approach to supporting universal wellbeing in schools, which has been gathering momentum internationally, is the introduction of contemplative education programs, such as meditation and other similar mindfulness practices (Mak et al., 2018; Micklejohn et al. 2012; Semple, Droutman and Reid 2017; Waters et al., 2014). Such momentum mirrors interest in contemplative practices more broadly and largely stems from the work of Kabat-Zinn (2003) who is credited with drawing out the secular notion of 'mindfulness' and its relevance for clinical and wider wellbeing application. He writes, mindfulness is 'the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally' (Kabat-Zinn, 2003, p. 145). Mindfulness can therefore be applied to many activities, including eating and interacting with others (see Dunning et al., 2019). By contrast, meditation tends to more specifically refer to remaining still and consciously focusing attention upon the breath or a repeated mantra. However, most classroom mindfulness programs tend to include at least a small meditative component (Dunning et al., 2019). Therefore, in this review we include research on both mindfulness and meditation programs in schools that may offer useful insight for furthering understanding of Christian meditation in schools.

“This review includes research on mindfulness and meditation programs in schools”

A burgeoning body of research on such programs indicates that the benefits for children and young people are potentially wide-ranging, from clinically established improvements in mental health issues, ADHD, sleep disorders, substance misuse, or physical health issues such as gastroesophageal reflux (Boynton, 2014; Corbett, 2011; Harrison, Manocha, & Rubia, 2004; Lau & Hue, 2011), to more generally strengthening educational, emotional and social skills such as emotional regulation, stress management, concentration, executive function and behavioural regulation (see, for example, Champion and Rocco 2009; Flook et al. 2013; Bakosh, 2013; Britton et al., 2014; Crescentini et al., 2016; Quach et al., 2016; Sines, 2009; Singh et al., 2018; Wendt et al., 2015; Yoo et al., 2016). However, the rapid expansion of meditation and mindfulness programs has led to cautions that enthusiasm has outpaced robust evidence and questions of whether such benefits are replicable in schools (Dunning et al., 2019; Van Dam et al., 2018).

In addition, concerns have been raised over the risk of 'McMindfulness' (Purser & Loy, 2013), whereby meditation practices are divorced from their ethical roots and used as a neoliberal tool (or 'band-aid') to maintain – or enhance – productivity and individual capacity to cope with contemporary capitalist society (O'Donnell, 2015; Reveley, 2016). This is important to reflect upon, although such criticism neglects to consider the needs of children and young people in the here and now. While widespread societal shifts and policy changes to better support wellbeing might be desirable, they are unlikely to occur quickly. Furthermore, the human experience requires navigation of many emotional and social ups and downs, not necessarily connected to wider societal change. Therefore, supporting capacity to maintain personal wellbeing would seem important.

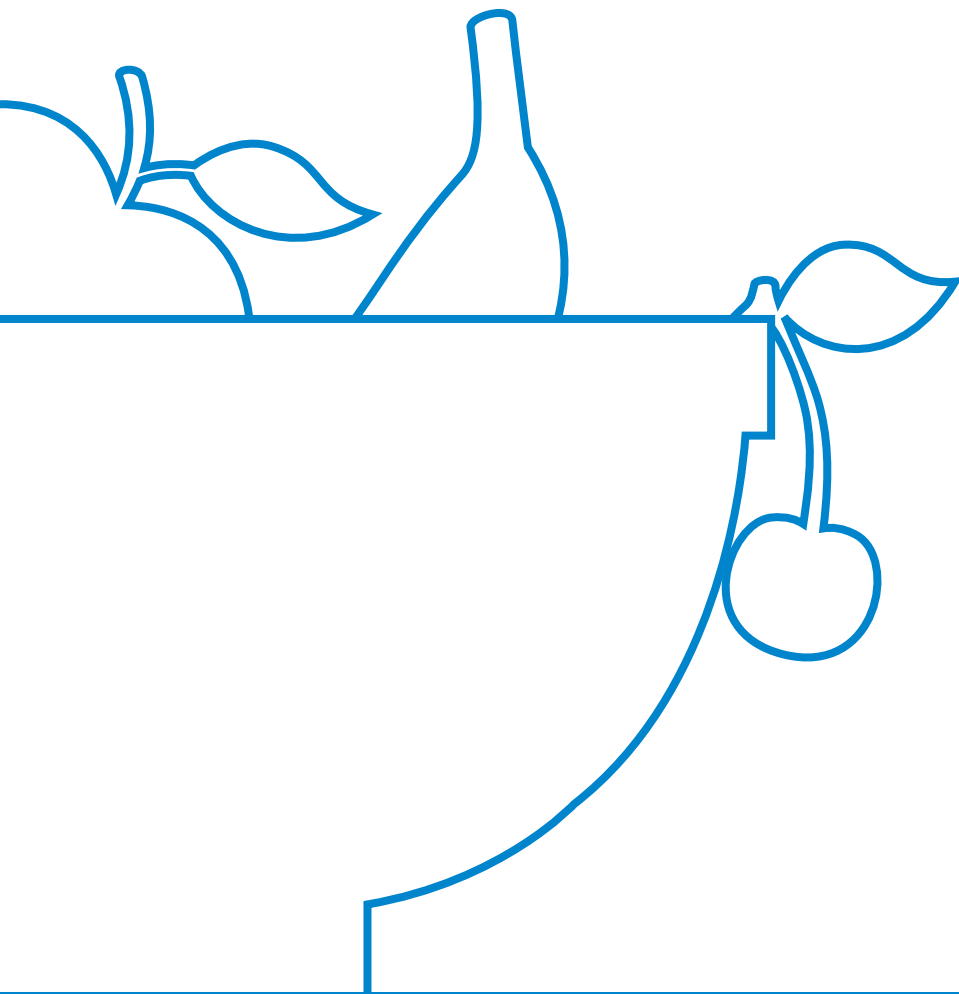
It is evident, however, that any spiritual aspects of contemplative education practices, and any spiritual-wellbeing connection, do tend to be side-lined in schools (De Blasio, 2011; Hodder, 2007; Keating, 2017a; Natsis, 2016; Trousdale, 2014). This is at least partly because 'spirituality' is conflated with religiosity and interpreted as a potentially sensitive topic (De Blasio, 2011; Hodder, 2007; Natsis, 2016; Trousdale, 2014). Indeed, disentangling what spirituality is or could be in relation to wellbeing while retaining resonance across faith and secular traditions worldwide has been an ongoing definitional challenge (Benson, 2004; de Souza & Hyde, 2007; Holder et al., 2010; King & Boyatzis, 2004; Ubani & Tirri, 2006).

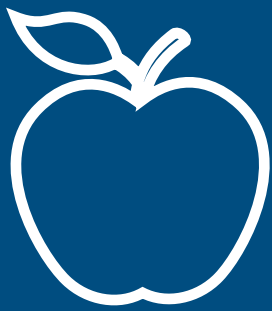
Acknowledging the definitional complexity surrounding spirituality (something we return to later), meditation practices explicitly situated within a broader moral framework, such as Christian meditation, potentially offer added scope in reducing the risk of 'McMindfulness' by connecting to the spiritual journey, compassion for others and the wider search for meaning that underpins the pursuit of wellbeing (Ereaut & Whiting, 2008; Halafoff & Gobey, 2018; Ryan & Deci, 2001). This may be a key area where research on Christian meditation in schools might add value and extend the wider contemplative education knowledge base. Certainly, spirituality and the potential 'spiritual fruits' of meditation in schools are key research interests of The World Community for Christian Meditation, and these have been a key focus of much of the Christian meditation research in schools to date (see the section below on Christian Meditation in Schools).

"Meditation practices explicitly situated within a broader moral framework, such as Christian meditation, potentially offer added scope...by connecting to the spiritual journey, compassion for others and the wider search for meaning"

This review is based on the premise, then, that supporting wellbeing in and through schools is critically important and that meditation warrants close consideration as a valid and viable tool for doing so. We endeavour, therefore, to collate recent research evidence on universal, meditation-type interventions in schools. The document aims to chart the progress of research in this field, summarise the current evidence base and highlight any

gaps. Hence, the preparation of this review is underpinned by the twin objectives of 1) improving understanding and practice around the benefits of meditation in schools, and 2) identifying gaps and possible approaches for further research on Christian meditation in schools, so as to continue to strengthen the evidence around its impact and outcomes internationally.





Method

A scoping review methodology was used to gather material for this report. This is a useful approach for mapping the size and scope of research on a particular topic, synthesising findings, and identifying gaps in the literature (Arksey & O'Malley, 2005). It allows for rapid mapping of fields where the range of material that might be available is unknown or difficult to visualise.

A series of electronic searches was conducted during December 2018-January 2019 using a mixture of health and educational research databases: Academic Search Premier; CINAHL Plus with Full Text; Education Research Complete; ERIC; MEDLINE with Full Text; and Scopus. Initially, we searched titles, subject terms and abstracts using the search terms: (meditation OR mindfulness OR contemplative education) AND (school student* OR pupil* OR child*) AND (school OR classroom) NOT teacher*. However, in some databases these initial searches returned enormous results lists (in the region of 20,000 peer-reviewed articles) sometimes even when limited to the last 10 years. While this highlights the enormous interest and growth in this field, it was necessary to considerably narrow the search to reduce the results to a manageable level of material.

It was found that the inclusion of the term 'mindfulness' was likely responsible for many of the less relevant results. Something of a current 'hurrah word', the term is broadly applied in educational contexts to notions of being mindful, to mindful teaching and learning and to a broad range of interventions beyond mindfulness-meditation type activities. Excluding mindfulness as a search term was found to yield a manageable number of highly relevant results in most databases while still locating mindfulness-based interventions that included a regular meditation component. Therefore, this document is based upon search results in the aforementioned databases using the following terms: meditation AND (school student* OR pupil* OR child*) AND (school OR classroom) NOT teacher*. The search was limited to articles published between 2010-2019.

Using these terms, and following removal of duplicates, a total of 265 potentially relevant articles were collated. The abstracts of these articles were then manually reviewed. Articles were retained if they met the following criteria: they focused on interventions that included regular meditation as at least one of the activities, the interventions were aimed at children and young people, and were conducted in the school setting. Articles were excluded if they were not from peer reviewed academic journals, did not describe

meditation interventions (e.g. focused on social and emotional health programs or physical meditative activities such as yoga), did not focus on the school setting, did not involve children or young people, were not in the English language or were published before 2010 (except for one study specifically on Christian meditation published in 2009). Foreign language material was excluded given the time and cost involved in having such material translated. Of the total 265 articles identified, 51 were found to be particularly relevant and useful.

When reviewing the full texts of these 51 articles, additional relevant studies were identified (either in the reference lists or through citation links). This so-called 'snowballing' yielded an additional 7 articles for the review (plus some additional contextual articles included in the introduction). These were combined with 6 'known' articles from an earlier literature review conducted on this topic. Finally, a supplementary search using the Google Scholar platform was conducted to look for any additional material specifically focusing on Christian meditation in schools, including any material published in a different format (e.g. report form) or not yet academically published. This did not yield any additional documents. In total then, 64 relevant documents were identified as being particularly useful and are drawn upon in this review (additional items in the reference list include contextual articles on children's wellbeing, children's spirituality and those that problematise mindfulness programs). The overall process is summarised in the flow diagram on the following page.

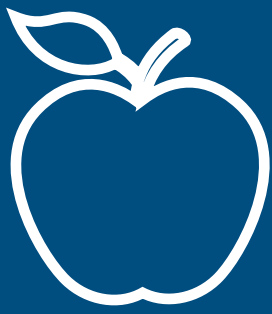
While the methods were intentionally selected to meet the requirements of a rapid scoping review, a few limitations are evident. Key amongst these is the volume of material initially identified and the need to substantially reduce this to a manageable level. This means that some relevant studies may have been missed. The inclusion of existing peer-reviewed systematic reviews and meta-analyses were helpful in addressing this issue as they collate the most robust research evidence at key points in time. Another limitation, underscored by the systematic reviews and meta-analyses, is that mindfulness and meditation studies involving children are in their infancy. While there has been a sizeable surge with research in this field, much has been exploratory. Therefore, the development of robust methods and comparable outcome measures for investigating interventions are still being refined (Van Dam et al, 2018).

Finally, the other main limitation of this review is largely a conceptual issue - the broad use of the term 'mindfulness', in particular, but also 'meditation' (Van Dam et al., 2018). Of the studies retained in this review, reference was made to mindfulness-based interventions, mindfulness-based approaches, mindfulness programs, mindfulness education, mindfulness training or instruction, the mindfulness based stress reduction program as well as mindfulness meditation and mindfulness-oriented meditation. All of the retained studies included the regular practice of meditation, but this was often a component of a broader mindfulness program, which might also involve learning about mindfulness as a concept, associated social and emotional learning and other mindfulness practices such as mindful eating, focused breathing, body scan or movement activities. In addition, studies investigating different forms of meditation were retained including mindfulness

meditation, transcendental meditation, concentrative meditation, Samatha meditation, Maum meditation, as well as Christian meditation. The wide range of mindfulness and meditation interventions being integrated and studied in schools have broadly similar intentions, hence their inclusion in this review, but it should be acknowledged that the variety limits their direct comparability. Therefore, caution should be exercised in assuming that findings from other studies would be replicable to Christian meditation in schools.

Flow Diagram of Articles Gathered for this Review





Meditation in Schools as a Universal Practice for Supporting Wellbeing

What are the Potential Benefits of Meditation in Schools?

Much of the initial research into the potential benefits of contemplative education programs for children and young people focused on subsets of the population, such as those diagnosed with mental or physical health issues, or emotional or behavioural difficulties. Sometimes schools were used as sites of recruitment or delivery for these interventions. Latterly though, in line with the widespread concern about children and young people's wellbeing, there has been increasing research investigating the potential benefits of contemplative education programs offered universally to all children in a class or school (Felver et al., 2016). The evidence from these latter studies as well as their approaches to research are the main focus of this review.

The majority of studies exploring universal contemplative education interventions in schools take a quantitative approach, and seek to explore whether interventions achieve statistical significance for potential health, wellbeing and/ or academic related benefits. Across the studies a wide range of potential benefits are investigated, which usually fall within one or more of the following broad categories:

- **General mental wellbeing**, for example improvements in anxiety and depression – sometimes collectively referred to as 'internalising behaviours' (see, for example, Britton, et al., 2014; Kuyken et al., 2013; Wendt et al., 2015; Yoo et al., 2016);
- Ability to **cope with school-related stress** (for example, Sibinga et al., 2013);
- **Emotional and behavioural regulation**, including social interaction – sometimes collectively referred to as 'externalising behaviours' (for example, Crescentini et al., 2016; Metz et al., 2013);
- **Academic skills**, usually attention, executive function and working memory capacity (see, Crescentini et al., 2016; Mak et al, 2018; Quach et al., 2016; Wood et al., 2018) but sometimes academic achievement (for example, Bakosh et al., 2016; 2018; Colbert, 2013; Nidich et al.2011);

- **Physical health benefits**, such as sleep improvements (Wendt et al., 2015), reduced heart rate and cortisol levels, (Sibinga et al., 2013; Yoo et al., 2016), smoking cessation (Jung-Im et al., 2017) or impact on underage drinking (Patton et al., 2019);
- And, occasionally, **spiritual engagement opportunities** (mainly investigated in the Christian meditation literature, see section below).

Overall, effect sizes tend to be smaller in contemplative education interventions conducted universally in schools, than with specific subsets of children and young people (Johnson et al., 2017; Waters et al., 2014). Nevertheless, interventions are consistently identified as feasible in schools, easy to implement, acceptable to children and almost no negative effects are identified.

Beyond this general positivity though, it is difficult to find any consistency in reported benefits or improvements when comparing individual studies. As Burke's (2010) early review highlighted, some studies find improvements in some internalising behaviours, which are not found in others; other studies identify improvements in externalising behaviours, for which other studies find no significance. This inconsistency continues to be demonstrated in subsequent systematic reviews (see, Erbe & Lohrmann, 2015; Felver et al., 2016; Langer et al., 2015; Mak et al., 2018; Waters et al., 2014; Zenner, Hermleben-Kurz & Walach, 2014). There are a range of reasons likely contributing to this lack of consistency. These include the small effect sizes at a population level, the reality that any intervention is but one small component of children's lives, different forms of contemplative education, frequency and length of interventions, the age or ability of the student sample, different study designs and other methodological issues such as different definitions or measures for similar outcomes (Dunning et al., 2019; Johnson et al., 2017; Van Dam et al., 2018).

Some of these issues are beginning to be addressed as research in this area has increased and begun to move beyond small-scale, pilot-type studies. Indeed, there is clear evidence that methodological approaches have been evolving over the past decade (see, for example, Kuyken et al., 2017; Johnstone et al., 2016; Solar, 2016). The most recent studies typically adopt randomised controlled trial (RCT) type approaches with the use of both passive and active control groups to which pupils are randomly assigned, and more robust pre- and post-intervention measures (see, for example, Britton et al., 2014; Johnson et al., 2017; Quach et al., 2016; Sibinga et al., 2013; Wood et al., 2018) These more comparable research approaches have allowed meta-analyses to be conducted and these are very useful for the purposes of this review.

Meta-analyses, such as those by Zenner et al. (2014), Zoogman et al. (2015), Klingbeil et al. (2017) and Dunning et al. (2019), collate the reported results of existing studies and analyse the collective data. Each meta-analysis conducted can report different results, despite including many of the same studies. This is because outcomes are defined or grouped in different ways by different teams meaning some potential benefits can

achieve statistical significance in some meta-analyses but not in others. Dunning et al. (2019) have sought to account for this and have summarised that, across the existing meta-analyses, mindfulness-based interventions appear to consistently offer benefits for children and young people in relation to mindfulness, cognitive function and attention, with greater variation in effects on wellbeing issues and social, emotional and behavioural regulation. This makes sense given that contemplative education interventions directly practise mindfulness and concentration skills, and any potential mental health, wellbeing or behavioral improvements (or preventative benefits) would likely occur secondarily (Devcich et al., 2017; Zoogman et al., 2015).

Dunning et al.'s (2019) own meta-analysis is not only the most recent but also the most robust to date because it focuses exclusively on collating randomised controlled trials (RCTs). Thirty-three trials met the criteria for inclusion in their analysis, with the majority of these conducted on a universal-basis in schools. Following analysis of the combined results they found benefits for children and young people in relation to mindfulness, executive functioning, attention, and reductions in depression, anxiety/stress and negative behaviours. They then went further, examining only those studies that included active controls (which is the gold standard for RCTs). Active controls in this context tend to be other novel group activities, other quiet activities or other socio-emotional learning programs. Conducting a meta-analysis only on these studies (n=17) found significant improvements over the active control activities in relation to mindfulness, depression and anxiety/stress, but did not reach significance in other outcomes.

“Benefits vary between studies...but a more consistent picture is beginning to emerge”

Overall then, the benefits vary between studies, including amongst meta-analyses, but a more consistent picture is beginning to emerge. To date it would seem that contemplative education interventions have the potential to:

1. Improve student mindfulness and attention skills, which are valuable to a student's educational journey; and
2. Reduce depression and anxiety/stress, which are valuable for student wellbeing generally as well as specifically coping with school.

The vast majority of the research reviewed above has been quantitative studies, with a shift towards increasingly robust randomised controlled trial approaches. These are generally accepted as the gold standard for demonstrating the efficacy of interventions. This emphasis on quantitative research to date may possibly be a throwback to the early roots of the Kabat-Zinn's (2003) mindfulness-based stress reduction program, which was situated in psychological and mental health practice. However, wellbeing (and spirituality) are also subjective experiences. It is therefore difficult for quantitative studies, even those

of the most robust nature, to ensure survey items and scales are interpreted the same way by different children. It is also very difficult to measure preventative or protective wellbeing effects, or to gain insight into how children conceive of or experience meditative practices. As such, mixed-method or qualitative studies (such as, Bernay et al., 2016; Doss & Bloom, 2018; Hutchinson, Huws & Dorjee, 2018; Joyce et al., 2010; Keating, 2017a,b; Keller et al., 2017; Smith-Carrier et al., 2015; Thomas & Atkinson, 2017;

“Qualitative studies are an important complement to quantitative work, offering opportunities to explore children’s subjective experiences of meditation and wellbeing”

Wisner, 2014) are an important complement to quantitative work, offering opportunities to explore children’s subjective experiences of meditation and wellbeing, how they progress with the practice overtime, and to better understand how interventions are experienced by children and teachers within the messy, busy reality of school life. Supported by interdisciplinary Childhood Studies theory (James & James, 2012) as well as the United Nations Convention on the Rights of the Child (UN, 1989), there is now an enormous body of

research undertaken with children over a 30 year period, across a broad range of issues, legitimising such qualitative approaches. Such work pushes the boundaries of knowledge generation, ethics and ‘voice’ (Spyros, Rosen & Cook, 2019).

To date, qualitative and mixed method studies particularly report the relaxation and calming benefits of meditation practices and the knock-on effects for social interaction with others and concentration on school work (Campion & Rocco, 2009; Hutchinson, Huws & Dorjee, 2018; Smith-Carrier et al., 2015; Thomas & Atkinson, 2017). Qualitative work can often gather quite powerful descriptions and explanations from children on how they feel meditation benefits them, even if quantitative outcome effects are low or non-significant. As an 8th grade gifted student in Doss and Bloom’s (2018) mixed method study hypothesised, his scores may not have changed because the academic stress in his life remained the same, but he has changed the way he handles this stress. Qualitative and mixed method studies also gather insights into whether and how children incorporate meditation into their lives beyond school as well as reports of what children dislike about the practice and ideas for improving delivery in the classroom setting. These aspects are explored in more detail in the section on Christian meditation below.

At present, the most recent focus within meditation research more broadly is exploring how or why benefits occur – the mechanisms by which contemplative education interventions promote wellbeing, emotional regulation and academic skills. Neuroscience has taken up the baton in exploring these kinds of questions, making use of high resolution MRI scans. Research over the past decade has shown that regular meditation appears to build grey and white brain matter (see, for example, Fox et al., 2014; Kang et al., 2012; Luders et al., 2009). Key findings which have received considerable attention to date, are that meditation strengthens the prefrontal cortex and the connectivity between this region of the brain and the amygdala (which is responsible for the ‘fight or flight’

response). As such, neuroimaging studies suggest that regular meditation helps better modulate the brain's reactivity to stress (Boccia, Piccardi & Guariglia, 2015; Davidson et al., 2003; Fox et al., 2014; Kang et al., 2012; Luders et al., 2009). This is something that has also been demonstrated visually by exposing study participants to laboratory stress and monitoring brain reaction using functional MRI scans (Boccia, Piccardi & Guariglia, 2015; Bauer et al., 2019; Davidson et al., 2003; Fox et al., 2014). Modulating the stress response in real world contexts likely underpins many of the other reported benefits explored in studies to date, including many of the physiological benefits, mental health and improved emotional and self-regulation. In addition, researchers studying contemplative education in schools posit that mindfulness and meditation also improve emotional awareness, which might more consciously improve emotional regulation and focus, and by extension academic benefits, and subjective and relational wellbeing (Baijal et al., 2011; Devcich et al., 2017; Kaunhoven & Dorjee, 2017; Keller et al., 2017; Marusak et al., 2018).

“Regular meditation appears to build grey and white brain matter...[and] it helps better modulate the brain's reactivity to stress”

It should be noted that the vast majority of neuroimaging research has been conducted on adults. One of the first studies involving children was undertaken very recently but it suggests meditation improves brain connectivity and the stress response in children via a similar means (Bauer et al., 2019). At any rate, work involving adults is illuminating as it was previously believed that adult brain connectivity was much more fixed. Meditating during childhood may be even more powerful in terms of brain connectivity, with some researchers positing that the practice may be particularly beneficial during the key brain restructuring that occurs during early adolescence (Baijal et al., 2011; Erbe & Lohrman, 2015; Kaunhoven & Dorjee, 2017). Further exploring brain function and other mechanisms by which meditation-type practices might promote wellbeing look to be a key focus of future contemplative education research.

Who Experiences the Benefits of Meditation in Schools?

In general, existing research demonstrates that children can benefit from contemplative education regardless of age, gender, ethnic minority group, socio-economic status, academic achievement or learning or behavioural issues. However, there may be variation in the extent and type of benefits experienced (Kang et al., 2018; Worthen & Luiselli, 2017). For instance, in Dunning et al.'s (2019) meta-analysis they found that age significantly moderates the effect of mindfulness-based interventions on executive functions, with greater benefits seen in older children (those aged 14-18 years). A number of possible reasons are proposed for this including heightened brain plasticity and increased self-reflection. However, other studies have shown that even pre-school and early primary children are receptive to contemplative education interventions, demonstrating improvements in age-appropriate executive function (Wood et al., 2018)

or a reduction in negative behaviours (Crescentini et al., 2016; Dunning et al., 2019).

When interventions are delivered on a universal basis in a class of similarly-aged children, personal characteristics or abilities may influence the receptiveness of individual children, and correspondingly the benefits experienced. Mixed method or qualitative studies in particular sometimes report that there can be a subset of children who dislike or resist contemplative education practices (Keller et al., 2017; Graham et al., 2018). Keller et al. (2017) has conducted the first in-depth study to explicitly explore the traits and perceptions of those children who respond well to mindfulness programs and those who do not. Their mixed-methods study involved a 4th-grade class in a low income, ethnically diverse area of the US. They found that children who conceptualised themselves as 'good students', 'smart', who liked schoolwork and their teacher and liked being kind towards others were most receptive to the mindfulness intervention, seeking to engage with it most whole-heartedly and improve their mindfulness and meditation skills. These children represented around half of those involved in the study. Children who engaged with the practice in a moderate way were those who appeared to have a lot of stress and difficulty in their lives and experienced difficulties at school such as bullying. These children conceptualised mindfulness as a way of blanking their mind and 'escaping' although they did not always find this easy to achieve. These findings concur with an earlier quantitative study involving adolescent boys at private schools, which found that improvements in wellbeing following mindfulness were related to personality variables - agreeableness and emotional stability (Huppert & Johnson, 2010).

“Children can benefit...regardless of age, gender, ethnic minority group, socio-economic status, academic achievement or learning or behavioural issues. However, there may be variation in the extent and type of benefits experienced.”

In Keller et al.'s (2017) study the most resistant and disruptive pupils (accounting for around one third of the children) tended to have difficulty concentrating, were not very engaged with school, held negative feelings about themselves and others, including a desire to hurt others and low self-esteem. As such, the results of Keller et al.'s (2017) study (and to a lesser extent Huppert & Johnson's (2010) study) could suggest that contemplative education does not offer benefits to those who need it most – that it could act to create a greater divide between high and low achievers, those with high and low student wellbeing. However, this presumption is countered by the results of other studies which have shown that engagement in contemplative education programs can improve academic engagement, achievement, high school dropout, college acceptance, anxiety and resilience amongst some of the most at-risk low-performing students in low socioeconomic status schools (Colbert, 2013; Elder et al., 2011; Nidich et al., 2011; Wendt et al., 2015) as well as for children with ADHD (Singh et al., 2018). Of particular relevance to this review, all of these latter studies investigated meditation rather than

mindfulness programs, specifically the Quiet Time program (which involves the opportunity for children to engage in Transcendental Meditation, a mantra-based practice and therefore similar to Christian meditation) or Samatha meditation (Singh et al., 2018 only).

While there could be a risk contemplative education may heighten the divide between high and low achieving students in some classrooms, it has been shown that it may be a particularly important practice for high-achieving students, who can be particularly prone to academic related stress, anxiety and perfectionism (Doss & Bloom, 2018). For instance, in Keller et al.'s (2017) study heart rate monitors found high stress rates amongst the most receptive children, and this was found to reduce during the mindfulness intervention. That said, work with gifted students specifically, shows that they too can resist or struggle with contemplative education, at least initially, because their high stress rates can make it difficult for them relax, to quieten their mind and to not feel their time would be better spent in more productive ways (Doss & Bloom, 2018).

What is notable, is that many of the studies listed above that demonstrate positive results either involve older children and/or the opportunity for children to choose to engage in the meditation practice or not (the Quiet Time program allows children to read silently or sit quietly and look out of the window if they prefer). This may account for the strength of some of the findings, with children who really dislike the practice able to opt-out (and form part of the control). A further feature of Transcendental Meditation within the Quiet Time program is that the meditation is contextualised in wellbeing and brain development terms and on-going support is often offered to children who wish to engage with it but are struggling to do so.

Overall then, connecting to Dunning et al.'s (2019) finding about age, it seems possible that age interacts with other personal characteristics and program design to influence potential benefits for children. Perhaps children who are 'good students' and engaged with school might more readily access the benefits of contemplative education at a younger age. Those who are disengaged or under-achieving may not access benefits until a later age. This discrepancy may be heightened for meditation rather than other types of mindfulness activity such as those involving movement, eating or games (Crescentini et al., 2016; Keller et al., 2017). However, it is possible that these effects could be countered by offering a choice of quiet activities, or additional support to disengaged or struggling students in small groups or on an individual basis (Doss & Bloom, 2018; Keller et al., 2017; Malboeuf-Hurtubise, 2017). In Keller et al.'s (2017) study even some of the most resistant children came to describe mindfulness in slightly more favourable terms towards the end of the 10-week intervention, and particularly after

“Age [likely] interacts with other personal characteristics and program design to influence the potential benefits for [individual] children”

learning that mindfulness was being used by a preferred sports team, suggesting that these children perhaps just need additional input and time. In any case, any correlation between age, engagement and receptiveness is a tentative notion. However, it warrants further study, particularly given the need to balance the benefits to different children – balancing important stress-reduction benefits for ‘school-engaged’ and gifted students with the possibility of disengaging other children from meditation or mindfulness approaches at a young age and risk that they do not attempt them at a later date when they might experience important benefits.

In considering who might benefit from contemplative education interventions in schools, it is important to reiterate that teachers were not the focus of this review. This was reflected in the search process, which deliberately sought to focus on interventions aimed at children rather than teachers. However, it would be an oversight not to note that meditation and mindfulness programs for teachers have been growing in popularity alongside those for children (see, Flook et al., 2013; Franco et al., 2010; Hartigan, 2017; Meiklejohn et al., 2012). These aim to help reduce teacher stress and improve teacher wellbeing and retention. There is some indication that contemplative interventions aimed at teachers may also bring benefits for children, and those aimed at children may also offer stress-reduction and wellbeing benefits for teachers (Campion & Rocco, 2009; Flook et al., 2013; Graham et al., 2018; Graham & Truscott, 2019; Hartigan, 2017; Meiklejohn et al., 2012; Smith-Carrier et al., 2015). When both student wellbeing and teacher wellbeing support are improved, the benefits could extend beyond individuals to schools and school systems, with benefits such as improved relationships, school culture and cost-effectiveness (in terms of teacher absenteeism, retention and student support services etc.) (Flook et al., 2013; Kuyken et al., 2017; Meiklejohn et al., 2012; Modi, Joshi & Narayanakurup, 2018; Wisner, 2014).

What Other Factors Can Influence Outcomes of Meditation in Schools?

With some semblance of consistency emerging in terms of how to research universal contemplative education interventions, what types of benefits occur, and who might benefit, some attention in research is turning to exploring other influencing factors such as the length of time spent meditating, frequency of practice at school (several times per day, several times per week, intermittently etc.), duration of the intervention and uptake by children outside of school. Investigating these kinds of variables would help in identifying the optimum conditions, or at least the minimum thresholds, for achieving potential benefits for most children and how long these benefits might be sustained over time (Bernay et al., 2016; Devcich et al., 2017; Erbe & Lohrmann, 2015; Johnson, Burke, Brinkman & Wade, 2017; Quach et al., 2016).

Existing studies suggest, as might be anticipated, that more time spent practising offers greater likelihood of benefits. Certainly, in the studies reporting on transcendental meditation interventions (Colbert, 2013; Elder et al., 2011; Nidich et al., 2011; Wendt et

al., 2015), which demonstrate benefits in terms of academic achievement, school engagement and stress and anxiety, a considerable amount of time was allocated to meditation practice - 15 minutes at the beginning and end of the school day – and this was sustained throughout the school year. In a study by Britton et al. (2014) with 6th grade students, the intervention group meditated 4-5 times per week for 5-10 minutes over a period of six weeks. When compared with children experiencing a novel art activity significant differences were only found in relation to more extreme wellbeing issues (suicide ideation and self-harm) but none of the other expected benefits. Whilst undisputedly important benefits, Britton and colleagues wondered whether larger effects might have been found for other outcomes had the meditation sessions been longer. Exploring factors such as these remain an area for further research.

Summary of Contemplative Education in Schools Research

This section of the review has focused on contemplative education research in a broad sense, encompassing a wide range of meditation approaches and techniques. It has highlighted that there is general positivity towards integrating contemplative education on a universal basis in schools and it is consistently reported as feasible, easy to implement and acceptable to most children. Despite this, there is considerable inconsistency between studies in terms of which potential benefits achieve statistical significance. This inconsistency is not helped by differing research designs, differing definitions of potential outcomes and different types and duration of intervention, let alone other factors such as student age. However, over the past decade it is clear that techniques for researching universal contemplative educations are being refined and becoming more comparable.

To date it would seem that contemplative education interventions have the greatest potential to:

1. Improve student mindfulness and attention skills, which are valuable to a student's educational journey; and
2. Reduce depression and anxiety/stress, which are valuable for student wellbeing generally as well as specifically coping with school.

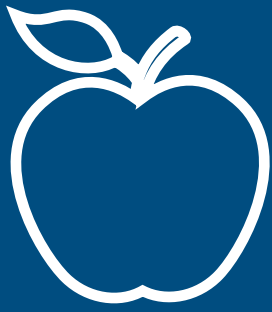
Children can benefit from contemplative education regardless of age, gender, ethnic minority group, socio-economic status, academic achievement or learning or behavioural issues. However, there may be variation in the extent and type of benefits experienced. Age may moderate some of the benefits, with some indication that benefits may be more readily experienced by older children (Dunning et al., 2019). The opportunity to choose whether to engage in meditation (overall and on a day-to-day basis) may also influence student outcomes and engagement with the intervention (not to mention the strength of the study results). Beyond individual children, universal contemplative education programs may also offer reciprocal benefits for teachers as well as broader cultural, achievement and economic benefits for schools and school systems.

Directions for future research on universal contemplative education include:

- Continuing to refine research methods and approaches
- Exploring the (neuroscientific) mechanisms by which meditation practices promote wellbeing
- Further investigating the personal factors that might influence student engagement with meditation practices
- Exploring the spiritual fruits of practising meditation (this is covered more in the section below on Christian meditation)
- Investigating effective approaches for supporting children who might find meditation difficult, should they wish to engage with meditation practices and experience benefits
- Exploring the reciprocal benefits of universal meditation practices for both teachers and children and the mechanisms by which these occur
- Investigating the program factors – content, duration, frequency etc. – and how these can influence outcomes
- Longitudinal studies of meditative practice (i.e., beyond short, time-bound interventions)

Overall, the holistic student wellbeing benefits are promising and there is considerable evidence that contemplative education programs to date are already benefiting a diverse range of children in different situations.





Christian Meditation in Schools

What is Christian Meditation?

Given the above, the practice of Christian meditation at school has the potential to tap into the broad wellbeing benefits of other meditation practices, while also providing an intentional space within which children and young people can explore and nurture their spirituality. It is not a time-bound intervention, but an on-going practice that is similar to other forms of transcendental meditation in that it involves remaining still, with eyes closed and silently, interiorly repeating a mantra. The most commonly used mantra for Christian meditation is the ancient Christian prayer word, Maranatha (Come Lord). Indeed, the practice is intended as a form of silent prayer, described as offering the opportunity to be in God's presence and to discover the true self through the stillness and silence of body and mind (WCCM, 2013).

"It involves remaining still, with eyes closed and silently, interiorly repeating a mantra"

Four studies were located to date that have specifically investigated Christian meditation programs in schools. Three of these have been undertaken in Australia (three separate research teams working in three different states) and one in Ireland (Northern Ireland and the Republic of Ireland). These studies generally involved schools already engaged in the regular practice of Christian meditation, some for many years,

rather than a time-bound intervention with a clear start and end. In contrast to the wider contemplative education research, all of these studies adopted explorative qualitative approaches, although the most recent study (Graham et al., 2018) also included a small quantitative component. Also unlike the broader contemplative education research, the studies (with the exception of Campion & Rocco's (2009) early work) have

"[Research to date has had] a strong focus on exploring children's spirituality"

a strong focus on exploring children's spirituality, an aspect almost entirely overlooked in broader contemplative education studies.

Considering Children's Spirituality in the Context of Christian Meditation in Schools

Given the interest in spirituality within Christian meditation in schools research, it is important to briefly consider how we might define the concept. As flagged earlier, a decisive definition of spirituality has remained elusive, although there has been on-going 'intellectual storming' in an effort to articulate the notion (Benson, 2004, p. 48). Core to these discussions and debates is that spirituality is no longer only the domain of organised religion nor does it necessarily refer to any connection with a God (Bosacki & Ota, 2000; Boynton, 2011; Holder et al., 2010; King & Boyatzis, 2004; Mercer, 2006). Nevertheless, many efforts to define spirituality have done so largely by making comparisons with religiosity. For instance, Ubani and Tirri (2006) note that 'religion is usually defined as the organizational, the ritual and the ideological. The spiritual then refers to the personal, the affective, the experiential and the thoughtful' (p.358). Similarly, Holder et al (2010) describe that 'spirituality refers to an inner belief system that a person relies on for strength and comfort whereas religiousness refers to institutional religious rituals, practices, and beliefs' (p.132). However, King and Boyatzis (2004) have cautioned that such approaches have generated 'an often-overstated false dichotomy' (p.3).

Correspondingly, others seek to assert more inclusive definitions which might achieve resonance across religious and secular traditions worldwide. Such definitions often work from the basis that spirituality is an innate human capacity that predates institutionalised religion, but which may be engaged with through religious practice. For example, Waaijman (2010) uses the expression 'primordial spirituality' to capture the notion that this type of spirituality belongs to the basic processes of human existence. Understandings of this nature tend to preface the personal, experiential aspects of spirituality, with a particular emphasis on authentic living (Frohlich, 2007) or what Merton (1968) has referred to as uncovering the 'true-self,' all the while offering scope for a transcendent dimension. This is largely the approach from which The World Community for Christian Meditation operates, with Director, Fr Laurence Freeman OSB, recently describing spirituality as 'that aspect of human experience which is open to the transcendent while remaining rooted in the material world and body' (2020, p. 2). Such a definition underscores the intentionally inclusive approach of the WCCM and its outreach, *Meditatio*. Further, the emphasis on 'experience' in Freeman's and others' definitions may be a particularly important element when considering the potential of meditation to nourish spirituality. As described above, Christian meditation works from the premise that those who open themselves to the practice create the opportunity to personally experience the transcendent and Divine, to experience God's presence and in doing so to come closer to God, to strengthen their faith and to discover their 'true self' (WCCM, 2013).

"Spirituality is an innate human capacity that predates institutionalised religion, but which may be engaged with through religious practice"

The notion that spirituality is an innate capacity and the emphasis on the importance of the experiential in nourishing it, may also be particularly important when considering the spirituality of children (Eaude, 2014; Keating, 2016; Rahner cited in Hinsdale, 2001). Indeed, the most prominent conceptual approach to emerge from recent research into

“Those who open themselves to [Christian meditation] create the opportunity to personally experience the transcendent and Divine, to experience God’s presence...to strengthen their faith and to discover the ‘true self’ (WCCM, 2013)”

children’s spirituality echoes the above ideas while focusing upon relational experiences (Hay & Nye, 1998). Building from this, Fisher’s (2006, p.347) model of spiritual wellbeing encompasses the quality of relationships that young people ‘have with self, others, nature and/or with God’. This correlates with recent work in Australian schools in which it was found that student wellbeing is predominately experienced in relational terms (Graham, Powell and Truscott, 2016; Thomas et al., 2016). Notions of spiritual wellbeing also link to assertions of the need to increase the

emphasis on wisdom, ethical and self-awareness aspects of development in schools, to balance the market-driven, knowledge-based, attainment focus of current curricula and testing (Binder, 2011; De Souza, 2003; Eaude, 2014; Ruddock & Cameron, 2010). As mentioned earlier, though, spirituality is frequently conflated with religiosity and is often overlooked as a vital component of overall wellbeing, particularly in non-denominational schools (De Blasio, 2011; Fisher, 2007; Hodder, 2007; Jacobs, 2012; Natsis, 2016; Trousdale, 2014).

In the context of children and young people, reference is usually made to spiritual development. Yet, development denotes a sense of ‘becoming’ rather than ‘being’ spiritual, which seems questionable when applied to some of the relationships Fisher lists and from children’s descriptions of their spiritual experiences (as captured in the research on Christian meditation, see below). The Catholic Education Diocese of Townsville’s website (www.cominghome.org.uk) highlights the importance of shifting thinking in this regard, making connections to contemporary Childhood theory and positioning children as active, social agents:

Children are usually written about as objects of faith, rather than subjects. Many traditional approaches to spiritual development of children thus miss the point. The real challenge is to build on the ‘spiritual competence’ each child is endowed with; then the development of faith is made possible.

Connected to this, an important aspect of supporting children’s spiritual journeys is to recognise that, like many other aspects of modern life, they are growing up in a considerably changed spiritual context – one in which spirituality is ‘relatively secular, eclectic, subjective, individualistic and self reliant’ (Rossiter, 2010, p.130). Perhaps more than ever before, young people seek to bring their own agency and autonomy to their

spirituality, including their relationships with God (Casson, 2011). This may be equally true for many students enrolled in denominational schools, including, for example, children who identify as Catholic and attend a Catholic school (Casson, 2011; Rossiter, 2010). Therefore, while it can appear that young people are drifting away from organised religion, and arguably particularly so as they approach adolescence, many young people report remaining spiritually active (Büssing et al. 2010; Casson, 2011; Engebretson 2006).

Denominational schools usually openly promote a climate and ethos that aims to nurture and recognise children's spirituality (Hyde, 2008; Kennedy & Duncan, 2006; Natsis, 2016). However, Rossiter (2010) has argued that, in Australia for example, the Catholic education system has largely responded to shifts in religiosity by seeking to re-evangelise children and young people and reverse the decline in traditional religious behaviours such as church attendance. This is at odds with young people's experiences and needs and may exclude or marginalise students who identify as Catholic but may never be regular church attendees (Casson, 2011). Correspondingly, Rossiter argues that there is a role for the moral and spiritual values embedded within religions such as Christianity, but suggest that denominational schools need to approach the contemporary spiritual situation more positively and inclusively, not as a 'deficit model of spirituality' (Rossiter, 2010, p.131). Essentially, it has been increasingly argued that there is a mismatch between how spirituality is presented to and experienced by young people. A concerted view is emerging that suggests confining spiritual development to religious education and the routines of religious practice may limit children exploring, developing and sharing their spirituality and associated self-awareness, and limit its contribution to their overall sense of wellbeing (Holder, Coleman, and Wallace 2010; Ingersoll 2014; Petersen 2008; Rossiter 2011). There is a need to explore different ways of approaching spirituality at school, both to help enliven children's spiritual engagement and enhance broader efforts to improve student wellbeing. Meditation practices, including Christian meditation, offer one means by which to do this.

What Does Existing Research Evidence on Christian Meditation in Schools Tell Us?

The Catholic School Diocese of Townsville, in Queensland, Australia, pioneered the large-scale practice of Christian meditation in schools (Green, 2011). In 2006, the diocese introduced meditation into 31 Catholic schools, reaching more than 10,000 children. A year after implementation, Campion & Rocco (2009) conducted the first known academic study of the practice of Christian meditation in schools. Their study involved interviews with children (n=54), parents (n=7) and teachers (n=19) from across three primary schools at different stages of implementation and with different demographic characteristics. At the time of the study, schools were practising with varying regularity (daily, weekly, thrice weekly) and not all teachers were following the exact

Four studies exploring Christian meditation in schools have been conducted to date

Christian meditation protocol (for example some preferred to use guided meditation with their class).

In 2013 in Ireland, Keating completed a Master's thesis exploring primary school children's experiences of Christian meditation at school, and following this undertook a PhD thesis on the topic, which was completed in 2016. The latter study involved in-depth individual interviews involving creative methods with 70 children across four primary schools, as well as interviews with the children's class teachers (n=15), co-ordinating teachers (n=2) and school principals (n=4). Christian meditation had been introduced in the three denominational schools and the implementation was fairly consistent in that the schools usually meditated twice per week and usually for one minute per year of age (e.g. 9 minutes for children aged 9 years). The study also included one non-denominational school, which had been practising whole-school guided meditation for eight years. Spiritual experiences are a central interest of Keating's work and in his findings he distinguishes between the practical pragmatic 'benefits' that children experience and the inner 'spiritual fruits' of the practice. He drew on theologian Dermot Lane's (1999) conceptualisation of faith as a guiding definition of spirituality for the context of his study:

A love of truth, a personal dedication to truth and a practical living out of life according to truth. An insight into the truth of God followed by a personal response to that insight which affects daily living (p.168).

Such an approach resonates with notions of authenticity, personal experience and openness to the transcendent, as described above. Key results have been published in two peer-reviewed publications (Keating, 2017a,b).

Around a similar time period to Keating's Master's thesis, a research team from Australian Catholic University undertook a small case study research project with a Catholic primary school in the Australian state of Victoria (results published in de Souza, Hyde & Kehoe, 2014; Hyde, de Souza & Kehoe, 2014). This small study involved five visits to the school and gathered observational, participatory and interview data with children in their first and final years of primary schooling (different numbers of children were involved in different aspects). Despite being located in a Melbourne suburb the school had very little diversity, comprising predominately Anglo-Australian children. The school followed the Christian meditation protocol laid out by the WCCM, although the young children meditated for 9 minutes, which is longer than the 'minute to age' recommendation. The school had been practising Christian meditation several times per week on a whole-school basis for at least six years.

Finally, the most recent study on Christian meditation in schools was a mixed-method study conducted in two Dioceses in the Australian state of New South Wales. The study was undertaken between 2014-2016 and followed 206-250 children (the class numbers changed over time) and interviewed 50 teachers from 12 Catholic schools across the two Dioceses. The schools were at different stages of implementation, had different

demographic characteristics and practised with varying regularity. This study adopted a relational understanding of spirituality, similar to Fisher's (2006) framework of spiritual wellbeing mentioned earlier. It sought to explore how the practice of Christian meditation at school might shape students' (and teachers') understandings of and relationships with themselves, others, God, and the Catholic Church. This literature summary draws on the findings presented in the final full project report (Graham et al., 2018), as well as two associated journal articles (Graham & Truscott, 2019; 2020).

All four studies were exploratory and report a wide range of benefits ranging across social and emotional wellbeing, academic and spiritual outcomes. These are articulated differently in the different studies with Campion & Rocco (2009), for instance, using pragmatic terms broadly aligned with indicators of wellbeing and Keating (2017a,b) articulating ideas in more holistic, spiritual ways (e.g., spiritual 'fruits'). A brief overview of each study is provided in Table 1 overleaf.

The most consistently articulated finding across the studies was that Christian meditation at school is a calming and relaxing experience for children and teachers. Both children and teachers described the way meditation can disperse stress, reduce tensions and provide a rare opportunity to pause within an otherwise busy world. In Campion & Rocco's (2009) study, and particularly Graham et al.'s (2018) research, the children and teachers then described how a calm atmosphere frequently prevails within the classroom following meditation, something also observed by de Souza, Hyde & Kehoe (2014; Hyde, de Souza & Kehoe, 2014). In a practical sense, this calming effect likely underpins some of the other reported classroom benefits, such as improved interactions with others and improved concentration, and personal benefits, such as emotional awareness, regulation and stress management.

Calmness, centredness, emotional awareness and regulation, along with concentration, connect to notions of 'mindfulness' and attention. Similarly, emotional regulation and stress management connect to emotional wellbeing. In this way, many of the findings from the Christian meditation studies resonate with the results from the broader contemplative literature review, albeit articulated in more qualitative, experiential terms. Indeed, the Christian meditation studies, while not robust in some respects, go beyond the majority of broader contemplative education research to date through exploring the wider implications of these benefits, and contextualising them within the context of relationships and the wider school experience.

For instance, in Graham et al.'s (2018) qualitative work it emerged that benefits such as 'mindfulness', emotional regulation and attention could be experienced by both children and teachers, with reciprocal, flow-on effects for the other – teachers were calmer and more patient, benefiting students, and calmer students benefited teachers by being more attentive, focused and better able to work through issues with their peers (Graham & Truscott, 2019). Teachers often reported that they were experiencing these reciprocal benefits even if they were unable to personally enter a meditative state in the class (e.g., if they felt the need to supervise). There was also some discussion in the studies,

particularly in Keating’s work (2017a,b), that the calming and emotional awareness effects that occurred immediately after a meditation session could have lasting effects upon an individual’s self-awareness and understandings of relationships.

Table 1: Overview of the Four Studies Exploring Christian Meditation in Schools

Authors (Publication Date)	Location of Research	Number of Participants / Schools Involved	Outcomes Explored
Campion & Rocco (2009)	Queensland, Australia	54 primary children; 7 parents; 19 teachers; 3 schools.	<ul style="list-style-type: none"> • Open evaluation: feelings about teaching and learning meditation, what meditation practice involved, and effects on themselves and others
Keating (2013, 2016, 2017a,b)	Northern Ireland & the Republic of Ireland	70 primary children; 4 schools.	<ul style="list-style-type: none"> • To explore children’s experiences of meditation • To what extent, if any, children benefit spiritually from the practice
De Souza, Hyde & Kehoe, (2014); Hyde, de Souza &	Victoria, Australia	2 x primary classes; 1 school.	<ul style="list-style-type: none"> • Children’s relationship with God • Student wellbeing and self-esteem
Graham, Anderson, Truscott, Simmons & Powell (2018); Graham & Truscott (2019; 2020)	New South Wales, Australia	250 primary children; 50 teachers; 12 schools.	<p>How Christian meditation might shape students’ (and teachers’) understandings of and relationships with:</p> <ul style="list-style-type: none"> • Themselves • Others • God • The Catholic Church

These kinds of perspectives were shared by (many of) the children and teachers in the studies by both Graham et al. and Keating, but such views are difficult to articulate in a way that can be accurately identified and measured quantitatively. Indeed, the quantitative component of Graham et al.'s (2018) work was unable to find statistically significant improvements in students' relationships with themselves or others, despite gathering rich qualitative data on these aspects. Perhaps the most difficult relationship or 'outcome' to articulate is children's relationships with themselves. Keating's (2017a,b) work is particularly illuminating in this regard, highlighting the interconnectivity of wellbeing, the spiritual journey, an awakening of the heart and making links to identity formation, offering a richness that goes beyond individual markers of wellbeing.

The emphasis in the Christian meditation studies on spirituality, including relationship to God specifically, adds new insight to the wider contemplative education research. In their early evaluation, Campion & Rocco (2009) gathered data indicating that some children experienced a connection to God during meditation, despite this not be a specific focus of their study. The data reported in the papers by de Souza, Hyde and Kehoe are more oblique, but they tentatively conclude that Christian meditation 'appears to enhance children's sense of and relationship with God' (de Souza, Hyde & Kehoe, 2014, p.209). Building from this, both Keating's (2017a,b) and Graham et al.'s (2018, 2019a) studies then offer much clearer evidence that many children do experience a connection to God while meditating and that these experiences can contribute to enhancing their relationship to God, with some children in both studies describing quite profound experiences. It should be noted that not all children, even in Graham et al.'s study, approached the meditation practice as 'God time'. This was either because they did not conceptualise the practice as a form of prayer or chose to focus on the relaxation and emotional wellbeing benefits. Most of these children still enjoyed the practice though, and some even advocated strongly for it. Therefore, a lack of direct engagement with the spiritual need not be framed negatively – children retained the opportunity to engage with God or the spiritual more broadly, and this sense of agency may be particularly important in experiencing Christian meditation as a spiritually 'hospitable' space (Eaude, 2014; Graham & Truscott, 2020). Interestingly, Keating (2017a) found no discernible difference in children's discussions of spiritual benefits they experienced between the denominational and non-denominational schools involved in his study.

Adding to the above, it should be noted that strengthened relationships with God were reported in Graham et al.'s study (2018; Graham & Truscott, 2020) despite background statistical data indicating a drop in the children's religiosity and religious behaviour over the same time period (between school Years 4 to 6, ages 9-12 approximately). This drop corresponds to the frequently reported shift away from traditional, organised religion than can occur as young people approach adolescence (Büssing et al. 2010; Casson 2011; Engebretson 2006; Halafoff and Gobey 2019; Holder, Coleman, and Wallace 2010). Correspondingly, the relational connections many children experienced with God may be all the more pertinent. In the qualitative component of Graham et al.'s (2018, 2020) study, students reflected upon what aspects of the practice of Christian meditation facilitated their relationship with God. They described the new avenue for communication, the non-

forceful nature of the practice and the opportunity to connect with God in a private, personal way. This aligns with contemporary literature on children and young people's spirituality and religiosity which indicates their desire for greater agency and autonomy in their spiritual journey, as well as being more in step with the increasingly individualistic and eclectic way in which young people in countries such as Australia engage with the spiritual (Büssing et al. 2010; Casson 2011; EAUDE, 2014; Engebretson 2006; Halafoff and Gobey 2019; Holder, Coleman, and Wallace 2010).

Such findings also echo the words of Michael Paul Gallagher (2015): 'Spirituality comes before theology: If faith is not an experience of encounter, we have little to reflect on except the words of others. And they will ring hollow unless touched by personal fire' (p.39). It should also be noted that many teachers also found the practice to be

"Findings...echo the words of Michael Paul Gallagher (2015): 'Spirituality comes before theology: if faith is not an experience of encounter, we have little to reflect on except the words of others. And they will ring hollow unless touched by personal fire' (p.39)"

beneficial in deepening their faith and relationship with God, and were particularly appreciative of the opportunity to build this in the workplace (Graham et al., 2018).

While the Christian meditation research to date is largely very positive, it is important to note that some negative perceptions were gathered both from children and teachers. In Campion and Rocco's

(2009) study, only 58% of teachers were positive about the practice, some feeling that the program had been pushed too hard or preferring to use other calming or mindfulness techniques. This teacher response contrasted directly with the Graham et al.'s (2018) study in which all of the teachers interviewed (n=50) discussed Christian meditation in positive terms. Some teachers in Graham et al.'s (2018) study, particularly in the first and second years of the study, did describe some initial reservations about implementing Christian meditation in the classroom setting, but they had worked through this with their class. Perhaps the differences between Campion and Rocco and Graham et al.'s findings can be attributed in part to the length of time that schools had been implementing the program and the increased normalising of interventions such as Christian meditation in schools.

Some children in Campion and Rocco's (2009) study reported that meditation made them feel sleepy or lethargic afterwards or that they felt bored during the meditation. Hyde, de Souza and Kehoe (2014) also noted that some children struggled to concentrate during meditation, although they observed that even when this happened they did remain quiet so as not to distract others. Focusing on one child, in particular, they noted that this sense of distraction continued for this child, who struggled to concentrate on their schoolwork after the meditation session (i.e., this meditation session may have had the opposite effect on concentration, compounding a sense of restlessness and inattention - perhaps only on this particular occasion).

The survey component of Graham et al.'s (2018) study is the first anonymous platform for children to voice their views on Christian meditation at school. This platform gathered the greatest mix of perspectives from children, identifying a small sub-group who really disliked the practice or who had not engaged with it at all. These children reported finding the practice boring, difficult and pointless, with a couple using strong language such as 'I hate it' (Year 6 Boy). Furthermore, both the qualitative and quantitative aspects of the study identified that many children struggled, at least some of the time, to remain still, silent and focused and to keep their eyes closed for just a few minutes, even after up to three years of practice. While this difficulty is not the reserve of children, and indeed is central to the exercise itself, there was a sense from the children that they should be able to do this and being unable to do so seemed to create frustration and lack of engagement. This suggests a need to slightly reframe the meditative practice such that children understand that it is both a spiritual experience and a wellbeing exercise. This may include knowing, for example, that meditation does not lead to an easy, blissful state but is one of repeatedly becoming aware that thoughts, feelings or emotions have intruded and then letting go of the distraction and returning to the mantra. It is the process of repeatedly letting go and returning to a state of mind that is silent, yet receptive, that will likely build brain matter and bring them closer to a level of consciousness and mystery deeper than ordinary self-consciousness.

“Children need to know that meditation [is not] an easy, blissful state...it is [a] process of repeatedly letting go [of distractions] and returning to a state of mind that is silent, yet receptive”

It should also be noted that it would be unrealistic to expect all children to be able to enter a meditative state every session in a busy classroom setting, nor for all to engage with and enjoy an on-going intervention. Indeed, while there were many children who experienced positive effects (as discussed above), by the end of Graham et al.'s (2018) study only 51.6% of the students reported still enjoying the practice at school. Nevertheless, children and teachers in Champion & Rocco's (2009) study thought that disruptive students benefited from the practice, even though they did not necessarily enjoy it, and this helped create a calmer atmosphere in the classroom for all.

The studies suggest some ways forward to help support schools in their endeavours to offer Christian meditation programs in the classroom setting. Champion and Rocco (2009) reported that the degree to which the program was taken up related to school leadership commitment, how much training teachers received, individual teachers' perception of benefits and the level of in-school practical support from the assistant principals for religious education. Graham et al. (2018) echoed this, also finding that attending the WCCM teacher training seemed to be beneficial, with teachers feeling more confident and enthusiastic about implementing Christian meditation as a result. All of the Australian studies also found that whole-school implementation, particularly if a specific time was set

aside for meditation, facilitates more regular practice and aids in reducing distractions overall.

In terms of individual children who dislike or resist the practice of Christian meditation, there is some uncertainty about what would work best to encourage greater engagement. Hyde, de Souza and Kehoe (2014) advocate explicitly framing meditation as 'God time', but, as indicated above, Keating (2017a,b) found little difference between denominational and non-denominational schools (and Christian meditation and guided mediation) in terms of the spiritual fruits children described. Perhaps though, what the children in Keating's study were offered was a unique and creative opportunity to reflect upon their spiritual experiences, with it likely that this opportunity further enhanced their engagement and reflection on the practice. Indeed, both Keating's work and Graham et al.'s (2018, 2020) findings point to the importance of

“[It is important to create] opportunities for children to reflect on and describe their own experience of the practice”

creating opportunities for children to reflect on and describe their own experience of the practice and to help them find words or other means of articulating their deep inner experience. Keating has since moved forward in this regard, making his research tools available to schools to help facilitate conversations with children and developing an additional, innovative music CD (Meditation

with Children: Songs and Reflections) to further assist in promoting and encouraging such discussion and exploration (2019). This exploratory aspect is likely a key component of supporting children's spirituality through Christian meditation in schools and may be something that needs to be more strongly promoted by the WCCM in their training and support to schools. An additional point to consider is whether there is any merit in offering children the opportunity to choose whether they engage in the meditation practice or to read quietly or look out of the window, in line with the Quiet Time/ Transcendental meditation approach which has repeatedly shown beneficial results (in wellbeing and academic terms although not necessarily spirituality). This sense of choice might help reduce the strong resistance or dislike some students experience that hampers their ability to engage with the practice.

Overall, all four Christian meditation studies were exploratory and report a wide range of benefits across social and emotional wellbeing and academic outcomes that resonate with the literature on contemplative education more broadly. The Christian meditation research, particularly that by Keating (2017a,b) and Graham et al. (2018; 2019; 2020), also demonstrates additional spiritual fruits, with some children and teachers experiencing profound spiritual experiences during meditation. Collectively, then, the Christian mediation research contributes to the broader contemplative education literature through the more focused exploration of the connections between meditation and children's spirituality / spiritual wellbeing, aspects overlooked in the broader contemplative education research located to date.

Overall, the collective reported benefits of Christian meditation in schools coalesce under the following main headings:

- Respite in a busy world – calming, relaxing and restoring effects
- Improvements in emotional awareness and regulation (including stress management)
- Improved attention and concentration
- Supporting identity-formation, confidence and self-acceptance
- Improvements in social interactions
- Supports a sense of inter-connectedness, belonging and community at school
- Opportunity to strengthen personal relationships with God
- A sense of personal agency in faith or spirituality

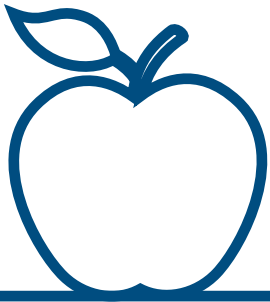
What are the Gaps in the Research on Christian Meditation in Schools?

The existing body of research on Christian meditation is very small and the studies to date take an exploratory approach. While the qualitative analysis and insights are arguably a strength of the research, and certainly capture rich data, the existing body of research might be strengthened by an RCT-type study to test if Christian meditation offers the kinds of wellbeing and academic benefits reported for other forms of contemplative education. In developing this, researchers could build upon the methodological developments that have been conducted in broader contemplative education research. An additional element of this would be to consider whether there is merit in pursuing ways to capture changes in students' relationships with themselves and others, such that the relational / spiritual wellbeing benefits might also be confirmed statistically. In line with the gaps identified for the contemplative education research more broadly, it would be beneficial to undertake a robust longitudinal study of Christian meditation in schools and the impact of factors such as regularity of practice and the effects of different approaches or choices for supporting students currently disengaged from the practice.

At present there has been no Christian meditation research involving secondary school students and teachers. Given indications from the wider contemplative education literature that older students may experience stronger benefits, further research is warranted to explore this. It would also be valuable to explore the opportunities children (of all ages) are offered in schools to reflect on and articulate benefits, as well as the

spiritual fruit they experience, as a result of engaging in Christian meditation. Such research might identify whether and how these opportunities contribute to or enhance children's spiritual understandings and experiences, how their experiences develop over time, and what kinds of tools or methods work best for facilitating such exploration.





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