

University College Dublin
School of Education



*Assessing the Impact of Active Learning and Cross-Curricular Collaboration
on Integrating Education for Sustainable Development (ESD) and
Sustainable Development Goals (SDGs) in Junior Cycle Business Studies.*

Submitted by:

Jack Gillivan - [REDACTED]

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Research Supervisor

Marelle Rice

Head of School

Assoc. Prof Alessandro Benati

Module Coordinator

Dr Deirdre McGillicuddy

Dr Áine Mahon

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Abbreviations

CBA	Classroom Based Assessment
COVID-19	Coronavirus Disease 2019
ESD	Education for Sustainable Development
GCE	Global Citizenship Education
GDPR	General Data Protection Regulation
NCCA	National Council for Curriculum and Assessment
PME	Professional Masters of Education
SDGs	Sustainable Development Goals
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Chapter 1: Introduction

1.1 Statement of the Problem

As Ireland endeavours to implement sustainable development education comprehensively, involving students, teachers, administrators, and the local community (Hargreaves, 2008), challenges persist in effectively teaching Sustainable Development Goals (SDGs) in post-primary education. The author identifies a lack of awareness and understanding among teachers, students, and school management, hindering seamless integration of SDGs into school curriculum. Teacher difficulties in incorporating SDGs into lesson plans and concerns about student engagement are noted. The dissertation aims to explore academic literature and policy documents to assess the effectiveness of sustainable development education in post-primary education, specifically focusing on active learning methods in Junior Cycle Business Studies, using the author's reflective insights as a student teacher.

1.2 Policy Section

The United Nations (UN) General Assembly adopted SDGs in 2015 as a component of their comprehensive "2030 Agenda for Sustainable Development" (United Nations, 2015). The core concept is that progress on each goal is interdependent, necessitating advancement across all goals (United Nations, 2015). UNESCO (2020) as the primary UN agency for Education for Sustainable Development (ESD), has devised a 'roadmap' aimed at assisting national policymakers in integrating ESD into education systems and advancing the Sustainable Development Goals (SDGs) throughout the 'Decade of Action'. The Department of Education and Skills (2022) has created 'ESD for 2030', which serves as the foundational document for crafting a new strategy, offering a framework of priority action areas, and facilitating coherence with the SDGs.

A study by Bogers et al., (2022) indicates a significant rise in the discourse surrounding the SDGs among international organisations across various policy domains. However, this increased discourse does not necessary translate into enhanced policy integration, instead, it appears that organisations with pre-existing high levels of policy integration are more inclined to reference SDGs serving more as a framework for reframing existing activities rather than fostering substantial policy integration (Bogers et al., 2022).

It will be vitally important that ‘ESD for 2030’ (Department of Education and Skills, 2022) sticks to the strategy of ‘advancing policy’ to ‘strengthen ESD and contribute to achieving all 17 SDGs’ (Department of Education and Skills, 2022).

1.3 Methodology

Due to the nature of the Professional Masters of Education (PME) dissertation process, and the limitations I face in terms of ethical clearance and GDPR (General Data Protection Regulation) for the purpose of gathering data, I will be taking a qualitative approach to my research. Looking at academic journals, policy documents, scholarly articles and my own professional observations and reflections from my time on school placement. This approach allows for a comprehensive understanding of the challenges, opportunities, and best practices associated with integrating ESD and aligning SDGs in the Business Studies classroom.

1.4 Dissertation Structure

The integration of ESD and the alignment of the SDGs in Junior Cycle Business Studies will be investigated in this dissertation through active learning as well as cross-disciplinary collaboration. Chapter one identifies the research topic, identifies policies that will be drawn on, and the methods used to conduct this research. Proceeding this, chapter two will detail a literature review with a restatement of the research questions and will discuss further,

education's role in advancing SDGS, integrating SDGs into the Junior Cycle framework and incorporating SDGS into teaching methods. Finally, the literature review will conclude with recommendations for future directions regarding the integration of ESD and the alignment of the SDGs with education, as well as good practices for implementing the SDGs in Business Studies classrooms.

In chapter three, I will discuss my experiences and reflections from my placement throughout the PME in relation to integrating SDGs and incorporating ESD through engaging teaching methods in a business studies classroom and raising awareness of SDGS in the wider school environment through cross-disciplinary collaboration. All of this will be done through the lens of the literature review. The last chapter will discuss what I have learned from this study, how it has changed my own practice and how the dissertation has changed the way I think and how my practice has evolved, and any potential ramifications going forward as a teacher of Business Studies.

Chapter 2: Literature Review

2.1 Introduction

The implementation of new educational frameworks that centres on achieving the SDGs presents a challenge to curriculum and pedagogy of education (Ferrer-Estévez & Chalmeta, 2021). This literature review will investigate further the following research questions.

How can the integration of SDGs into the Junior Cycle framework, particularly in a subject like Business Studies, be further optimised to ensure effective alignment with Global Citizenship Education (GCE) and ESD principles?

How can cross-curricular collaboration and interdisciplinary approaches be leveraged to enhance the integration of SDGs and ESD principles, fostering a holistic understanding of sustainability and encouraging students' active engagement in addressing global challenges?

What are the most effective teaching methods and pedagogical approaches for integrating SDGs into Business Studies, considering the challenges highlighted by educators such as limited knowledge of ESD and SDGs, as well as curriculum constraints?

What strategies and initiatives can be implemented to enhance professional development for teachers, aiming to integrate good practices regarding ESD and SDG alignment?

This will be accomplished by delving further into the role of education in achieving sustainable development, exploring how the quality of student learning can be improved in relation to the education of SDGs in Junior Cycle, how can we enhance student's awareness and knowledge of SDGs through active learning methodologies and finally what recommendations can be made to improve the quality of student learning and enhance awareness and knowledge of SDGs with reference to policy, professional development and cross curricular collaboration in Ireland.

2.2 Education's Role in Advancing Sustainable Development Goals

GCE and ESD are intricate concepts that intersect and offer collaborative potential (Khoo & Jørgensen, 2021). ESD, highlights the necessity for a revolutionary approach to education and the possibility of collaboration, with a particular emphasis on the SDGs (Khoo & Jørgensen, 2021).

GCE, as defined by UNESCO (2015), encompasses cognitive, socio-emotional, and behavioural dimensions, aiming to equip learners with the knowledge, skills, and values necessary to contribute to a more inclusive, just, and peaceful world. The cognitive dimension

involves critical thinking about global issues and recognising their interconnectedness, aligning with the holistic approach of the SDGs (UNESCO, 2015).

The United Nations established 17 Sustainable Development Goals (SDGs) with associated targets, including a focus on integrating education in global citizenship, sustainable development and climate change (United Nations, 2015). The SDGs, though numbered, are interconnected, offering a dynamic framework for education (United Nations, 2015).

Although the SDGs create a great roadmap for a sustainable future, according to UN Secretary-General António Guterres, as of September 2023 only 15% of the targets are on track. This risks abandonment of the SDGs and means that a “global rescue plan” is required to accelerate SDG progress (United Nations, 2023). According to Guterres, “progress is possible through collective effort and fulfilling promises to billions of people worldwide”, (United Nations, 2023). Therefore, there is a continued effort required to further incorporate SDGs into school curricula as the significance of sustainability becomes more and more apparent (UNESCO, 2017). Ferrer-Estévez (2021) offers a practical framework for academic institutions to integrate the SDGs into their activities. This framework also addresses the challenges identified in previous research, such as the lack of explicit links among the SDGs (Le Blanc, 2015), the need for educational framework to engage with the SDGs in teaching and research (Leal Filho et al., 2021), and the importance of mapping the curriculum to the SDGs (Rajabifard, 2021). This framework suggests a similar approach could be applied to Junior Cycle Business Studies.

ESD encompasses a range of disciplines, including climate change, mitigation of social and economic impacts, environmental economics and others (UNESCO, 2019). For the SDGs to be achieved, ESD is essential in both formal and informal learning (UNESCO, 2020). This characterisation suggests that ESD adopts a comprehensive perspective, incorporating key sustainable development topics into all educational methods and practices (Goian, 2010).

According to De Pauw et al. (2015), ESD emphasises active participation, collaboration and engagement in teaching and learning. As a result, ESD, serves as a platform for cultivating essential competencies for sustainability, such as critical thinking, systematic reasoning, self-awareness, and problem solving (De Pauw et al., 2015).

Higher education's critical role in addressing global challenges, such as poverty, health, climate change, and environmental degradation, is underscored by its capacity to equip graduates with the necessary skills (Ashida, 2022). Consequently, universities face mounting pressure to integrate SDG-related content into their curricula, preparing students to contribute effectively to sustainable development (Ashida, 2022). Recognising the importance of early integration of SDGs, secondary school teachers play a vital role in ensuring students' familiarity with these goals before third level education (Ashida, 2022). The ability of future leaders and citizens to innovate and navigate toward a sustainable future relies heavily on the effectiveness of today's educational systems (Abera, 2023). Despite current educational shortcomings in addressing complex global challenges, education remains pivotal for continuous learning and the pursuit of sustainability (Abera, 2023; UNESCO, 2019).

2.3 Integration of SDGs into Junior Cycle Framework

The National Council for Curriculum and Assessment Framework for Junior Cycle (2015) integrates principles of GCE, ESD, and aligns SDGs. It emphasises fostering independence in learning, creativity, engagement, participation, and collective wellbeing, all of which are foundational aspects of GCE and ESD (Khoo & Jørgensen, 2021). Furthermore, the framework explicitly addresses six Junior Cycle statements of learning with relevance to UNESCO's key competencies for sustainability, which are integral to both GCE and ESD (NCCA, 2018). These competencies include awareness, knowledge, skills, values, motivation for sustainable living,

understanding rights and responsibilities, moral decision-making, appreciation of diversity, and taking action to safeguard wellbeing (NCCA, 2015).

This holistic approach to integrating GCE, ESD principles, and key competencies into the Junior Cycle framework demonstrates a commitment to addressing the challenges outlined in the SDGs and preparing students to become active global citizens who contribute to sustainable development (NCCA, 2018).

The study by NCCA (2018) to map curriculum framework with UNESCO's (2015) key competencies for sustainability and for teaching and learning SDGs within curriculum highlights several key practices. Firstly, curriculum frameworks must include clear learning outcomes aligned with overarching visions, principles, and key skills (NCCA, 2015). This ensures that students encounter key competencies for sustainability within the curriculum. Additionally, the integration of key skills into curriculum frameworks drives collaborative and engaged pedagogy, facilitating student engagement with UNESCO key competencies (UNESCO, 2015). Moreover, the inclusion of wellbeing as a theme within the curriculum, emphasising wellbeing as both an individual and collective endeavour, is essential for positioning sustainability and ESD (NCCA, 2018).

Policy-level drivers, such as the National Strategy on Education for Sustainable Development, play a crucial role in driving progress in integrating key competencies for sustainability and SDG-related content into curriculum specifications (Department of Education and Skills, 2014). Curriculum specifications across various subjects should articulate rich learning outcomes that balance knowledge, skills, and values, demanding teaching, learning, and assessment about sustainability topics. Furthermore, the inclusion of Classroom-Based Assessments (CBAs) in Junior Cycle allows students to explore areas of interest related to the SDGs and demonstrate relevant skills (Department of Education and Skills, 2014). Overall,

these practices create multiple opportunities for students to encounter SDG-related content and key competencies across different subject areas.

Junior Cycle Business Studies is designed to equip students with the understanding, skills, and attitudes necessary for active participation in a globalised world (NCCA, 2015).

It fosters an appreciation of how economic and social factors shape individuals' lives while exploring the interconnectedness of economic prosperity, societal well-being, and environmental sustainability (NCCA, 2015). The curriculum aims to develop students' ability to make informed and responsible decisions, ensuring personal and societal well-being, while promoting self-awareness as learners (NCCA, 2015).

The learning outcomes in the Business Studies specification are organised into three strands, each with cross-cutting elements. These learning outcomes explicitly address sustainable development ensuring that ESD is integrated into Business Studies classrooms (NCCA, 2018). Additionally, teachers have the opportunity to embed SDG-related content into teaching across various learning outcomes. Examples include discussions on ethical consumption, understanding the role of entrepreneurs in society, and evaluating the impacts of economic policies on society and the environment (NCCA, 2018).

Overall, Junior Cycle Business Studies provides a framework for students to develop the knowledge, skills, and attitudes necessary to navigate the complexities of the modern world while contributing to sustainable development and ethical business practices (NCCA 2015).

However, integrating ESD and aligning SDGs into certain curricula isn't as straightforward. Conway et al., (2021) outlines the challenges faced by teachers in integrating ESD into the curriculum associated with Design subjects in Ireland. From this study, it is clear that educators face challenges including limited knowledge and understanding of ESD and association with

SDGs. An implication of this is teachers' knowledge of ESD practices is often limited to environmental aspects, neglecting the social and economic dimensions (Mahat, 2016). In addition, teachers fear that “unless it’s on the Leaving Cert” they would be doing an “injustice” to their students as assessment priorities side line ESD due to an already crowded curricula (Conway et al., 2021, p.9). Traditional assessment methods may inadequately capture students' capacity to critically analyse and address sustainability issues. Moreover, a lack of awareness or understanding among both students and teachers regarding ESD can impede meaningful engagement in expertise needed to effectively incorporate SDGs into the Junior Cycle Business Studies curriculum.

2.4 Incorporating SDGs into Teaching Methods

Active learning, integral to integrating SDGs into the Junior Cycle framework, is characterised by its emphasis on student engagement and participation in the learning process (Prince 2004). It is critical to improve the quality of student learning by implementing active learning strategies that are in line with the SDGs (Romero et al., 2021). Introducing GCE within active learning entails translating the notion of global citizenship into practical application (Lilley, 2015). By informing the design of teaching methods, especially active learning strategies, educators can better equip students to become ethical, critical, and responsible global citizens. GCE hinges on students' active involvement in meaningful learning tasks and the subsequent reflection on their actions, emphasising the importance of aligning learning experiences with student's needs, interests and lives (McCombs & Whistler, 1997). Meaningful learning, which encourages students to create, comprehend and connect knowledge, fosters a deeper understanding of the interconnectedness of systems and their impact on human lives (Eilam & Trop, 2010), aligning with the objectives of SDGs (UNESCO, 2018).

Moreover, active learning incorporates emotional learning, instilling in students a sense of connection, belonging and responsibility towards the subject matter (Eiliam & Trop, 2010). This combination of cognitive and emotional learning empowers students to not only understand but also feel strongly about the issues at hand, motivating them to take action and influence change (Eilam & Trop, 2010). Therefore, active learning emerges as a crucial pedagogical approach in integrating SDGs into Junior Cycle learning outcomes, particularly in subjects like Business Studies.

Lucas (1997) outlines essential aspects of active learning, emphasising its ‘focus on comprehension, student accountability, skills development and relevance to broader career and social contexts’ (Lucas 1997, p.189). This approach shifts the focus from the teacher to the student, fostering meaningful interactions, peer collaboration and critical thinking in classroom settings (Moore et al., 2020). Active learning requires students not only to engage in activities but also to intentionally reflect on and evaluate their actions, both inside and outside the classroom (Allsop et al., 2020).

Incorporating various teaching methodologies such as problem-based learning, cooperative learning, experiential learning, role-play, and peer instruction, active learning stimulates higher order cognitive processes (Foster and Stagl, 2018; Prince, 2004; Roehl et al., 2013). These methods, aligned with Bloom’s taxonomy of educational objectives (Bloom et al., 1956), promote deeper understanding, critical thinking and application of knowledge (Albert and Beatty, 2014). Thus, active learning emerges as a dynamic approach to education, essential for effectively integrating SDGs into educational curricula and fostering sustainable development awareness among students and as such must be employed in the Business Studies classroom.

2.5 Future Direction: Integrating ESD and Advancing SDGs in Education

The future direction of ESD and the alignment of SDGs require a multifaceted approach to address existing challenges and maximise impact. According to Farrell and Sugar (2021), ESD necessitates changes in knowledge, skills, values, and attitudes, emphasising its pivotal role in shaping future educational directions.

In shaping the future direction of implementing SDGs in education, the Second National Strategy on Education for Sustainable Development in Ireland (2022) underscores the crucial need for effective communication to raise awareness among stakeholders. It focuses on the goal of building a more just and sustainable world by strengthening ESD and contributing to the achievement of the 17 SDGs (Department of Education and Skills, 2022). The strategy is structured around five priority action areas, namely advancing policy, transforming learning environments, building capacities of educators, empowering and mobilising young people, and accelerating local-level actions (Department of Education and Skills, 2022).

However, SDGs face several limitations, including a lack of awareness and perception of their importance (Oltra-Badenes et al., 2023). Alston (2020) highlights significant shortcomings in the SDG framework, including a lack of political will hindering progress towards key objectives such as poverty alleviation, economic equality, gender parity, and climate change mitigation. Despite raising awareness and facilitating discussions, SDGs fall short in several areas, particularly in addressing systemic issues like wealth redistribution and inequitable fiscal policies (Alston, 2020). As a response, this necessitates a re-evaluation and restructuring of SDGs to effectively address emerging challenges such as the recent COVID-19 pandemic, climate change, and the digital revolution (Alston, 2020).

Successfully achieving SDGs necessitates collaboration across sectors and disciplines (Kiely et al., 2021). Interdisciplinary collaboration among educators is vital for addressing challenges in implementing transformative educational curricula (Harraway et al., 2012). Successful integration of SDGs in cross-curriculum collaboration involves robust evaluation processes and thematic organisation of learning outcomes (Rieckmann, 2017). For instance, initiatives like the E-Mining@School partnership between Castletroy College and the University of Limerick exemplify effective integration of SDGs through thematic learning and student-centred approaches (Kiely et al., 2021). In addition, The Take 1 Programme in Irish secondary schools is designed to integrate ESD into learning by aligning SDGs with subject specifications, promoting awareness and emphasising students' responsibilities in achieving them (Take 1 Programme, 2024). By connecting SDGs with learning outcomes across all subjects, this program fosters a holistic understanding of global challenges and encourages students to engage actively in sustainable development efforts. The programme's objectives include providing professional development opportunities to understand ESD, linking formal and informal activities to SDGs, and supporting the integration of ESD into school policies and well-being programmes (Take 1 Programme, 2024).

Professional development for educators is crucial for ensuring exceptional student performance and aligning with SDGs (Havea & Mohanty, 2019). Lack of professional development poses a threat to the 2030 Development Agenda's objectives (Havea & Mohanty, 2019). It is essential to enhance educators' skills through education and training to achieve greater efficiency and productivity, contributing to the goals of human resource development (Redman et al., 2018). This underscores the significance of global adoption of professional development programs to advance sustainable development, particularly in education (Havea & Mohanty, 2019).

2.6 Implementing Good Practice in the Business Studies Classroom

To implement good practice in the classroom, a Business Studies teacher can start by aligning their teaching with the NCCA's Framework for Junior Cycle, integrating principles of GCE, ESD, and SDGs (Khoo & Jørgensen, 2021). This involves fostering independence, creativity, and engagement among students, incorporating key competencies for sustainability into the curriculum, and promoting collaborative and engaged pedagogy (NCCA, 2015; UNESCO, 2015). Additionally, teachers should explore innovative teaching methods to address challenges such as limited teacher knowledge of ESD and SDGs, prioritise student engagement with sustainability issues, and advocate for curriculum flexibility and resources to support meaningful integration of SDGs into the Business Studies classroom (Conway et al., 2021; Mahat et al., 2016).

As a Business Studies teacher the emphasis on teaching methods, in particular active learning and its alignment with SDGs, holds significant implications for good practice. The Junior Cycle Business Studies curriculum incorporates learning outcomes directly related to sustainable development and SDGs, ensuring that teaching and learning activities relevant to ESD take place in Business Studies classrooms. Furthermore, teachers have the opportunity, based on their interests, abilities, and resources, to integrate content related to SDGs into teaching outcomes that may not explicitly mention sustainable development (NCCA, 2018).

In addition, the outlined future direction of ESD and the alignment of SDGs necessitate several key considerations for good practice. Firstly, collaborative culture is crucial for effectively addressing challenges related to SDGs implementation (Wright et al., 2022). In addition, professional development opportunities are also important for teachers to fully understand ESD and learn how to integrate SDGs into teaching practices effectively (Take 1 Programme, 2024).

This ensures that educators are equipped with the necessary knowledge and skills to impart sustainable development concepts to their students.

It is also important for good practice to be aware of the limitations and shortcomings of SDGs in order to promote quality education and sustainability. It is essential for advocates of SDGs to acknowledge the profound lack of political will hindering progress towards key objectives such as poverty alleviation, economic equality, gender parity and mitigating climate change (Alston, 2020). As educators it is important to understand that new strategies are required to emphasise empowerment and accountability (Alston, 2020). Lastly, by supporting policy integration, teachers can advocate for the integration of ESD into school policies and well-being programmes (Take 1 Programme, 2024), contributing to the creation of a school-wide culture emphasising environmental stewardship and social responsibilities (Department of Education and Skills, 2024).

Chapter 3: Evaluating My Practice Through the Lens of the Literature

Review

3.1 Introduction

As I reflect on my practice through the lens of the literature review, I believe that active learning methods can be utilised to strengthen good practice in incorporating ESD and aligning SDGs into a Junior Cycle Business Studies classroom. This chapter will examine how my teaching practices contradicts or resonates with the literature discussed in the literature review, while outlining the impact of incorporating SDGs into my lesson planning in Junior Cycle Business Studies classes throughout the two years of my PME. The data set used in this inductive analysis is a mixture of post-lesson reflections from teaching first and second-year Business

Studies and entries from a reflective journal consisting of general observations or interactions with members of staff on the topic of SDGs in both PME Year One and Year Two. In PME Year One, I conducted my teaching practice in an all-boys secondary school where very little awareness or discussion about ESD and alignment of the SDGS was implemented within school policy or in the classroom. On the contrary, during my second-year placement in a co-educational community school in south Dublin, the integration of ESD and acknowledgement of SDGs is integrated into school policy with full participation of the 'Take 1 Programme' activities throughout the academic year. During this process of analysis, the following themes emerged:

- Interdisciplinary collaboration for SDG integration.
- Active learning strategies for SDG integration.
- Addressing limitations of the implementation of SDGs in Business Studies and the wider school setting.

3.2 Interdisciplinary Collaboration for SDG integration

I noticed one prominent theme from the literature review, which is the necessity of interdisciplinary collaboration among teachers to effectively integrate SDGs into educational curricula (Harraway et al., 2012). The literature review highlights the importance of collaboration across sectors and disciplines, such as initiatives between schools and universities, e.g. E-Mining@School partnership (Kiely et al., 2021), to successfully integrate SDGs through thematic learning and student-centred approaches (Kiely et al., 2021). At the beginning of my PME Year Two placement during initial staff meetings, I was introduced to the Take One programme and how the school planned to integrate SDGs across subjects through interdisciplinary collaboration.

Tuesday, August 29th, 2023,

Today, during a staff meeting I became aware of the Take One Programme, which exemplifies effective collaboration between schools and third level to integrate SDGs through student focused approaches. I have been obviously aware of SDGs from our inclusive pedagogy lectures; however, it was the first time I had heard any of my placement schools mention SDGs.

I came away from the meeting thinking the school was taking the correct initiative and I felt that I wanted to be an active member of the Take One team within the school to help promote and collaborate with my colleagues about integrating ESD and aligning SDGs into their own subject specific learning outcomes.

I realise that such partnerships offer valuable opportunities for our students to engage deeply with sustainability issues and understand the interconnectedness of various disciplines in addressing global challenges. As a Business Studies teacher, I see the relevance of collaborating with colleagues from other subjects to incorporate SDGs into our lesson planning. By working together, we can create meaningful learning experiences that empower students to become active global citizens contributing to sustainable development.

I noticed that as the academic year progressed and planning for the 'Take One Week' was coming into more focus it started to become clear that some of my colleagues were not as enthusiastic about getting involved with the programme as they may have shown at the beginning of September. Collaboration is often hindered by a lack of time and resources (Hirsch, 2018) and it was becoming clearer that teachers were facing a complex challenge in incorporating SDGs into their classes while preparing for exams (Kwee, 2021).

Wednesday November 8th, 2023.

After our weekly Take One team meeting, it was becoming more apparent that some colleagues were losing interest in collaborating on the topic of incorporating SDGS into their teaching methods. I suggested to the team that perhaps the timing of the Take One week coincided with more immediate pressing matters for certain subject teachers in terms of Leaving Cert project deadlines (PE and Economics projects were mentioned) and the preparation of Christmas exams.

In my understanding, the findings mentioned resonate with the conclusions drawn by Conway et al. (2021) in the literature review. I noticed that limitations were emerging within the school environment, especially concerning cross-subject collaboration and the alignment of SDGs, particularly regarding assessment priorities.

As I reflect on my experiences, I've come to appreciate the significance of interdisciplinary collaboration for successful integration of SDGs into educational curricula is underscored by research findings. Harraway et al. (2012) emphasises the necessity of collaboration across disciplines, as demonstrated by initiatives like the E-Mining@School partnership (Kiely et al., 2021). However, I believe, challenges such as time constraints and competing priorities can hinder collaborative efforts (Hirsch, 2018), highlighting the need for ongoing support and resources to facilitate cross-subject collaboration.

3.3 Active Learning Strategies for SDG Integration

Throughout my two PME school placements I have made efforts to integrate SDGs through diverse active learning methods. I've observed that the Junior Cycle Business Studies curriculum integrates learning outcomes directly related to sustainable development and the SDGs, ensuring that teaching and learning activities relevant to ESD occur within Business

Studies classrooms (NCCA, 2018). This approach ultimately enhances student engagement and participation in the learning process (Prince, 2004) while equipping them with the necessary understanding, skills and attitudes to actively participate in an interconnected world (NCCA, 2018).

As I taught my first-year class, focusing on the learning outcome ‘1.9 Debate the ethical and sustainability issues that arise from their consumption of goods and services and evaluate how they can contribute to sustainable development through consumer behaviour,’ I opted to introduce a walking debate activity. This approach aimed to actively engage students in discussing ethical consumption while emphasising the association of this specific learning outcome with SDG 12 - Responsible Consumption and Production, SDG 17 - Partnership for the goals and SDG 13- Climate Action. Following the debate, I took time to reflect on the outcomes of the activity.

Wednesday October 12th, 2022.

While the walking debate activity successfully engaged students in discussing ethical consumption and sustainable development, it was apparent that some students remained unaware of the direct connection to the SDGs throughout the activity. Despite efforts to emphasise the association between their consumer behaviour and SDGs 12, 17, and 13, there were still gaps in understanding among certain students as to the objective of SDGS.

Similarly, while teaching the learning outcome 2.2 ‘Describe the skills and characteristics of being enterprising and appreciate the role of an entrepreneur in an organisation, in society and to the economy’, I decided to use a think-pair-share activity. This activity involved students

reading various short case studies linked to social entrepreneurship, where they worked in pairs to determine the SDGs associated with each case study. After conducting this activity, I observed a response similar to the previous one.

December 8th, 2023

“In today’s class, I implemented a successful variation of a think-pair-share activity where students worked in pairs to analyse five examples of social enterprises and identify the SDGs most suited to each example by picking and displaying the associated SDGs to the class. Some students struggled to connect more than one SDG to each case study, highlighting the need to emphasise the interconnected nature of SDGs. During the discussion, one student raised an insightful question about the relevance of achieving SDG 16 (Peace, justice and strong institutions) and SDG 2 (Zero Hunger) in light of recent conflicts and humanitarian crises in Gaza and also Ukraine”.

Although I found encouraging aspects in this reflection, such as my student’s successful engagement with the activity and their ability to embrace the connection and responsibility of aligning SDGs with the specific social enterprises, there is also a sense that as these second-year students engage more with ESD and SDGs through active learning, they are becoming increasingly aware of the limitations of SDGs, particularly in addressing systemic issues and emerging challenges (Alston, 2020) such as the recent conflicts in Ukraine and Gaza.

The integration of ESD and alignment with SDGs within the Business Studies classroom reflects both promising practices and areas for improvement, as evidenced through the lens of my literature review.

Active learning strategies show potential in engaging students with sustainability issues and SDGs, aligning with best practices highlighted in the literature. However, upon reflection, I recognise the importance of reinforcing connections between student activities and the broader context of SDGs (Eiliam & Trop, 2010). Additionally, as my students become more aware of the limitations of SDGs in addressing systemic issues, it becomes evident that deeper exploration and critical understanding within the classroom are essential (Alston, 2020).

3.4 Improving SDG Implementation in Business Studies and School Settings

To overcome some of the limitations of integrating SDGS in my Business Studies classroom, it is necessary to address them within the broader school context. One example is providing resources and support for teachers to integrate SDGs into their teaching methods effectively (Take 1 Programme, 2024).

November 15th, 2023

“Today, I spent the afternoon distributing SDG posters to teachers for display in their classrooms. I did so to increase the potential impact they could have on raising awareness of the 17 SDGs ahead of the school’s Take One week. These vibrant posters serve as a gentle reminder to integrate the SDGs into teaching methods, fostering a culture of sustainability within our school community. I hope that by having these posters prominently displayed and to serve as a reminder to integrate the SDGs into their own teaching methods”.

In addition, I would suggest collaboration among teachers from different subjects to incorporate SDGs into various learning outcomes which could also encourage more awareness of willingness to integrate SDGs into their own teaching.

November 21st, 2023.

“Today is the second day of the Take One week. I decided to write on the teaching and learning wall in the staff room to invite other teachers to my second-year business studies class where I plan to incorporate a group work activity where students will be tasked with developing a business idea that addresses a specific social or economic issue related to reduced inequalities (SDG 10). It was great to see some of my colleagues come to my classroom and hopefully this will encourage them to integrate the SDGS into their own classroom”.

In conclusion, my efforts to tackle limitations in the broader school setting, such as distributing SDG posters and encouraging collaboration among teachers, align with recommendations from the literature. These initiatives aim to foster a culture of sustainability within our school community and support educators in effectively integrating SDGs into their teaching practices (Take 1 Programme, 2024).

Looking ahead, I recognise that ongoing reflection, collaboration, and support are essential for enhancing the integration of ESD and alignment with SDGs in my Business Studies classroom. By addressing challenges and building on successes, I can empower my students to become proactive global citizens who contribute to sustainable development.

Chapter 4: Conclusion

4.1 What I Have Learned from This Study

Reflecting on my practice through the lens of the literature review has provided valuable insights into the integration of ESD and alignment with the SDGs within the Junior Cycle Business Studies curriculum. The literature emphasises the importance of active learning

methods (Prince, 2004), interdisciplinary collaboration (Harraway et al., 2012), and addressing limitations in implementing SDGs (Conway et al., 2021). Throughout this process, I have recognised the significance of collaboration, the challenges faced in integrating SDGs, and the potential impact of active learning strategies on student engagement and understanding of sustainability issues.

Through this extensive literature review, several significant insights have surfaced regarding the integration of ESD and alignment with SDGs within the Junior Cycle Business Studies curriculum. Firstly, it is evident that ESD and SDGs are vital components of GCE, highlighting the interconnectedness of social, economic, and environmental issues (UNESCO, 2015; United Nations, 2015). Scholars emphasise the necessity of collaborative approaches among educators, interdisciplinary integration, and active learning strategies to effectively engage students with sustainability concepts and cultivate critical thinking skills (Prince, 2004; Harraway et al., 2012). Moreover, the literature underscores the challenges faced by educators in integrating ESD and aligning with SDGs, including limited teacher knowledge, curriculum constraints, and the necessity for professional development opportunities (Conway et al., 2021; Mahat et al., 2016). However, successful initiatives like the Take 1 Programme exemplify promising practices in integrating SDGs across subject areas and fostering a culture of sustainability within educational institutions (Take 1 Programme, 2024).

4.2. What Does This Mean for My Own Practice?

Drawing from the insights gleaned from the literature review and my reflective practice to date, there are several avenues for advancing my own practice in integrating ESD and aligning with SDGs. Firstly, I aim to embrace active learning methods as a means to bolster student engagement and deepen their comprehension of SDGs in Business Studies. Additionally, fostering collaboration with colleagues across various disciplines presents an opportunity to

infuse SDGs into cross-curricular projects, amplifying their impact across the school community. Furthermore, I recognise the importance of addressing challenges and limitations in implementing SDGs by advocating for resources, providing support, and raising awareness within the school environment. Finally, I commit to a process of continuous reflection on my teaching practices, seeking to adapt strategies and approaches to continually enhance the integration of ESD and alignment with SDGs in my teaching methods for Junior Cycle Business Studies.

4.3 How Has the Dissertation Shaped My Thinking?

At the beginning of this dissertation journey, I initially only perceived educators improving their own teaching methods as an attempt to rectify the perceived 'problem' of insufficient awareness and understanding among teachers, students and school management, which obstructed the seamless integration of SDGs into school curriculum. However, through an extensive review of literature and introspective analysis derived from my teaching practice, my comprehension of integrating ESD and SDGs within the Junior Cycle Business Studies curriculum has significantly evolved. Firstly, the literature underscores the pivotal role of collaborative approaches among educators and the utilisation of active learning strategies to effectively engage students with sustainability concepts (Prince, 2004). Moreover, my reflective diary entries from my own teaching practice shed light on the practical challenges encountered in implementing SDGs within educational settings, including time constraints and competing priorities (Hirsch, 2018). Nonetheless, initiatives like the 'Take 1 Programme' exemplify promising practices in fostering a culture of sustainable practice within schools (Department of Education and Skills, 2022). This journey through my dissertation has profoundly reshaped my perspective by highlighting the critical importance of collaboration, active learning, and ongoing support in advancing sustainability education. Looking ahead, I

am steadfast in my commitment to embracing these insights to refine my teaching practice and play a crucial role in preparing students to become active global citizens capable of addressing the complex challenges of sustainable development.

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