

Towards powerful geography education: A curriculum case
study analysis of Irish and Maltese secondary schools

By

Ryan McCarthy

A dissertation presented in the Faculty of Education at the
University of Malta for the Degree of Masters in Teaching
and Learning

June 2021



L-Università
ta' Malta

University of Malta Library – Electronic Thesis & Dissertations (ETD) Repository

The copyright of this thesis/dissertation belongs to the author. The author's rights in respect of this work are as defined by the Copyright Act (Chapter 415) of the Laws of Malta or as modified by any successive legislation.

Users may access this full-text thesis/dissertation and can make use of the information contained in accordance with the Copyright Act provided that the author must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the prior permission of the copyright holder.



L-Università
ta' Malta

FACULTY/INSTITUTE/CENTRE/SCHOOL Faculty of Education

DECLARATIONS BY POSTGRADUATE STUDENTS

Student's Code 1703872

Student's Name & Surname Ryan McCarthy

Course Masters in Teaching and Learning

Title of Dissertation

Towards powerful geography education: A curriculum case study analysis
of Irish and Maltese secondary schools

(a) Authenticity of Dissertation

I hereby declare that I am the legitimate author of this Dissertation and that it is my original work.

No portion of this work has been submitted in support of an application for another degree or qualification of this or any other university or institution of higher education.

I hold the University of Malta harmless against any third party claims with regard to copyright violation, breach of confidentiality, defamation and any other third party right infringement.

(b) Research Code of Practice and Ethics Review Procedures

I declare that I have abided by the University's Research Ethics Review Procedures. Research Ethics & Data Protection form code _____.

As a Master's student, as per Regulation 58 of the General Regulations for University Postgraduate Awards, I accept that should my dissertation be awarded a Grade A, it will be made publicly available on the University of Malta Institutional Repository.

Ryan McCarthy
Signature of Student

RYAN MCCARTHY
Name of Student (in Caps)

06/06/2021
Date

Acknowledgements

First and foremost, I would like to express my deepest gratitude to my mentor for this research study, Dr. Glorianne Borg Axisa,, B.A.(Hons)(Melit.), P.G.C.E.(Melit.), Dip.Geog.(Milan), M.A.(Melit.), Ph.D.(Lond.). Without her guidance throughout the master's program, this research study would not have been possible. She devoted much of her free time to provide me with much guidance throughout this study, and her insight was very helpful.

I would like to also give special mentions to two important individuals who helped guide me throughout my Masters, a special thanks goes out to Dr. Stephen Schembri, B.Ed. (Hons),Ph.D.,(C.Biol),.M.(I.Biol).for his guidance in helping me develop as a teacher, as well as Clara Buttigieg, who provided much support throughout my teaching practicums across these two years.

A special thanks must also be given to the support I have gotten from my own family in Ireland, who would provide me with much emotional support, especially so over the course of the coronavirus epidemic over the last year and a half.

Table of Contents

Acknowledgements.....	3
List of abbreviations.....	8
List of tables.....	9
List of figures.....	10
Chapter 1 – Introduction	11
1.1: The purpose and vision of the research study	11
1.2: The inspiration behind the study	11
1.3: Research aims	13
1.4: Differences between the educational systems in Ireland and Malta.....	14
1.5: The development of the Irish secondary educational system.....	15
1.6: The development of Geography education within the Irish Secondary school educational system:	20
1.7: The Background of the Maltese secondary educational system.....	24
1.8: Geography education within the Maltese secondary school educational system..	28
Chapter 2 – Literature Review.....	31
2.1: Defining what is a curriculum and its purpose.....	31
2.2: “Knowledge of the Powerful”	35

2.3: “Powerful Knowledge”	36
2.4: The differentiation and specialisation of knowledge	41
2.5: Young’s advocacy for social justice.....	43
2.6: The curriculum arguments of John White: Contesting “Powerful Knowledge”	46
2.7: White’s advocacy for an aims-based curriculum.....	50
2.8: “Towards an aims-based curriculum”: A key text analysis.....	51
2.9: The overarching vision of White and Reiss’ aims-based curriculum model.....	59
2.10: Comparing White and Reiss’ aims-based curriculum model to young’s theory of “powerful knowledge”.....	60
 Chapter 3 – Powerful knowledge and its application to Geography education.....	 61
3.1: Threats facing geography education in the present.....	61
3.2: David Lambert and powerful geographical knowledge: The Future 3 curriculum for Geography.....	66
3.3: “Powerful Knowledge” within the discipline of Geography.....	70
 Chapter 4 – Methodology.....	 73
4.1 The epistemology	73

4.2 The comparative case study	76
--------------------------------------	----

Chapter 5 – An analysis of the Irish and Maltese secondary school curriculum frameworks in respect to the curriculum arguments of White and Young.....	77
--	----

5.1: Comparing the Senior Cycle curriculum framework with the geography syllabus.....	78
---	----

5.2: Contrasting the curriculum vision with research findings from academia	83
---	----

5.3: Curriculum vision and assessment within the revised 2015 Junior Cycle framework.....	84
---	----

5.4: Comparing and contrasting the Junior and Senior Cycle curriculum frameworks in Irish secondary schools	87
---	----

5.5: To what extent are the arguments of Michael Young and John White present within the Irish curricular frameworks?.....	89
--	----

5.6: Introducing the National Curriculum Framework in Malta.....,.....	93
--	----

5.7: The grounding of the vision of the National Curriculum Framework.....	94
--	----

5.8: The aims and assessment within the Learning Outcomes Framework.....	100
--	-----

5.9: To what extent are the arguments of Michael Young and John White present within the curriculum frameworks in Maltese secondary schools?.....	104
---	-----

Chapter 6 – An analysis of national standardized assessment in Ireland and Malta..	106
--	-----

6.1 The weakness of a teacher-centric system.....	107
---	-----

6.2: Reviewing the SEC and MATSEC assessment models in Maltese schools.....	108
6.3: Conclusions drawn from the current challenges facing geography education in Irish and Maltese secondary schools.....	109
6.4: The importance of key skills for students progressing beyond secondary education.....	110
6.5: Epilogue to key arguments from academia to modernise Irish and Maltese secondary and post-secondary curricula and assessment models.....	112
6.6: Expanding curricular reforms towards Leaving Cycle and sixth form.....	113
Chapter 7 – Conclusions	115
7.1: Key research findings of this study.....	115
7.2: Limitations of this research study	118
7.3: Recommendations for further reading.....	118
7.4: Final comments	119
Bibliography.....	121

List of abbreviations

DES	Department of Education and Skills
ESRI	The Economic and Social Research Institute
EUROGEO	European Association of Geographers
LOF	Learning Outcomes Framework
MATSEC	Matriculation and Secondary Education Certificate
MEDE	Ministry for Education and Employment
MTL	Masters in Teaching and Learning
MUT	Malta Union of Teachers
NAPD	National Association for Principals and Deputy Principals
NCCA	National Council for Curriculum and Assessment
NCF	National Curriculum Framework
NMC	National Minimum Curriculum
OECD	The Organization for Economic Co-operation and Development
PME	Professional Masters in Education
SEC	Secondary Education Certificate

List of tables

Table 1: Statistics of students taking Leaving Certificate and Junior Certificate geography..... 24

Table 2: Extract of the questionnaire conducted by O’ Leary & Scully (2018), on to what extent did the leaving certificate provide 1st-year university students with skills needed for university..... 111

List of figures

Figure 1: The breakdown of the Geography syllabus for Junior Cycle (1989)	21
Figure 2: The breakdown of the Geography syllabus for Senior Cycle (2003)	22
Figure 3: Hours spent doing homework or studying on weekday evenings	81
Figure 4: Bloom's taxonomy pyramidal model for progression of thinking	91
Figure 5: The eight learning areas of the National Curriculum Framework (2012).....	96
Figure 6: The six cross curricular themes of the National Curriculum Framework (2012).....	98
Figure 7: Interview extracts from Maltese secondary school geography teachers on the limitations facing geography education	104

Chapter 1: Introduction

1.1: The purpose and vision of the research study

The purpose of this research study is to examine the curriculum arguments of Michael Young and John White and to examine to what extent are their recommendations found within the national curricula put in place within secondary schools in Malta and the Republic of Ireland. This study will provide a window into the current status of geography education not only within the context of Ireland and Malta but will also include a global perspective, it will take into consideration existing curricula frameworks in place as well as teaching techniques commonly practised in classrooms in both countries. This dissertation will also discuss why Young and White sought to establish arguments for alternative curriculum models within the educational system. The fundamental theories that will underpin this thesis will be Michael Young's theory of "powerful knowledge" and the theories of John White and his argument for an aims-based curriculum model. In conclusion, an examination of national secondary school curricula in both Ireland and Malta will then be conducted to determine the extent to which White and Young's recommendations are reflected within the policy documents in both countries.

1.2: The inspiration behind the study

The primary motivation for creating this study finds its grounding in a society where the value of our educational system is becoming increasingly analysed under the microscope. Newspaper articles from sources such as the Irish Times have questioned whether the educational system in Ireland is failing their students (O' Brien, 2017), and Maltese politicians such as the Hon. Minister Evarist Bartolo, former Minister for Education and Employment, have spoken out

against the “unjust” educational system in Malta, in a critique where Bartolo (2016) highlights that Malta registers one of the highest rates of early school leavers in the European Union. Baumann (1998, 2006, 2005 in Sultana, 2011) further argues that in developed countries, governments have reneged on their responsibilities and have instead implemented educational changes to fit the needs of the market economy (p. 182). Idris et al. (2011) further note the importance of education to our society, as “*Education is generally seen as the foundation of society which brings economic wealth, social prosperity and political stability*” (p. 434).

Modern times have shown demographic changes in the age ranges to which people are attending university and a greater emphasis on learning as not only accessible in youth but also as a lifelong experience. O’Brien (2020) states that business employers in recent times have lamented the lack of skills required by graduates to navigate the future workplace, with only 13% of Irish employers believing graduates are well equipped in this regard. Their frustrations have been laid at the feet of the Irish educational system, where it is noted that students coming through the system lack essential soft skills such as communication and problem-solving. In Ireland and Malta, there is evidence within policy documents, that governments are seeking to change and innovate the national secondary curricula within their schools (see *National Minimum Curriculum* (1989, 2000), *A National Curriculum Framework for all* (2012), *Framework for Junior Cycle*, (2015)). Furthermore, both states have sought to modernize and improve teaching quality with teachers now requiring a two-year Master’s degree in teaching, instead of previous qualification criteria only requiring a single year postgraduate certificate. In Malta however, some teachers are currently teaching without a master’s degree, and the obligatory requirements for possessing a master’s degree is currently not ratified into law. Since 2014, Irish universities have offered the Professional Masters in Education (PME) for postgraduate teacher training (Rickard & Walsh, 2019, p. 313), whereas in Malta, the Masters in Teaching and Learning (MTL), has been offered by the University of Malta since 2016

(Caruana, 2016). As governments in both countries have reflected and are actively attempting to modernize their curriculum models in secondary schools, with this in mind, this study seeks to provide a detailed analysis of the theoretical arguments found within the writings of Michael Young and John White, as well as their various debates.

1.3: Research aims

With context given to the purpose, vision and inspiration behind the construction of this study, the focus of this dissertation will be reflected in the structure of two key research questions.

1. To what extent are the writings of John White and Michael Young reflected within contemporary curricula in Malta and Ireland
2. Do the programmes of work in Ireland and Malta allow for the national curriculum to be reflected clearly within the classrooms of secondary schools, with specific reference to school geography.

This study will primarily use primary sources from government bodies responsible for providing education, government agencies, and insight from both respective countries' legal acts and constitutions to answer these key research questions. This research study will further be contextualized through contributions from academia, who will provide supporting insight into the educational systems in Irish and Maltese secondary schools, with a specific focus on geography education. This research study will also make meaningful use of data collection from archives in both Malta and Ireland to determine the extent of the prominent student uptake of the subject within secondary schools in both countries.

A necessary disclaimer that should be noted, is that due to the comparative nature of this thesis, a brief overview must be provided to demonstrate the differences and similarities that exist between both the Irish and Maltese educational systems. In this regard, I will briefly compare

and contrast the age ranges of students attending secondary school in Ireland, as well as secondary and post-secondary in Malta, when students in both respective countries face nationwide assessment.

1.4: Differences between the educational systems in Ireland and Malta

The age range of students attending secondary school

In the Republic of Ireland, students begin compulsory education at Primary school, from there onwards, they will progress to secondary education and then further proceed to tertiary education. Students attending secondary school typically are between the ages of 12 and 19 years old, and students attend secondary school for six academic years. It is important to note in this regard, that in the Republic of Ireland, there are no sixth-form institutions in contrast to Malta.

In Malta, students begin compulsory schooling in primary school, and progress to secondary school, students may proceed to post-secondary or tertiary education. Students in Malta begin secondary education at 10-11 years old and finish secondary school at 15-16 years of age.

Years of major nation-wide state examinations

In the Irish secondary school educational system, the six academic years are divided into two separate three-year cycles, these being the Junior Cycle, where the curriculum covers the first three years of secondary school, and the Senior Cycle, where the curriculum covers fourth year to sixth year. In the concluding years of each respective cycle, students sit for nationwide examinations to assess the student's knowledge for those specific three-year cycles. These state examinations are the Junior Certificate, which assesses syllabus content from 1st to 3rd year, and the Leaving Certificate assesses syllabus content from 5th to 6th year. In this regard, the

Irish Junior Certificate functions similarly to the SEC exams in Malta, and the Leaving Certificate functions similarly to the Maltese MATSEC examinations. The 4th year of secondary school, known as “transition year”, is considered an optional year and can be skipped in some schools, and is an academic year where student’s focus more on vocational education and greater involvement in extra-curricular activities.

One must note that in Malta, although all sixth form students sit for the MATSEC examinations, sixth form colleges may choose to approach the syllabus through a variety of means (MEDE, 2017, p. 49). Although there is a distinction between secondary school and sixth form, I will include a brief analysis of MATSEC assessment following the breakdown of to what extent can the curriculum arguments of Michael Young and John White be present in the geography secondary school curriculum. The justification for this decision is that both the Leaving Certificate in Ireland and the Maltese MATSEC examinations, which is taken at sixth form, both serve as nationwide assessment for student progression to university education.

1.5: The development of the Irish secondary educational system

To understand how the current secondary school system in Ireland operates, it is imperative that this study provides contextualization on the historical development of the secondary school curriculum in Ireland and gives context to geography education in the context of broader curriculum reforms. The grounding for the Irish educational system at both Primary and Secondary level, owes its origins to the events following the declaration of the Republic of Ireland in 1949. The aftermath of independence would lead to a change in educational policy as the government would seek to ground the educational framework within the context of the Irish Constitution, which was constructed in 1937. Article 42 of the Irish Constitution, would form the basic principles of Irish educational policy and to this day, remains the basic educational policy used by the government in outlining the role of the government in the

context of education in Ireland (O'Reilly, 2012, p. 240). O'Reilly quotes article 42.4 in this regard, as the article declares that

“The State shall provide for free primary education and shall endeavour to supplement and give reasonable aid to private and corporate educational initiative, and, when the public good requires it, provide other educational facilities or institutions with due regard, however, for the rights of parents, especially in the matter of religious and moral formation”. (p. 240)

Article 42.3 would further outline the role that the state plays within education in Ireland, as article 42.3 defines the rights of private, faith-run schools and State-run schools, with the state formally noting the religious freedom of parents and students in their choice of schools without interference from the state. (Constitution of Ireland, 1937b)

The Irish educational system is notable in some aspects, as most primary and secondary schools are not under the ownership of the state, with the majority privately owned, usually under the stewardship of church authorities or religious orders (Department of Education and Skills, 2012, p. 1). The state's role in education, is that of stewardship, with the Department of Education and Skills (DES) providing funding to schools and providing prescribed curriculum frameworks and syllabi to be followed within all schools in Ireland (p. 1). This is in keeping with section 3.2 in Article 42 of the Irish constitution, which outlines the state's responsibility in ensuring that *“the children receive a certain minimum education, moral, intellectual and social.* (Constitution of Ireland, 1937b)

The roots of much of the modern history of Irish secondary school assessment can be traced to the implementations of the intermediate education bill (1924), where the Irish government outlined assessment within Irish secondary schools. This bill came following the aftermath of the Irish Free State's formation in 1922, which had recently won Dominion Status from the British Empire following the conclusion of the Irish War of Independence in 1921. The bill's

outcome is salient to modern Irish assessment, as the bill would establish two sets of certification examinations in secondary schools. The intermediate certificate would serve as the certificate required to enter “*a variety of professional workplaces*” (House of the Oireachtas, 1924) and would assess students after three to four years, and would eventually merge with a separate vocational certificate (known as the day group certificate), to form the Junior Certificate in 1989. Meanwhile, the Leaving Certificate functioned much as it does in the present day, with the certificate assessing students’ knowledge over two years, and was designed as the necessary qualification for further advancement to university education. (ibid)

In the decades following the intermediate amendment bill (1924), Mulcahy (1981, in Hogan, 1983), states that during this time, the state of education at secondary level was left “*in a chronic condition*” due to the neglect of educational committees’ failure to provide aims or a clear purpose for secondary level education (p. 41). The “rules and regulations” policy documents which are issued annually by the state, and form guidelines for secondary schools under the stewardship of the state, (Department of Education and Science, 2004, p. 4), are critiqued by Mulcahy (1981, in Hogan, 1983) in this regard, as the documents would “*year on year*” either fail to provide a purpose for secondary level and would offer vague purposes to the certification examinations (p. 42).

With the advent of the 1960s came a change in the political landscape, as under the stewardship of Sean Lemass as Taoiseach (prime minister), much of the “old guard” of Irish politics who had been in government since the early days of the Irish free state, was replaced with a new generation of younger politicians (O’Reilly, 2012, p. 251). Under the new government, several inquiries into the Irish educational system were made, and investment rose exponentially, with the budget devoted to education increasing by 500%, from £8.5 million in 1950 to almost £78 million in 1970 (p. 253). Donogh O’ Malley, the Minister for Education at the time, would in

1966 further bolster secondary education, with an announcement of the abolition of fees for secondary and vocational schools, and a pledge made to provide transport services for primary and secondary schools (p. 254). This reform would directly lead to a drastic increase in schools in rural areas, and students attending post-primary education. O'Brien (2017), would highlight the importance of the reform's legacy where he states that

“At the time, about a third – or 17,000 children – who finished primary school were dropping out of education; at 15 years of age, fewer than 50 per cent were still in full-time education. By 16, only 36 per cent were still at school. Within a decade of the policy change, participation rates in second-level had doubled”. (p. 254)

O'Reilly (2012), notes that towards the end of the decade, questions surrounding the Leaving Certificate's reliability had led to proposed reforms. In 1968, this would cumulate in a change to how the Leaving Certificate was graded, with results determined on a points per grade basis. O'Reilly critiques this decision, as the reform had now made the examinations high stakes and very competitive (p. 259). For Leaving Certificate, this model of grading persists to the present day.

The 1980s would prove a challenging decade for Irish educational reform, as the decade's economic recession would see eight different ministers for education as Ireland saw several governments collapse during the recession (Department of Education, 2021). However, one outcome from the 1980s would prove significant as in 1989, assessment would see further changes at lower secondary level. The 1989 reform, would see lower-secondary assessment simplified, as the reform discontinued the intermediate certificate in academic secondary schools, and the group day certificate at vocational schools, and would replace them with a single certificate that would be known as the Junior Certificate (O'Reilly, 2012, p. 260), to which is still in place in today's lower secondary schools.

Towards the turn of the 1990s, the Minister for Education of the day, Séamus Brennan, on the back of a recent OECD (Organisation for Economic Co-operation and Development) report on the standard of teaching in Ireland, would call for educational reform in the country, with a green paper titled “*Education for a changing world*” in 1992. Minister Brennan would call for a pedagogical shift throughout Irish education under the pretext that

“knowledge and skill, both totally dependent on the education system, have become increasingly the dominant factors of wealth and job creation. This increased economic importance of learning is already a powerful catalyst in promoting a culture of lifelong learning in most developed countries. This is a shift in emphasis which in itself creates a substantial demand for change. Education cannot respond to tomorrow's challenges with the answers to yesterday's problems.” (House of the Oireachtas, 1992).

Coolahan (2007) would outline the importance of this document, noting that the desire for a pedagogical shift within the green paper, would manifest itself in the first formal written document on post-qualification induction training for teachers, and the recommendation for the creation of a teaching council, to ensure quality control within the teaching profession. (pp. 9-10).

However, despite these changes within the green paper and the attempt by the Irish government to instil a modern style of pedagogical practice into the Irish secondary school system, Doyle (2019) comments that the Junior Cycle reform of 1989 and another attempted reform in 2000, would fail to materialize. Doyle attributes these failures to the lack of meaningful reforms at Senior cycle level, which was the gatekeeper for further progression to tertiary education (p. 317). Gleeson (2010, in Doyle, 2019) notes that there were criticisms that examinations had become the key driving force within secondary level education and acting as a detriment to the curriculum, pedagogical innovation and student experiences (p. 4). With such an emphasis on

assessment placed on a single set of high stakes examinations, teachers were found to treat Junior Cycle as a “*test-run*” for Senior Cycle, and found to favour rote learning and used the examination papers as their syllabus. (p. 3). It became evident that reforming the assessment model would become central to any meaningful reforms in the Junior Cycle framework, and as such was noted by the NCCA (The National Council for Curriculum and Assessment) as one of their major recommendations in their review of the Junior Cycle in September 2011. In October 2012, the Minister for Education of the day, Ruairi Quinn, would announce the launch of a new curriculum framework for Junior Cycle that would promise to completely revolutionize the way Junior Cycle would be taught (p. 2). The framework in the words of Doyle “*disrupted the purpose of Junior Cycle as a trial run for the Leaving Certificate alone and called for an identity for lower secondary within itself*”, to challenge the system that did not wish to engage with change. (p. 4). This new Junior Cycle curriculum framework would be formally introduced in 2015, and remains the curriculum framework in place for lower-secondary to the present day, with reviews currently being conducted to enact similar changes to Senior Cycle. A more in-depth study on the current curriculum frameworks in use for Junior cycle and Senior cycle, will be covered with context to the curriculum arguments of John White and Michael Young in Chapter 5 of this research study.

1.6: The development of Geography education within the Irish Secondary school educational system

As noted by the Association for Geography Teachers in Ireland (AGTI), along with the changes to the intermediate certificate in 1989, a revision of the syllabus to Geography education came. Critiques were made against the old Geography syllabus, with AGTI noting that the prescribed curriculum had been made too long and lacked precision and detail. With the changes in 1989,

came a revision to how Geography was taught, with Geography education at Junior and Senior cycle level primarily broken up into separate sections. (Waddington, 2011, p. 20)

Figure 1:

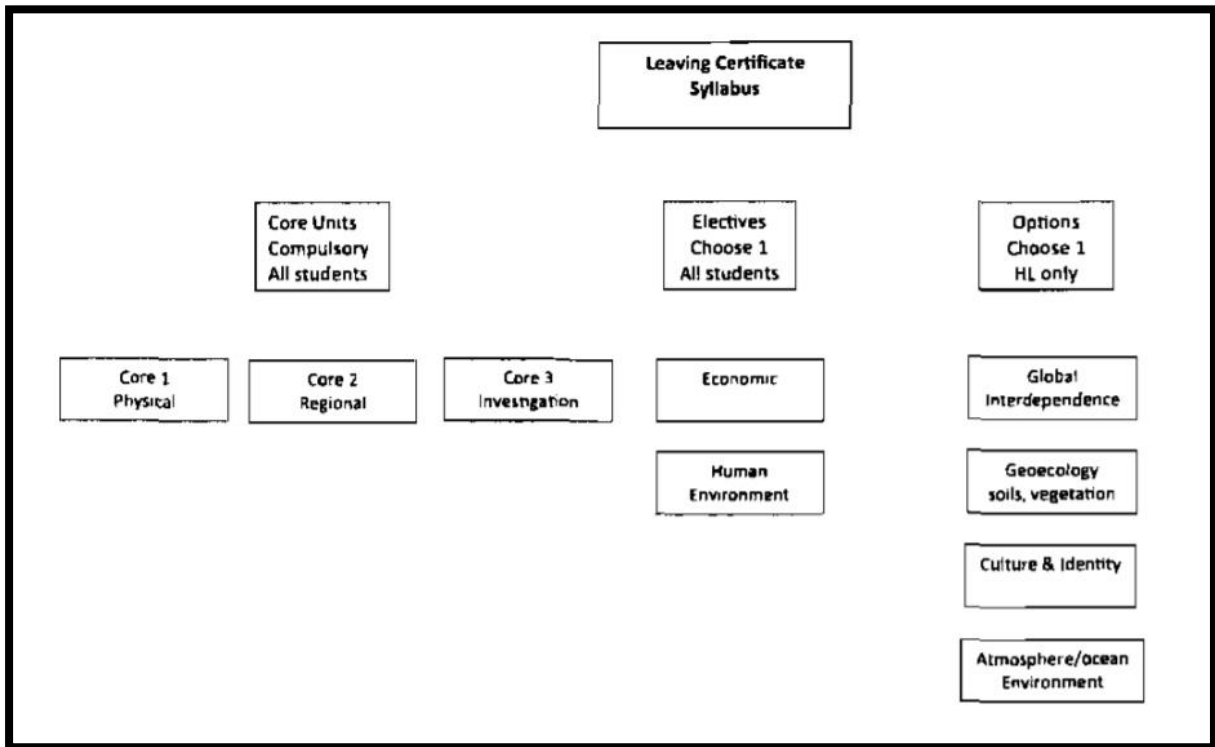
The breakdown of the Geography syllabus for Junior Cycle (1989) (Waddington, 2011)

Section	Units
A: The human habitat- processes and change	<ol style="list-style-type: none"> 1. The Earth's surface: shaping the crust 2. The restless atmosphere: the heat engine 3. The workings of our life support system
B: Population, settlement patterns, and urbanisation	<ol style="list-style-type: none"> 1. Population – distribution, diversity and change 2. People on the move 3. Settlement: changing patterns in where we live – villages and towns 4. Urbanisation: changing patterns in where we live - cities
C. Patterns in economic activity	<ol style="list-style-type: none"> 1. Primary economic activities: the Earth as a resource 2. Secondary economic activities; building resources into products 3. Tertiary economic activities: facilitating our use of resources 4. Economic inequality: the Earth's resources – who benefits?

Junior Certificate Geography would have its syllabus divided into three separate sections, these would be labelled under physical, human and economic Geography (p. 21)

Figure 2:

The breakdown of the Geography syllabus for Senior Cycle (2003) (Waddington, 2011)



In 2003, the revised Junior Cycle syllabus would be further built upon in the Senior cycle syllabus, with syllabus content on physical geography, regional geography, economic or human geography, with the option of one out of a range of elective units at higher level. (p. 23)

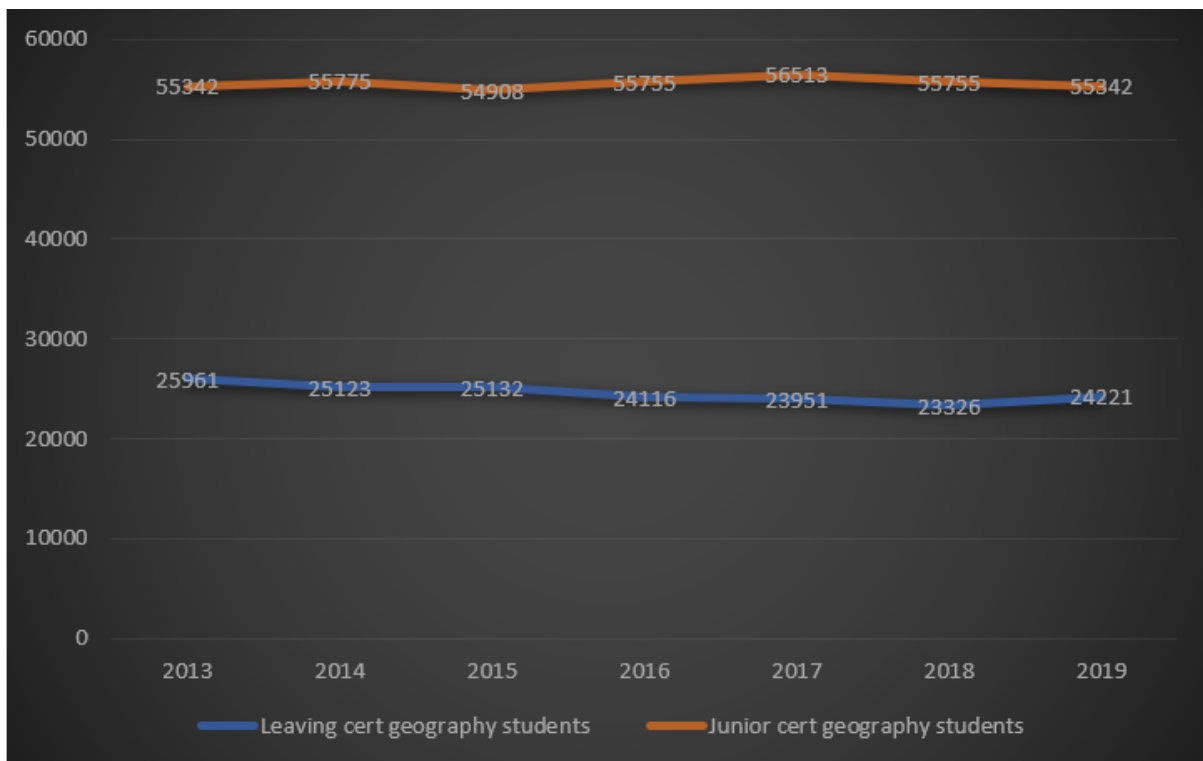
Initial reaction to these reforms was positive, with Waddington (2011) quoting one teacher's response to the Junior certificate reforms as *"awaited with outstretched arms by the second level teaching fraternity" (Sherwood, 1988). He considered that 'the new syllabus appears refreshing, stimulating, and definitely encouraging and worthwhile for students studying the course' and he welcomed the inclusion of a definite commitment to fieldwork within the programme."* (p. 22)

Despite several interventions by governments in the humanities subjects such as Geography, in reducing the number of years that students must take Geography education from three years

to one, Geography still registers some of the highest uptakes in student numbers at Junior and Senior cycle level. Figures from the State examinations commission demonstrate that students at Leaving Certificate level, regularly register over 23,000 per year, with Junior Certificate students regularly registering 55,000 or more per year. Only Biology and French match Geography in student uptake outside of the core three subjects of Irish, Maths and English. This is despite no Irish University requiring a student to have Geography for entry to any course, whilst many courses at Irish Universities require a student having completed a science subject or a foreign language at leaving certificate level.

Table 1:

Statistics of students taking Leaving Certificate and Junior Certificate geography



Student uptake of geography for both junior certificate and leaving certificate has remained consistent throughout the years. It consistently registers some of the highest student numbers for subjects not obligatory for all students throughout their secondary education such as Irish, Maths and English. Many have questioned the diminishing status of geography in Irish schools in the face of such promising figures. (The data for this chart was obtained from statistics obtained from the State Examinations Commission statistical archives for the years, 2019, 2018, 2017, 2016, 2015, 2014 and 2013. (See State Examinations Commission, 2021)).

1.7: A background of the Maltese educational system

Malta saw much of its modern historical secondary school development after the advent of national independence in 1964. Cutajar, (2007), notes that since the formal declaration of independence for the Maltese islands, the countries educational sector has gone through several

revolutionary reforms, with events from the last thirty years playing a particularly significant role in the formation of today's Maltese secondary school curriculum framework (p. 4). Cutajar further notes that the purpose of these reforms was to *“augment the country's intellectual capital and provide improved quality education that will help all Maltese children succeed”* (p. 4). Improving the national intellectual capital has always been a priority the Maltese governments. This can be reflected in Malta's history of curriculum frameworks, with both national curriculum models, the National Minimum Curriculum (NMC)(2000) and the National Curriculum Framework (NCF)(2012) both underlining the importance of developing the student for employment and active citizenship.

Below are some examples of direct references to the importance of the economy within both national curriculum frameworks.

“The educational system should prepare students for the world of work by helping them to develop knowledge and acquire information about:

- the different sectors of the Maltese economy*
- the global economy and how this affects the Maltese economy*
- the changing work environment in an information society*
- different workplaces and the required skills” (MEDE, 2000, p. 59)*

“The development of Malta's vision as a high value-added knowledge and service base economy, as well as becoming one of the leading Member States in implementing the EU 2020 Strategy, will not be achieved if the NCF isolates itself from the nation's economic aspirations and goals.” (MEDE, 2012, p. 7)

The NMC, would see its introduction in 1999, and be prescribed to the state across State, Church and Independent schools, at both private and secondary level, and would mark Malta's first national curriculum since the advent of independence. However, the curriculum framework itself would be borne out of the education act (1988), which would define the role of the government in the provision of education within the state. Cutajar adds on this point wherein the act, the government would outline three notable points within its role in the provision of educational services, where it is the right and duty of the state to

1. *“ensure the existence of a system of schools and institutions accessible to all Maltese citizens for the full development of the whole personality including the ability of every person to work”*
2. *“establish the national minimum curriculum of studies for all schools”*
3. *“to secure compliance with the National Curriculum Framework of studies and the national minimum conditions for all schools.”* (p. 5)

The Hon. Former Minister for Education Louis Galea, within the NMC, would note that the primary focus of the framework, was to be centred on the child, with the NMC promoting a holistic education for all, a push to encourage lifelong learning within students, and to promote global perspectives across the framework, in a society that had been increasingly globalized at the time (pp. 26-27). This is noted further by Bonello (2018) where she states that throughout the history of educational developments in Malta, educational reform was always preceded by a change within society (p. 10), this would be further proven with the NCF (2012) as will be analysed further on within this study.

Curmi (1994) provides a fine study on the implementation of the NMC and is recommended for a more in-depth analysis on this curriculum framework. In his research study which

investigated how the framework was being implemented into the classrooms in secondary schools, an important outcome of his research, was that within Maltese classrooms, it was found that the curriculum recommendations, were not successfully implemented in Maltese secondary schools. In a series of interviews conducted by Curmi with Secondary school teachers, it had become apparent that teachers had frequently replied that they either had no knowledge of the framework recommendations or had never known of the existence of the framework (p. 24). Furthermore, it was found that as much as 40% of the teachers interviewed, had not known of the existence of the NMC (p. 24). Curmi highlights in this regard, that within Maltese secondary schools, the new curriculum “*had changed nothing in any fundamental way*” (p. 24). Curmi further provides evidence supporting this claim, where out of the 60% of teachers who had read the curriculum framework, 48% of that 60%, had chosen not to implement the new curriculum framework within their classrooms. When one considers the 48% who decided not to implement the new curriculum, and the 40% of teachers who did not know of the curriculum frameworks existence, this only leaves a small minority of teachers (12%) out of a total of 306 teachers, who were implementing the new curriculum in their classrooms (p. 27). Curmi concludes in this regard, that no argument can be made for the national minimum curriculum being effective in classrooms, if only 12% of teachers were implementing the curriculum (p. 27). Curmi would attribute the failings of the NMC in Maltese secondary classrooms to three critical factors.

1. Ignorance of the existence of the curriculum framework, to which Curmi argued was the fault of the government, for lack of stakeholder involvement from teachers (p. 31)
2. Teachers felt pressured to adequately prepare students for tests and cover the syllabus content load. This led to a majority of teachers choosing to learn the syllabus and teach to the test. (p. 30)

3. Teachers were too attached to their method of teaching (i.e., teacher-centric), and had been unwilling to deviate from how they had been teaching throughout their profession (p. 30)

These failings will prove important later in the research study, as a greater in-depth analysis will be conducted on the NCF, which replaced the NMC, in Chapter 5.

1.8: Geography education within the Maltese secondary school educational system

Within the Maltese educational system at secondary level, geography enjoys the status as a core entitlement subject under Humanities as one of the eight learning areas in the NCF. This, in turn, means that students in years 7 to 11, have geography education in their timetable (Borg Axisa, p. 104). In state schools, geography is offered at years 7 and 8 as an individual subject, but in the upper secondary years, is placed under the umbrella subject known as “Environmental Studies”, where students also partake in studies in History and Social Studies (p. 104).

Borg Axisa (2018) further provides a critique of the framework of geography education within Maltese secondary schools as she makes the argument that within the National Minimum Curriculum (NMC), the framework contains a language policy statement, stating that the language of instruction in state schools for History and Social Studies, was to be conducted in Maltese (p. 104). This has been reaffirmed in the NCF (2012), as language constitutes one of the key learning areas of the framework, with English being deemed a language of importance culturally (p. 34), and Maltese being highly important for instilling Maltese national identity and pride (p. 60). The government policy document titled “*Language education policy profile*” (2015) further details that the increasing use of Maltese as the language of instruction, is specifically aimed at promoting Maltese identity through language (p. 22). This created a problem within Environmental Studies, with Geography education being omitted from a

change in the language of instruction (Borg Axisa, 2011, p. 104). At present, Geography is being encouraged to promote Maltese speaking also under its status as a “bilingual subject” (p. 76). This has led to problems within Malta’s ever-increasingly diverse population, as state schools are not as homogenous as they once were, with Borg Axisa (2018) noting that during the scholastic year 2014-2015, there were 1109 international students in state schools, although with the population has increased exponentially, with (Debono, 2021) noting a 700% increase in international students (non-Maltese) in state schools since 2011.

This inherently creates an issue with the language of instruction being enforced by the state, as the curriculum does not reflect the practical realities of Malta’s ever-growing multicultural population. Debono, (2021) in this regard, further notes that whilst state schools in Cottonera only register a 3.1% portion of students being non-Maltese, this rises to as high as 36% in the state schools surrounding the Sliema and St. Julian’s area, with St. Clare’s registering the highest portion of international students in the country. In a school where over 1/3rd of the student population are not Maltese, one can make the argument that the practical realities of having a large portion of the student population not being fluent in Maltese, constitutes a problem when faced with the language of instruction being Maltese for History and Social Studies, and bilingualism being promoted in Geography.

The issue of language is not the only problem facing Geography education in Malta however, as in contrast to the strong student uptake in Geography education in Irish secondary schools, student uptake for the Secondary Education Certificate (SEC), show that Geography uptake is not as strong as in Ireland, when comparing Geography to other optional subjects on offer. In 2020, a statistics report from the University of Malta (2020) on student uptake per subject in SEC exams for that year, had 41 different subjects on offer, and out of those 41 subjects, Geography would place 25th in the subjects with the most student uptakes.

Debono (2019), further adds to the difficulties facing Geography education at secondary school level, where students in non-state schools, might only receive geography under the umbrella subject of environmental studies, or after year 8, they might not choose to take on Geography as an optional subject, thus leaving their geographical knowledge at a basic level. (p. 14).

This leaves Geography education in a position where its future as a distinct discipline within the Maltese secondary school curriculum faces challenges. As Geography faces a crisis of status of having to preserve the discipline from being absorbed altogether into a catch-all subject of Environmental Studies and facing ever shorter allotments in the timetable dedicated to the field, these will be issues further explored within this research study in Chapter 3

Chapter 2: Literature Review

This chapter will primarily detail how we define a curriculum and the purpose of why we have a curriculum, and show insight into the curriculum arguments of Michael Young and John White. Researchers within academia across the disciplines, have promoted theories and engaged in debates, as to how national governments should structure their curricula for the future. Contemporary curricula have been put under the microscope and examined for their relevancy for the present, and to what extent are they applicable to real-world scenarios. Moreover, contemporary curricula have also been called into question as to what extent are they promoting and encouraging students to partake in their own education and be lifelong learners. Two notable researchers contributing to developing theories for a modernized curriculum framework, are Michael Young and John White. Michael Young has contributed immensely to the debates on modernizing curriculum frameworks, with his theory of “powerful knowledge”. White meanwhile, has contributed heavily through his arguments with Michael Young, using his model of an aims-based curriculum as a counterpart to Young’s theory of “powerful knowledge”. Along with White and Young, within geography education, David Lambert is a highly influential scholar in curriculum development and has drawn influence from Young, as to how “powerful knowledge” can be present within Geography Education.

2.1: Defining what is a curriculum and its purpose

As this study seeks at its heart to provide an analysis on the curriculum models in Irish and Maltese secondary schools, it is salient that this study first defines how we might define a curriculum. John Dewey in this regard, is an influential educational theorist, and is highly regarded in his work within academia surrounding education. In his book “The child and the curriculum” (1906), Dewey highlights the personal experience of the child as living “*somewhat*

in a narrow world of personal contacts, with things hardly coming within their experience unless they touch” (p. 8). Dewey further highlights that the conception of the child’s world at this time, extends only to their local area. This is further developed by Dewey where once the child is introduced to the curriculum, their life of learning knowledge through personal experiences, is replaced by facts and laws, and the scope of their world is expanded *“as far as the bounds of the solar system, where his little span of personal memory and tradition is overlaid with the long centuries of the history of all the peoples.”* (p. 9).

Dewey highlights that throughout the learning process, the personal experiences of the student’s own memories and traditions should be essential towards delivering the curriculum, as it is the child’s pre-existing knowledge that unifies the different types of knowledge being learned (p. 9). For Dewey, the instruments of the curriculum serve the needs for the growth of the child and to develop them, and this is made clear in a statement provided by Dewey, where he makes the argument that in the curriculum

“The child is the starting point, the centre, and the end. His development, his growth, is the ideal. ... To the growth of the child all studies are subservient; they are instruments valued as they serve the needs of growth. Personality, character, is more than subject matter. Not knowledge or information, but self-realization, is the goal. To possess all the world of knowledge and lose one’s own self is as awful a fate in education as in religion.” (p. 13)

The influence of Dewey can be felt in the works of modern educational theorists, such as Paulo Freire, as much of the arguments made by Dewey of how a curriculum can be defined and how a curriculum model should be implemented, can be found within Freire’s own arguments. Freire, in (Mahmoudi et al. 2014), reiterated the arguments of Dewey that *“curriculum planning is a people-oriented process in which the starting point is the people,*

and their expectation and wants, and is an ongoing process which is done through mutual participation from the teachers and students.” (p. 88).

Although the arguments made by Dewey for how we should define the curriculum and the purpose for having a curriculum have often been quoted and reaffirmed by many leading academics, Mulenga (2018) states that there is still a difficulty in finding an overall accepted consensus from within academia for how we define a curriculum (p. 14). Mulenga (2018) develops on this point further by detailing that when defining a curriculum, there are discrepancies involved, as educational theorists have differentiated between types of curricula, such as the prescribed curriculum and the hidden curriculum. Mulenga notes in this regard, that Ellis (2011), has provided examples of definitions from academics on how we can define the curriculum, with these examples relating to the formal curriculum prescribed by the state.

“Tyler (1949) stated that curriculum is all the learning experiences planned and directed by the school to attain its educational goals”.

“Print (1993) defined a curriculum as all the planned learning opportunities offered to learners by the educational institution and the experiences learners encounter when the curriculum is implemented”

“Ragan (1960) defined a curriculum as all the experiences of the child for which the school accepts responsibility”.

“Brown (2006) stated that a curriculum is all the student school experiences relating to the improvement of skills and strategies in thinking critically and creatively, solving problems, working collaboratively with others, communicating well, writing more effectively, reading more analytically, and conducting research to solve problems”.

“Silva (2009) viewed a curriculum as an emphasis on what students can do with knowledge, rather than what units of knowledge they have, is the essence of 21st century skills.” (pp. 14-15)

Baujard (2013) and Qu (2018) further delve into the debates surrounding the purpose the curriculum should serve for those studying under it, as Baujard (2013) and Qu (2018) argue the case of utilitarianism as a key driving force behind modern curriculum. Baujard (2013) notes that utilitarianism in itself is a historical philosophy, with origins dating back to the 1700’s and fully articulated in the 1800s (p. 2). Baujard defines utilitarianism as not only concerned with ethical, moral or political philosophy, but also as a philosophy of action. In the context of education, we will focus on the later application of utilitarianism as a philosophy of action. Baujard states in this regard the interpretation of utilitarianism as a philosophy of action, as being concerned with how *“individuals seek to promote their own utility, such that utility appears as both an explanation of and a guide for human action”*. (p. 2)

Qu (2018) explores further the application of utilitarianism within education where he argues that what drives the thought behind predominant curriculums and materials is driven by the competitive job market (p. 172). One can argue that in this regard, utilitarianism is present in the NCF in Malta, where it was remarked in the framework that it was salient that the NMC (2000) and NCF (2012) prepare students for employment and active citizenship (see page 21). Furthermore, this relates back to the argument made by Baumann (1998, 2006, 2005 in Sultana, 2011) where he argued that in developed countries, governments had implemented educational changes to fit the needs of the market economy (p. 182). Qu (2018) states that in the present, it is noted that a primary task of education, is to evolve into *“training students’ professional accomplishment and technical expertise for a large range of occupations in tight labour markets”* (p. 172). An example of this in practice, was the formal introduction in 2012, of bonus additional points for students who sat the Leaving Certificate Higher level (advanced) paper in

Mathematics. This was incentivised to promote students engaging in application-focused mathematics, and to further promote the number of students taking STEM (Science, Technology, Engineering and Mathematics) subjects at university level (Duffy, 2018). Qu (2018) outlines the effects of having utilitarian driven educational systems, where he quotes that

“Teachers have to keep to those educational policies cajoled by politicians and business leaders to design teaching process and compile teaching materials in order to prepare students to be ready for job responsibilities and superiors’ instruction against time, but never cared about their own individual developments and personal demands”. (pp. 171-172).

2.2: Knowledge of the powerful

Within the academia surrounding the sociology of knowledge and the creation of curriculum models, it can be contended that one of the most contentious aspects within this academic field, is defining what constitutes knowledge and what types of knowledge should be produced within the curriculum. Michael Young, an academic who has contributed much towards this field, writes extensively on the sociology of knowledge creation and schools as centres of learning and specialized knowledge. Within the academia surrounding educational theory and curriculum development, one of the most influential and heavily debated theories amongst researchers, is Michael Young’s concept of “powerful knowledge”.

In Young’s, article “*What are schools for?*” (2007), Young makes the distinction between two different types of knowledge, that of the “knowledge of the powerful”, and “powerful knowledge” (p. 150). For Michael Young, knowledge is deeply sociological, Young defines the importance of the school as a place as a historical struggle and argues that during the 1970’s it was accepted amongst educational theorists, that the place of the school was to teach the working class their place within society (p. 149). Young further comments that very few working-class students successfully made it to universities prior to that time during this period.

This becomes reflected within Young's definition of the “knowledge of the powerful”, as it is the knowledge prescribed by authority figures and what “counts as knowledge”. Young further relates this to the historical struggle of the school as a place, where he notes that knowledge of the powerful, refers to those in authority who have access to higher knowledge (p. 150). It is stated however by Young, that “knowledge of the powerful” tells us nothing about knowledge itself, and thus sought to define knowledge construction through his theory of “powerful knowledge”. In Young and Muller’s article “*on the powers of “powerful knowledge”*” (2014), Young and Muller seek to examine and further define the theory of “powerful knowledge”.

2.3: “Powerful knowledge”

Bonello, (2018) states that the term ‘“*powerful knowledge*”’ is grounded in the sociology of education, and came about when sociologists started theorizing about how we think sociologically about knowledge. In their arguments, Young and Muller (2013), further highlight the sociological grounding of knowledge construction and assert that the process of knowledge creation is inherently influenced by the social (p. 230). Maude (2016) provides insight into how Young himself would come to define powerful knowledge, with Young (2008, 2013 & 2014) defining powerful knowledge’s characteristics as to . . .

- Discover new ways of thinking
- Better explain and understand the natural and social worlds
- Think about alternative futures and what they could do to influence them
- Have some power over their own knowledge
- Be able to engage in current debates of significance, and
- Go beyond the limits of their personal experience (p. 72)

Maude (2015) provides further various quotations from Young, in his descriptions for what he deems as “powerful knowledge”, and what “powerful knowledge” can do for the individual. These can be seen in the below examples.

1. *“Powerful knowledge” refers to what the knowledge can do or what intellectual power it gives to those who have access to it. “powerful knowledge” provides more reliable explanations and new ways of thinking about the world and ...can provide learners with a language for engaging in political, moral, and other kinds of debates. (Young, 2008, p. 14)*
2. *“Knowledge is ‘powerful’ if it predicts, if it explains, if it enables you to envisage alternatives” (Young 2014, p. 74)*

What can be outlined in the examples provided by Maude (2015, 2016) for how Young (2008, 2013, 2014) defines the characteristics behind powerful knowledge, it can be argued that “powerful knowledge” as a concept is fluid in its grounding, with different explanations for how powerful knowledge can be defined. Young (2013) accepts within his paper *“on the powers of powerful knowledge”*, that one of the challenges that underpin his theory of “powerful knowledge”, is that “powerful knowledge” as a theory is not tied to a specific discipline, but instead is multi-disciplinary, and as such can be found within the humanities and sciences (p. 230). This has led to criticism over the theory of “powerful knowledge”, as scholars such as John White have critiqued the lack of a solid theoretical grounding for “powerful knowledge” and the criteria for which we can consider knowledge to be powerful.

David Lambert, an English educational theorist who specialises in geography education, further develops on the ideas of Michael Young’s theory of “powerful knowledge” and seeks to examine the purpose of the curriculum in the development of young students. In his paper, *“Who thinks what in geography classrooms? Powerful disciplinary knowledge and curriculum futures”*, Lambert (2017) highlights that schools are explicitly concerned with preparing the

students for adult life as well as their futures, and quotes Fred Inglis (1985), that curricula can be interpreted as a “*message to and about the future*” (p. 4). Lambert (2017), much like Young, shares concern with the state of curriculum modelling he observes in the present, and states that the primary purpose of his paper, was to explore Bernstein’s (2000) statement that students have the “*pedagogic right*” to be given access to what Michael Young defines as, powerful disciplinary knowledge (p. 1). Lambert (2014a, in Maude, 2016) would further define the capabilities of powerful knowledge, where Lambert determined powerful knowledge to be

“Knowledge that is created by specialist communities or disciplines: all knowledge is a human construction, but powerful knowledge is made in accordance with some rigorous and demanding procedures and practices, put in place to test knowledge claims potentially to destruction. These state of art epistemic practices are established to ensure that knowledge created is reliable and truthful: indeed, that it is the best it can be” (Lambert, 2014a, p. 7, in Maude, 2016, p. 71).

Lambert (2017) develops further on the curriculum arguments of Michael Young through the concept on “the three futures” of curriculum model making; these three futures are referred to as Future 1 (F1), Future 2 (F2) and Future 3 (F3). Lambert (2017) develops further on the concept of the three futures, by first defining what he calls, the F1 approach to curriculum modelling. F1 is the curriculum structure which is most prevalent in our schools at present and what Lambert (2017) defines as the default curriculum model (p. 3), it is the system of teaching and learning which is heavily teacher-centric, and the process of learning for students is heavily transmissive from teacher to student. The teacher is seen as the focus of the classroom, whose responsibility is to provide to the students, vast amounts of knowledge, Lambert (2017) metaphorically highlights such a practice as akin to a student’s mind being “*an empty bucket waiting to be filled*” (p. 3). This was observed in Chapter 2, where for much of the history of curriculum development for the Junior and Leaving Certificate in Ireland, due to the curriculum

being dictated by the assessment framework, students in this scenario did not play a prominent role in the development of their own learning. Instead, students were relegated to being recipients of knowledge, with no knowledge as to determine how that knowledge was created, as well as the absence of skills to determine the validity or strength of the knowledge they received. Lambert (2017) details that despite national governments recognising the negative aspects of this curriculum model, the F1 curriculum model has found itself quite resilient to widespread change.

Although Lambert (2017) highlights that for teachers and policy-makers, who see the system as heavily outdated and are eager to distance themselves from what is deemed a “19th-century approach” to schooling (p. 4), there is an approach to move from F1 and a movement towards what Lambert (2017) defines as an F2 curriculum model. Lambert (2017) defines F2, as a curriculum model that opposes the F1 model, eschews the teacher-centric transmission of knowledge from teacher to student, and instead seeks to implement a skills-based approach to education (p. 4). Lambert (2017) highlights examples of F2 curriculum innovations, where integrated subjects and problem-solving learning become favoured, and utilises such theoretical examples such as geography becoming geo-media or science becoming science literacy. F2 seeks to establish at the heart of its curriculum that developing a student’s skill-set for the future, such as digital literacy and problem-solving skills, would benefit the student for adult life once they leave school (p. 5). Lambert (2017) provides an important critique of the F2 approach to curriculum making, as Lambert argues that the curriculum’s focus on developing a student’s skills, are not for the benefit of the student’s own wellbeing, but are for the benefit that the student can bring as a participant within a fast-moving, capitalistic society (p. 4). Lambert (2017) details this further with example to a document published by OECD titled “*Schooling for Tomorrow: Think Scenarios, Rethink Education*” (2004). Within the report, the document critiques the F1 approach to schooling and instead advocates for a

curriculum which prepares students for what is called “the information age” (p. 10-11), further contained within the report are details of projects and movements made by national governments towards an F2 curriculum model (p.14). Within the report, one such example of a skills-based movement promoted by a national government, is the FutureSight project, promoted by the United Kingdom government, that aims “to build capacity for futures thinking through practical applications to help school leaders shape, not just guess at, the future.”, and includes specific objectives such as analysing where trends are moving in the future, and prepare student’s accordingly (p. 15). This skills-based F2 approach to curriculum modelling is further reflected within the curriculum framework of the NCF (2012) in Malta, where cross curricular themes such as digital literacy, co-operative learning and building entrepreneurial skills form the groundwork of the curriculum (p. xiv). As such, what becomes apparent in the F1 and F2 curriculum models, is that neither approach is grounded in what Lambert would define as “powerful disciplinary knowledge”, with F1 being teacher-centric, and F2 following a skills-based approach to curriculum planning. Lambert instead, would advocate for geographical thinking as the centrepiece for his arguments for GeoCapabilities as the grounding for an F3 approach to education. GeoCapabilities would promote geography education grounded within specialized disciplinary knowledge, where students would develop the capabilities to analyse geographical processes around them and envision new possibilities in their observations of the world. The F3 curriculum will be given its own analysis in chapter 3, where an application of powerful knowledge to geography education in particular will be examined.

Michael Young makes the argument for “powerful knowledge” to be involved in schools' curriculum and argues the point that “powerful knowledge” allows students to understand and analyse the world around them once they finish formal schooling. This lies in contrast to much of what we see in current school systems, where much of the curriculum encourages students

to rote-learn much of what is given to them in the curriculum and in many cases, holds no meaning to the student in the context of their own lives. Young further calls for the importance of social justice in providing “powerful knowledge”, as Young argues that schools are the centres for which students are given access to “powerful knowledge”. Young argues that the place of the school should be where students of all socio-economic backgrounds and ethnicities, can have equal access to knowledge which may help them progress further in their own life.

2.4: The differentiation and specialization of knowledge

The influence of Durkheim and Vygotsky are further reflected in Youngs works, as Young contends that within the differentiation of knowledge, there must be a process where knowledge can be consistently challenged and revised to determine the “best-ness” of knowledge, and what can be considered the knowledge that is deemed powerful and the most reliable for that moment in time (p. 236).

Young, would further seek to define “powerful knowledge” through the sociological theory of knowledge differentiation, a theory with clear influences from the works of Emile Durkheim, who would differentiate between knowledge and experience in a critique of Kant. Young would develop this further, where Young notes that Durkheim initially used the sacred/profane distinction to describe the separation of religion and everyday life in the primitive societies he studied (p. 41). Durkheim would argue that the everyday conceptual and social differentiation (the profane) from the spiritual systems which allowed people to speculate about the afterlife (the sacred), would become the social basis of science, philosophy and other forms of knowledge (Bachika, 2015, p. 162).

This is further reflected in his paper when Young himself states that the ideology behind his theory owes a debt to the works of Emile Durkheim (1858 – 1917), a renowned sociologist, as

well as the works of Lev Vygotsky (1896 – 1934), an educational theorist, who holds an undeniable influence within the academia surrounding educational theories (p 230, 235). This can be seen clearly in Young and Muller’s paper, as Young quotes Durkheim’s arguments, that because of the social nature of knowledge construction due to the social influences with humans, knowledge itself can be differentiated, and that not all knowledge is considered of equal status (p. 234). Young would further highlight the arguments of Durkheim, in that Durkheim asserted that the solid foundations of knowledge are rooted in reality, and that reality is inherently social (p. 235). Much like Durkheim, Vygotsky would differentiate knowledge, between two concepts, that of which is the theoretical knowledge, and everyday knowledge. Vygotsky argues that the school curriculum’s task is to provide students with access to theoretical concepts across the disciplines. Vygotsky then argues the place of a two-way complex pedagogic process where the learner’s everyday knowledge is shaped by the pedagogic, and this is as a result of engaging with the theoretical, or scientific knowledge present in the curriculum. Meanwhile, the other process involves the student taking the theoretical knowledge from the curriculum and using that knowledge to transform their everyday experiences (p. 235). As a result, as we have seen, it is clear that the social aspect of knowledge creation is shared between Durkheim and Vygotsky and together, these theorists’ arguments of the sociological process of knowledge creation and the theory of the differentiation of knowledge, would clearly influence the works of Michael Young, and be reflected within Young’s theory of “powerful knowledge”.

Young argues this type of knowledge as specialized disciplinary knowledge, because such knowledge has undergone processes of examinations and revisions. For this reason, Young argues the concept of knowledge differentiation and the fact that because some knowledge undergoes examinations and revisions, these pieces of knowledge become elevated and considered of greater worth than other pieces of knowledge based on the personal experiences

(p, 230, 236). Such knowledge is often further contained within specialized individual disciplines such as Mathematics, the sciences and the humanities. To demonstrate how specialized knowledge can be powerful, Young utilizes the example of STEM research knowledge, Young argues that having specialized knowledge to conduct STEM research, opens up possibilities for new alternatives to be explored (p. 232), if we take the second quotation provided by Maude for how Young defines the capabilities of “powerful knowledge”, one can contend that this type of knowledge would be considered powerful. Young, however, argued that not all specialized knowledge can be regarded as powerful in the context of everyday living, and that not all everyday knowledge can be considered powerful (p. 231).

Within the definitions that Maude provides for how Young constitutes “powerful knowledge” and how it can benefit people (see pages 35 & 36), Young contends that what makes knowledge powerful, is dependent on the recipient who has access to it. What might be considered “powerful knowledge” to one recipient, might not be considered ‘powerful’ by another recipient. This is developed further by Young, were utilizing his earlier example of how STEM research knowledge, which is specialized, is powerful to a STEM research scientist (p. 232), Young offers the contrasting scenario of a traditional healer, who may have knowledge of local medicines and herbs, which while valuable, would hardly have use for specialized institutionalized knowledge surrounding HIV/AIDS research. This remarks back to Young’s argument that not all specialised knowledge is powerful, as Young (2013) remarks in his paper “*on the powers of “powerful knowledge”*”, that specialist knowledge “*is ‘powerless’ in enabling someone to find their way around which they are completely unfamiliar*” (p. 231).

2.5: Young’s advocacy for social justice

Young reinforces the earlier arguments made by Vygotsky, for the importance of schools as places of knowledge creation, and argues in his book “*bringing knowledge back in*” (2008) that

the current curriculum he saw in the U.K. was inadequate, and the schooling system was failing to provide social justice. Young argues against what he calls “Neo-conservative traditionalism” within education, which advocates that the curriculum is a given body of knowledge, which is to be transmitted to students (p. 19). Young provides three key critiques of what he views within the neo-conservative model

1. The model is too slow in the production of knowledge
2. The model is too inefficient and too elitist to ensure that the majority of the population gain the skills and qualifications they need
3. It is too out of touch with the increasingly competitive global society in which we find ourselves (p. 32)

What is clear to see within these critiques of what he sees as an inadequate curriculum, was that the current model seen in the U.K, was out of touch with the modern needs of society for the production of knowledge, and the reluctance to change the model, has led to elitism, where the majority of the nation, were not getting the skills and qualifications they needed (p. 32). This creates a socio-economic barrier between those who have access to the powerful, specialised knowledge, which is created within the universities and research institutes. One can argue a clear lack of social justice in this regard, as in Malta, the PISA National Centre (2018), attributed those who attend private, fee-paying schools, to have a higher average proficiency in literacy (p, 50) and skills involving the sciences (p. 77) and maths (p. 101), than students attending state schools.

In a separate paper, “*What are schools for?*” (2007), Young reinforces Vygotsky’s previous arguments for the importance of schools. As mentioned previously, In Young and Muller’s paper, “*on the powers of “powerful knowledge”*” (2013), Young asserts that the place of schools, allows children to obtain “powerful knowledge” that they otherwise wouldn’t get in their everyday lives (p. 149). As a place that holds much meaning to Young in transmitting

“powerful knowledge”, Young further details the place of the school and the broader U.K. curriculum, and their importance for students. This paper aims to establish the place of knowledge within the U.K. curriculum, how its value differentiates knowledge, and what gets included within the curriculum and what is excluded. Within the paper, Young makes the argument that the success of the student developing “powerful knowledge” within schools, has much to do with the culture they were brought up in. Young, therefore, argues that in this regard, those brought up in higher socioeconomic classes have an advantage (p. 150). Young advocates for social justice in this regard and asserts that we must regard the curriculum base seriously to ensure that all students across the socio-economic classes have equal access to “powerful knowledge”. As is aforementioned, the curriculum is influenced by key policymakers within governments, and one can raise the question of the contesting of the curriculum and schools in general. Young demonstrates this by what he defines as the struggle for schooling throughout modern British history (p. 149). One must consider, that when analysing the curriculum, that the curriculum can become contested between different interest groups; this is a concern that John P. White would echo in his paper “*The end of “powerful knowledge”?*” (2019).

Thus, as we have seen, Michael Young makes the argument for “powerful knowledge” to be involved in schools' curriculum and argues the point that “powerful knowledge” allows students to understand and analyse the world around them once they finish formal schooling. This lies in contrast to much of what we see in current school systems, where much of the curriculum encourages students to rote-learn much of what is given to them in the curriculum and in many cases, holds no meaning to the student in the context of their own lives. Maude demonstrates how geography education can play a central role in empowering students with “powerful knowledge”, as the discipline contains concepts, both physical and ideological, that can allow students to think geographically about what happens in society around them. Young

further calls for the importance of social justice in providing “powerful knowledge”, as Young argues that schools are the centres for which students are given access to “powerful knowledge”. Young argues that the place of the school should be where students of all socio-economic backgrounds and ethnicities, can have equal access to knowledge which may help them progress further in their own life.

2.6: The curriculum arguments of John White: Contesting Powerful Knowledge

As is aforementioned, Michael Young’s theory of “powerful knowledge” has found itself centre stage not only within academic circles within educational theory and curriculum development, but has also been given attention by key-policy makers within governments. In John White’s paper “*The end of “powerful knowledge”?*” (2019), White writes further on the influence that Michael Young’s theory holds, as White notes that Young’s statement that “powerful knowledge” should be at the heart of the school curriculum”, has been widely received (p. 429). As such, Michael Young’s theory has found itself received in the educational world among academics, heads of school, and policymakers, not only in the United Kingdom but globally. White further notes the influence of “powerful knowledge”, where he gives evidence, that in a September 2018 speech, schools minister Nick Gibb used the phrase four times, saying among other things that ‘*we must ensure that pupils are equipped with both “powerful knowledge” and the skills needed for this century*’ (p. 429).

As is further commented by White, “powerful knowledge” evokes a strong emotional message, and the call for a powerful education for all students, has lent itself to being taken up by policymakers and academics (p. 430). In White’s paper, “*the weakness of “powerful knowledge”*”, White (2018) provides a critique of Young’s theory of “powerful knowledge”, and questions as to how “powerful knowledge” has found such prominence in the field of academia and beyond. The aim of White’s paper , seeks to analyse Michael Young’s theory,

and determine as to whether the theory is well-grounded and is indeed fit to take centre stage within curriculum planning, or alternatively, whether the theory has become a buzzword for policy-makers for their vision of tomorrow's schools.

At the core of White's argument within his paper "*The weakness of "powerful knowledge"*" (2018), White uses the definition of "powerful knowledge", as provided by Young, as a means of deconstructing the legitimacy that Young gives for why "powerful knowledge" should be at the heart of the future curriculum. White primarily highlights the lack of boundaries and solid definition provided by Young, and questions the legitimacy of his theory, as to what extent can knowledge be considered powerful, and what knowledge constitutes as powerful in the first place (p. 326). This is given further weight by White, as White asserts that throughout the course of Young developing his theory of "powerful knowledge", Young's definitions and explanations of "powerful knowledge" are not static but are in flux, and as such, the base and boundaries of the theory have changed consistently over time. White in this regard, defines Young's powerful knowledge in three key ways

1. "Powerful knowledge" is multidisciplinary and its concepts are interrelated across different groups
2. "Powerful knowledge" is powerful when students can understand the world around them and envision new possibilities
3. "Powerful knowledge" is specialised. In other words, it has been developed by clearly distinguishable groups with a well-defined focus and relatively fixed boundaries, separating different forms of expertise (p. 326)

White (2018) contextualises this further as he asserts that Young's definition establishes two key criteria, those two criteria, are that "powerful knowledge" has to do with (1) bodies of knowledge built around their own unique interrelated concepts, and (2) "powerful knowledge"

is specialised and is developed within distinguishable groups. White (2019) argues against the first criteria, as while disciplines such as Maths and the sciences do have subject-specific interrelated concepts unique to the discipline, such a definition has faults when one applies them to a humanities subject such as history (p. 430). White further contextualises this by asserting that much of the concepts found in history can be defined in everyday language and exist outside of specialised institutions and groups. White comments that as Young has revised his definition of “powerful knowledge”, Young has clarified that although subjects such as history and geography would not be at the forefront of “powerful knowledge”, they are centres where “powerful knowledge” is produced (p. 431). White critiques further on the definitions provided by Young, as when White addresses the second criteria, White acknowledges the power in the generation of new ideas within distinguished disciplines, but questions whether all new ideas are necessarily powerful. While White acknowledges that subjects like Maths have their own ‘*sui generis*’ concepts, such as multiplication, White questions the power within subjects such as music and drama and English literature. White (2018) argues that students don’t typically get to experience the deeper understanding behind poets, authors, and music in the school curriculum and instead are provided aesthetic experiences, which aren’t necessarily powerful. White (2018) ultimately concludes that the only subjects that satisfy White’s criteria for “powerful knowledge”, are the sciences and maths, and questions whether the experiences of the social sciences and humanities, can always be considered powerful? (p. 328).

White (2019) summarises his arguments of the weaknesses of “powerful knowledge” with the statement that if there are inherent flaws present when one applies Young’s criteria for “powerful knowledge” to disciplines outside of maths and the sciences, is “powerful knowledge” then relegated to the knowledge one obtains within those disciplines? (p. 435). White has raised many questions as to the validity of Young’s definitions of what constitutes

“powerful knowledge”, and questions to what extent can knowledge and ideas be considered powerful for the recipients.

The backgrounds of these two academics can further contextualise this, Michael Young grounds much of his theory of “powerful knowledge” in its application to maths and the sciences, whilst John White places greater emphasis on the arts, humanities, and social sciences. I would argue that although White states that Young places maths and the sciences as the main centres of the creation of “powerful knowledge”, as a geographer and a historian, I would consider the geographical and historical knowledge I have obtained, as more powerful to me. This remark can be further supported through Young’s own writings as mentioned above on specialised knowledge. As previously mentioned, Young himself highlighted how the recipient plays a key role in the power behind knowledge. In the comparative example between the STEM researcher and the local healer, knowledge could be considered powerful for one recipient, if they had the means to utilise it, but might not be as powerful for another individual. This raises an important question of the extent to which knowledge can be powerful, but the fact that knowledge is powerful depends on the individual receiving the knowledge.

In light of the arguments against “powerful knowledge” given by White (2018, 2019), White provides multiple critiques against the validity of the structure and grounding of Young’s theory of “powerful knowledge”. White (2019) underlines his critique of Young’s theory, as he argues that it is within the public interest, that the validity and grounding of the theory be assessed critically. Without a critical assessment of the theory, White worries that the theory might fall victim to interest groups who may use the theory to promote a curriculum that matches their political agenda, or use the meaning of “powerful knowledge” as a fashionable buzzword, without truly understanding it’s meaning. (p. 435)

2.7: White's advocacy for an aims-led curriculum

In contrast to Young's theory of "powerful knowledge", which White argues as a subject-centric approach to how schools should base their curricula of the future, White instead advocates for an aims-led approach to curriculum planning, and places the importance of the student and the school as the base for curriculum development. In White and Reiss' paper, "*An aims-led curriculum*" (2013), White and Reiss divide their paper into two separate sections (titled Parts 1 and 2). Part 1 of the paper constitutes how White and Young envision the effects of an aims-led curriculum on the individual, and the development of the student in not only their own life, but as a wider part of a democratic liberal society. In part 2, White and Reiss change their focus towards the school as a centre of teaching, and how an aims-based curriculum can be practically implemented into the subjects within the curriculum, and through teaching and learning. In this analysis of White and Reiss' writings on aims-based curricula, I will offer a brief overview of the first half of the paper (Part 1), and will provide a more in-depth analysis in Part 2, into how White and Reiss envision an aims-led curriculum within schools, and how this would benefit teaching and learning within classrooms. The justification for this decision of mine is that Part 2 is most relevant towards answering the research questions, as it directly addresses how White and Reiss envision implementing an aims-based curriculum in the classroom setting.

Reiss and White argue that an aims-led curriculum first and foremost, needs to start with the needs and wants of the students (p. 1). They contend that schools play a central role in the child's development, as they provide to the student, the means to which they can live a flourishing life into adulthood (p. 4). White and Reiss remark that at the most basic level, a school curriculum must equip children in two key ways,

1. To lead a personally flourishing life
2. To help others to do so, too.

2.8: “Towards an aims-based curriculum”: A key text analysis

In part 1 of Reiss and White’s paper, it is argued that Schools should provide the student the means to lead a flourishing life themselves and be able to actively participate in a local and global, active democratic society (p. 2). Furthermore, it is stressed that the role of the school in the student’s development, should also prepare student’s to be an active citizen and contribute with work. Reiss and White argue that schools should aid the student in this regard, by making them aware of the range of vocational possibilities for students, the routes needed to progress down their chosen path, and their advantages and disadvantages (p. 8). These are what Reiss and White call, moral aims, and constitute how the school in an aims-based curriculum, should benefit a child’s development as an individual and as a part of a wider democratic society.

In part 1, Reiss and White further develop on the importance of basic aims, which they argue, are the most basic requirements for a successful aims-based curriculum grounding, and assert that the development of these aims gives way to more specialised aims. Reiss and White demonstrate the complexity of how students can seek fulfilment in schools and what leads to a student being able to flourish as an individual. Living a flourishing life first and foremost in the eyes of White and Reiss, means ensuring that the students basic needs are met, although it is noted that schools don’t have a hand in the provision of much of the students’ basic needs, it is argued that schools can work along with parents to ensure that a child is healthy, is given recognition, security and is given food and shelter (p. 6). Living a flourishing life means the student not only flourishing as an individual, but as a part of a wider society, White and Reiss contend that a child should want to want others (p. 7), and enjoy healthy relationships whether with family, friends or with lovers (p. 12). It is argued that human interaction with others can

enrich the individual's life and help the student become more in touch with their emotions and appreciate the importance of interconnectedness and co-operation (pp. 12-13).

Helping others to lead a flourishing life means being able to partake as an individual in a wider society, and requires the individual to have a knowledge of moral education and knowledge on participation in citizenship. Reiss and White further contextualise this that in a world where religious faith is gradually waning, children must receive a moral education based on disposition. Children thus, should recognise what is seen by society as immoral, such as not lying, or causing harm to others (pp. 26-27). For the final specialised aim for an aims-based curriculum, Reiss and White appeal for an education in citizenship, and the importance of a student's participation as future active citizens in a democratic society. It is argued that to lead a flourishing life within wider society, students should be equipped with egalitarian virtues and recognise that respect should be shown to other people's freedoms, religious beliefs and sexual preferences (p. 29).

Within the wider specialised aims that Reiss and White contend are important educational themes that should be provided to children in schools, it is contended that a student's knowledge of their background is equally as important. It is argued that student flourishing can begin to occur, when the student understands the wider society around them, and can recognise their place within society as a part of a whole. Reiss and White in this regard advocate that students should have the ability to question, and attempt to rationalise the world, recognise the natural and scientific forces that work around them, and be in tune with societal development and the contribution of the arts, literature and events in human history. This will be further explored in my in-depth analyses of part 2, as Reiss and White assert that the background must feature within the physical curriculum (pp. 11-12, 21).

In comparison to what we have seen in Part 1 of White and Reiss' paper, Morgan White (2021) states on his analysis of the paper, that the purpose of part 2 of the paper, seeks to take the skeletal structure of the theory, and put meat on the bones of the theoretical, by examining the practicalities of physically introducing such a curriculum into schools. However, White and Reiss acknowledge that in the current time, the curriculum finds itself intimately tied to politics, and that the purpose of the paper itself is not to replace the national curriculum with their own aims-based curriculum. Instead, what is argued, is that the purpose of White and Reiss' paper, is to instead offer to politicians, a vision of an alternative to the status quo, and implement a curriculum that is based in aims, and is not wholly subject-centric (p. 38).

White and Reiss further detail the ties between temporary governments and the degree of influence that politics has on the curriculum, and advocates that in a liberal democratic society, there should be a commission that can be held for responsibilities surrounding the curriculum. White shows concern for how politicians may become influenced and involved with educational theories, and in his advocacy for a commission, he asserts that this would safeguard the curriculum from what he deemed, political meddling (p. 48). This commission would then in the eyes of White and Reiss, consult with key stakeholders in the learning process, such as teachers and parents, and negotiate the aims that are to be included in the new curriculum. After a continuous process of consultation and providing a defence of the prospective aims of the new curriculum, this recommended aims of the curriculum would then be submitted by the commission to the secretary of state. This new curriculum would then act as a national guideline for all state, church and independent schools in the United Kingdom, as well as free schools. White and Reiss argue that such a curriculum, having gone through this process, would provide teachers with not only a list of aims, but a rationale for these aims, how they can be understood and interpreted, and a means for introducing these aims to the students

in the classroom, which is lacking in the current curriculum in the United Kingdom, in the opinions of White and Reiss. (pp 48-49).

As was stated previously, White and Reiss argue that basic, generalist aims can make way for specialised aims in an aims-based curriculum when required. In these wider reaching, generalist aims, White and Reiss advocated for an aims-based approach that would develop the student to lead a flourishing life and actively partake in a liberal democratic society. In part 2, White and Reiss then analyse the practicalities of implementing such a curriculum into schools and take an approach for introducing an aims-based curriculum into the practicalities of the classroom. A key point of contention in the current curriculum in the views of White and Reiss, is the status quo of many subjects being compulsory for students, and instead argues for diversification in the subject's students can partake in (p. 39). White and Reiss highlight that in the current curriculum, where students have become overburdened with compulsory subjects, students should have the opportunity to diversify their learning opportunities (p. 40). White and Reiss provide a rationale for their argument, in that in a modern age where new sciences and technological subjects are being offered in the curriculum and are growing exponentially in importance (such as ICT and earth sciences), students should have the opportunity to be given the chance to expand their academic horizons (ibid). White and Reiss highlight that this recommendation would lead to a revoking of the privilege of status, that many subjects enjoy in the national curriculum, such as was seen in the case of geography in the Junior Certificate mentioned earlier in this study (p. 39). Reducing the status of subjects such as Geography and History in Ireland led to widespread disapproval not only among teachers of the subjects but also in academia (see Carmody et. al, 2019). White and Reiss further define how a school curriculum can diversify the subjects on offer, by providing to students "tasters" of subjects, where students can take a number of subjects for a small period of time, before making an informed decision over which subjects to take for further study over

a number of years (p. 44). White and Reiss provide such an example with languages, where students can take sample courses in French, German, Spanish or Mandarin Chinese, before making a conscious decision to proceed further with one subject for future study (p. 39). This concept provided by White and Reiss can be seen in secondary schools in Ireland, where students are offered taster subjects in 1st and 4th year (Moynihan, 2015). In one such example, during my studies as a 1st year in secondary school, one took a taster class in Art, technical graphics, music, technology and woodwork for six weeks each. At the end of the academic year, a student would choose one of those subjects, and study that subject for potentially 2 to 5 more years.

One can argue that this approach taken by White and Reiss to diversify the subject's students can take in secondary school, moves away from the subject-centric approach we see all too often in the curricula of today, and instead emphasizes learning as a lifelong process. White and Reiss further support this point by addressing the changing of the age demographics, for students studying in third level education in recent years. It is argued that with the introducing of the English Baccalaureate (EBacc) in the United Kingdom, great pressures are placed on students to take many classes, and to perform well on them to the detriment of their own wellbeing, such as sleep deprivation, anxiety, stress (p. 58). White and Reiss strongly argue that students who have barely reached adulthood are placing their own self-worth solely on the grades they receive in their penultimate examinations. If a student receives good grades, they believe themselves to have good prospects for the future, and often proceed to further education, however, for those students who are not satisfied with their grades, in the words of White and Reiss, these students look to seek salvation elsewhere. White and Reiss strongly disagree with this reality that today's curriculum makes, by arguing that in a world which is seeing more and more mature students either going to university for the first time, or re-enrolling at university later on in their life, this underlines the argument that learning is a

lifelong process. With this climate around us in mind, White and Reiss stress that an emphasis for lifelong learning, which underpins much of the aims within their curriculum arguments, should be given serious consideration, particularly for secondary level curricula.

To achieve the aims that White and Reiss advocate in an aims-based curriculum, it is asserted by White and Reiss that we must have effective assessment that ensures that the proposed aims are being targeted and achieved. Much like we have seen earlier on in this study, White and Reiss, together with other academics, critiques the place of standardized assessment. While they argue that this assessment can measure markable knowledge, it often fails to assess adequately for students' understanding of knowledge and other higher-order thinking skills. In light of this method of assessment that we see are characteristic of Maltese A-level examinations as well as the Irish Leaving Certificate, White and Reiss advocate for an alternative form of assessment that ensures that students are meeting the goals of an aims-led curriculum. White and Reiss provide an envisagement of such an alternative, by proposing the concept of continuous recording of student progress during their schooling (p. 56). The purpose of such records, would be to show the gradual progress that student's make in their gathering and understanding of knowledge (p. 55).

Moreover, the evidence of progression of learning, will then in turn demonstrate how a student has developed as an individual over a period of time. Furthermore, White and Reiss make the argument, that this form of assessment can also be used as a learning tool for student's when the records are electronically kept, as student's can reflect on their own progress, and visually see the process of how they gathered and understood pieces of knowledge. It is further argued that through visually seeing their own progress over time, this form of assessment can further encourage students to further their own learning (p. 56).

Although White and Reiss acknowledge that their reforms would likely prove too radical for politicians to implement (p. 1), they argue that there is a history of attempts to change the curriculum within the U.K. One such proposed reform, was the Tomlinson report, which advocated for removing the GCSE's and instead advocated means of assessment that championed student progression reports, work experience and written assignments (p. 57). It is worth mentioning that White and Reiss themselves state the misfortune that the reform failed to pass, due to the report advocating much of the same recommendations that White and Reiss propose in their own curriculum vision.

White and Reiss further argue that when implementing an aims-based curriculum in the practical environment of schools, it is imperative that teachers have the means necessary to implement and fulfil the desired aims (p. 60), and that the school itself promotes the envisaged curriculum (p. 59). White develops further the school's place by providing a clear picture of what activity goes on in the school, and have it shown, the educational vision that the school sets to achieve, and the ethos that the school itself represents. White and Reiss argue that in this technological age, some schools have yet to utilise the effectiveness of the internet fully and argue that the school can use the internet to provide insight into highlights of class and wider-school activity. This could be further developed through creation of student and teacher blogs, and can be argued by White and Reiss, as an effective means of self-promotion to parents of students and the wider general public.

White and Reiss highlight the place of the inspectors in this regard, as the purpose of the inspector, would be to scrutinize the policy of the school to see how it reaches the desired aims, and to inspect teacher's understanding of aims-based processes, and how this translates into school wide and classroom policies, inspections would be carried out for more generalised aims, and how this is reflected in the activities and policies carried out within the classroom

and wider school environment. White and Reiss raise the argument that for teachers to be able to adopt, implement and fulfil the generalist aims and be able to adapt these aims to become more specialised where needed, teachers must be equipped with the necessary training (p. 60). White and Reiss argue that at present, students complete a one-year postgraduate degree in order to receive a PGCE, and with this degree in the U.K. one can become a qualified teacher. They contend that with prospective teachers only having a single year to be trained to become teachers, student teachers are not given adequate means of implementing an aims-based curriculum in such a limited timeframe (pp. 60-61). In contrast to the current requirements that one must need to become a teacher in the United Kingdom, White and Reiss argue the case for a two-year postgraduate masters in teaching, although it is acknowledged that this would be a recommendation that has repeatedly been denied over the years by politicians. (p. 61). In Malta and Ireland, this is a recommendation already in place, where the Higher Diploma in Education (HDip) was replaced by the Professional Masters in Education (PME) in 2015 (see Rickard & Walsh, 2019). Furthermore, in Malta, the PGCE was replaced by the Masters in Teaching and Learning (MTL) at the University of Malta in 2016 (see Caruana, 2016).

In White and Reiss' (2013) curriculum arguments for an aims-based curriculum, it is argued that at the centre of the curriculum framework should lie the needs and wants of the student (p. 1). In this regard, the advocations for reform by White and Reiss differ from that of Young, and move away from the purely theoretical, and instead seek to implement a practical framework that can be readily implemented physically within the classroom. While Young seeks to provide "powerful knowledge" to students by combining students' everyday knowledge with specialized disciplinary knowledge to empower students to envisage new possibilities, White and Reiss instead advocate to develop the overall self of the student and their own wider place within a societal backdrop. These include developing the student's basic needs, a student's understanding of the backdrop for how society developed, as well as an

education on how to function as part of society and an education on good moral practice. One can argue in this regard that the grounding of the aims-based curriculum approach moves away from the individual disciplines as advocated by Young and instead seeks a holistic approach, with the student's personal development at the centre of his curriculum arguments.

2.9: The overarching vision of White and Reiss' aims-based curriculum model

In conclusion, White and Reiss have proposed an aims-led approach to curriculum development, that seeks at its heart to move away from subject-centred learning, and commit to a lifelong vision of preparing student's to not only lead a personally flourishing life, but to become lifelong learners. This would entail a student developing a sense of self within the backdrop of their place within a wider society, with a knowledge of societal progression, science, nature and human culture and art. Students are then developed as individuals in a manner where they can understand, respect and accommodate how to accommodate themselves within a liberal democratic society, and participate within the workforce actively and in political systems upon leaving formal schooling. White and Reiss argue that in order to achieve this theoretical aim of the vision, it is critical that the teachers, as well as management within the school, receive the education and means to implement the aims, and have the necessary training to ensure that children meet the aims as proposed by White and Reiss. White and Reiss then argue that in order to ensure that the teachers have the means to set and maintain the high standards expected of them by inspectors, the system must ensure that the qualifications needed for the teaching profession, provide the teacher with the knowledge and means they need in which to succeed. For this reason, to ensure that an aims-led curriculum can be practically implemented, White and Reiss advocate for a longer, more-comprehensive qualification, in order to ensure that teachers are equipped with the means to carry out the aims as envisaged by White and Reiss.

2.10: Comparing White and Reiss' aims-based curriculum model to Young's theory of "powerful knowledge"

In contrast to what we have seen with White and Reiss, Young takes an alternate approach to teacher and learning, and argues from an inherently subject-centric approach, that the heart of the curricula for the future, lies at the heart of “powerful knowledge”. Young argues that with “powerful knowledge” that allows students to predict, explain and envision new possibilities, students can become empowered, and apply this “powerful knowledge” to their everyday lives. Powerful knowledge would equip students to challenge the status quo and look beyond their context as a call for social justice. As can clearly be seen, Both White and Reiss, and Young, provide two deeply contrasting visions of alternatives to the current curricula we see in secondary schools in many countries such as Ireland and Malta. However, despite their deep contrasts, both theorists highlight the importance of schools as centres of learning, and advocate the importance of the student actively participating in their own learning. Whilst differing vastly on their own prospective visions, these two theorists agree that a teacher-centred, subject-centric curriculum that promotes ineffective assessment for measuring understanding of knowledge, and higher-order thinking skills, is inadequate for today’s societal needs. The curriculum arguments of Michael Young and John P. White and Michael Reiss have been quite influential in the field of education theory and have promoted much discussion and debate as discussed in the following chapter with insight provided by Lambert (2017) and Maude (2015). In light of what we have seen, the purpose of the learning objectives of this research is to demonstrate to what extent these two theorists' arguments are reflected within the secondary school curricula of Ireland and Malta.

Chapter 3 – Powerful knowledge and its application to Geography education

To make sense of the curricular arguments made within academia for why there should be a change in how geography is taught within the curriculum, it is critical to examine how geography education is taught in the present in many countries, and how students, teachers and key policyholders, view the value of geography education. In contemporary times, it has often been commented through national media, that geography education finds itself in a precarious position towards its status within secondary schools. Media headlines from national newspapers across the globe stating “*Geography declining in many English schools*” (Richardson, 2011), “*The importance hasn’t gone away, calls for geography to be brought back as core subject*”, (Daly, 2019) and “*Australian schools are scrapping history and geography and replacing them with coding classes,*”, (Chang, 2015) show that geography is facing a crisis of status in many societies across the globe

One could say that in its current state, secondary geography education in many cultures finds itself at the precipice. To understand how a discipline with such a long and rich history has found itself in such a precarious position, it is essential to investigate what has led students, teachers, and key decision-makers to become increasingly disillusioned with the place of geography in the present.

3.1: Threats facing Geography education in the present

A problem that has become evident in many states, is the perception of geography as a stale subject that is stagnant, irrelevant and uninteresting. In a study conducted by Smith (2009), where Smith researched year 11 and 12 students and teachers and their perceptions of geography education in Australian secondary schools. Smith’s results found that while students recognized that geography could offer much when finding a potential career, it was noted that

when invited to elaborate on their feelings and experiences of geography, the majority of students were more inclined to speak negatively on the subject, then to say positive things about it (p. ii). Geography was quoted as boring, irrelevant, having a stale syllabus, and the perception that the subject did not contribute to future employment opportunities as much as other subjects did (p. 11).

Much has been said on the current state of the arts, humanities and social sciences all across the education sectors (see Zhang, 2011, Zhou 2020, Harris, 2018), and to what extent are these disciplines are being neglected. Whether it be underfunding, having a syllabus that is out of place with the current time, or in some cases, some subjects not being offered at all. In Ireland, one can see that much of the results from Smith (2009) are also applicable, as the Leaving Certificate syllabus for geography, has not been updated since its initial introduction in 2003 (Department of Education and Science, 2003). This is particularly worrying for Ireland, which has traditionally enjoyed substantial numbers in the uptake of students studying Geography at secondary school until their final exams.

However, in the face of what is seen as a healthy uptake of students pursuing geography to Junior and Leaving Certificate level, scholars and lecturers have questioned the diminishing of the status of geography throughout secondary and tertiary level education. Houghton & Houghton (2016) conducted a study on the effect of powerful outsiders on the status of geography education in Ireland and focused on how influential figures within third level institutions and government affect the provision of geography education in Ireland. In an interview with an individual in an unnamed Irish university, Houghton & Houghton quote the individual as stating,

‘We are down to our last fellow and he is due to retire next year and we will not replace him with a geographer. That decision was taken 4 or 5 years ago . . . We will never have a BA in French, we won’t have a BA in Geography, or a BA in History, we will never have any of those normal subjects as core programmes. They will often appear on programmes, but not in themselves as an entity’ (pp 93-94).

Furthermore, as is aforementioned, geography has not only found itself under threat in third level institutes but is also facing a threat within secondary level education. In response to a decision made by the Minister for Education at the time, John McHugh, to reduce the years of compulsory geography education from three years to one, Irish geographers from six leading Irish universities, wrote an open letter to the government in defence of the importance of geography. Within the letter, it is argued that

“Geography is the only discipline which combines the study of both the natural and social worlds and their interaction. And in a world where there are important national and global issues such as climate change and poverty are present, students need the analytical skills to navigate these wicked problems with multiple causes and interactions, and these skills start within primary and secondary schools.” (Carmody et. al, 2019,).

Karl Donert, president of the European Association of Geographers (EUROGEO) would in a lecture (2009) outline some of the struggles facing geography education at present. Some of the key crises facing geography education were outlined to be

- A failure to provide to students meaningful, relevant geography such as field work and school projects
- Secondary schools and Universities had lost touch of one another
- Teachers employed to teach geography were often not specialists in their field, and instead were qualified in other subjects

- The syllabus in many countries in Europe were found to be overburdened by content, this was found to be apparent in the geography syllabus for Senior Cycle” (Smyth, McCoy & Banks, 2019, p. 14).

Following the demonstration for how geography education can become an important subject for the provision of “powerful knowledge”, it is important also to determine what it means to think geographically. Bonello (2018) notes in this regard in her quotations of Bell (2004), that geography education is often reduced to the delivery of facts, where the public perception of geography is as a subject of facts, rather than interrelating concepts. This has fed into the narrative of geography education portrayed earlier by Smith (2009), where students in Australian secondary schools had often noted their dislike for geography, where the subject content was quoted as stagnant, boring, and irrelevant (p. 11). Bonello (2018) further notes in this regard the insight from Lambert (2006), where he explains that geography’s core knowledge can be considered as geography’s vocabulary (geographical facts), whilst the conceptual framework of geography can be regarded as its grammar (p. 18). Lambert further states in this regard, that it is important to link facts with conceptual knowledge through geographical thought to make connections at different scales between the local and the global. This is what Lambert refers to as geography’s “big ideas” where to make connections, it is essential to utilize geographical vocabulary and concepts to avoid inert information.

In Ireland, ESRI (The Economic and Social Research Institute) (2003) underlines that at the centre of thinking geographically, is the spatial dimension. This is defined further where the document states that

“knowing where something is, how its location influences its characteristics, and how its location influences relationships with other phenomena are the foundation of geographic thinking, such as exploring, analyzing and acting upon things you find” (p. 1).

McDougall (2001) in this regard, further notes the importance of the Geographical knowledge and how it permeates other disciplines, as he quotes a statement from the Rediscovering Geography committee (1997) that . . .

“A central tenet of geography is that location matters for understanding a wide variety of processes and phenomena. Indeed, geography's focus on location provides a cross-cutting way of looking at processes and phenomena that other disciplines tend to treat in isolation. Geographers focus on "real-world" relationships and dependencies....”

Jackson (2006), would also seek to provide contributions to the importance of thinking geographically, as he argued that Geography enables the individual to see the world from a unique perspective, a way of understanding complex problems and thinking interconnectedly at a variety of scales from the local to the global (p. 199). In his arguments for how geographically provides the individual with these capabilities, he argues four concepts contained within geography.

1. Space and Place: the ways space is used and humanised to create meaningful places
2. Scale and connection: the ways in which people and place are connected, from the local to the global
3. Proximity and distance: how technology has in some ways eroded the friction of distance.
4. Relational thinking: how we see the world depends on our perspective. (Jackson, 2006, pp. 199-201, in Bonello, 2018)

Jackson states that whilst the insight he provides argues that thinking geographically is a uniquely powerful way of seeing the world, it does not provide a blueprint for addressing ethical dilemmas or provide easy solutions to complex answers. Thinking geographically,

instead enables the individual to recognise interconnections between concepts, places and scales, that otherwise would be missed by others not empowered with powerful geographical thinking (p. 203). The definition given by Jackson for the capabilities provided to the individual by thinking geographically bear stark similarities to the statements given by ESRI (2003) and the Rediscovering Geography committee (1997) (in McDougall, 2011).

3.2: David Lambert and powerful geographical knowledge: The Future 3 Curriculum for Geography

As was mentioned previously within Chapter 2, David Lambert sought to provide an analysis of Young and Muller's (2010) paper "*Three Educational Scenarios for the Future: lessons from the sociology of knowledge*", which outlined the concept of the three futures. In the previous chapter what became evident was that in his arguments, Lambert (2017) detailed that in many nations, curriculum frameworks are still conforming to an F1 scenario, where education is predominately a process of transmission from teacher to student, where students are limited in the skills and capabilities that they develop, and is a process of learning akin to "*empty buckets waiting to be filled*" (p. 3). One could see this future scenario in action in the investigation into the history of secondary school curriculum development in Ireland, where Doyle (2018) provided a study into the repeated failures of curricular reform within the Junior cycle, where teachers were repeatedly regressing to a rote-learning, teach to the test form of pedagogy due to the inherent issues surrounding how the curriculum was assessed (pp, 2, 3, 4, 317). At Senior level, this remains the case where reforms to the curriculum framework have not been formally introduced since it's last major reform in 1968 (O'Reilly, 2012, p. 259). In contrast to these examples of curriculum frameworks that had operated or still continue to operate in line with the F1 approach, Lambert (2017) argues the case of a subject-led curriculum and asserts that for students to receive a powerful education, the curriculum should

be grounded in powerful disciplinary knowledge, this is what Lambert (2017) refers to as the Future 3 approach, and makes the argument, that ‘curriculum makers’ should work towards a future 3 curriculum.

Lambert (2017) states that while for teachers and key policy-makers, it is important to avoid the F1 approach to curriculum modelling, it is equally important to avoid falling into the trap that the F2 model creates (p. 10). This trap Lambert details, is a curriculum that focuses solely on the future of the student, and what the curriculum wants the student to be able to achieve once they leave school, as was seen in the previous example, some examples of the actions of national government, are not focused on the future of the student’s development in the classroom or their own wellbeing, but instead focus on the student’s future as a participant in the future economy, this trap, is what Lambert defines as Future2ism (p. 5).

Lambert (2014) defines GeoCapabilities, as an educational movement promoted by the European Union, that seeks to adopt the arguments of Amartya Sen, an economics philosopher, and apply his arguments for personal freedoms to geography education (p. 8). Sen’s (1999) primary arguments in his book “*Development as freedom*”, argue that personal freedoms, of which these are reflected in access to healthcare, education among other vital public services (p. 3), allows an individual to thrive, and in turn benefits the economic and social security of a nation (pp. 10-11). This is seen within the definition given by the GeoCapabilities movement (2016a) on what it seeks to achieve, as it advocates promoting the development of students’ capabilities within their education, especially in the field of geography education. It is further argued (GeoCapabilities, 2016b) that by student’s developing the capabilities to think geographically, students are equipped with the skills to analyse the world around them, and become informed in their own decision making and choices. As we observed previously, while the F2 model advocates for a skills-based education to prepare students for life outside of education, Lambert (2017) highlights that the curriculum emphasizes the skills students learn

to benefit a fast-moving capitalistic society, and not on their own personal development. Lambert (2017) highlights that in contrast to what he defines as the trap of future2ism, GeoCapabilities avoids the trap of future 2 as it inherently encourages students to discern between knowledges, and to make value judgements on the knowledge they receive. This is due to the student's knowledge being grounded within geography and thus gaining powerful disciplinary knowledge, of which this is not the focus within an F2 scenario, where instead it is skills-based. (p. 11)

As one can see, the ideology behind the concept of GeoCapabilities finds its groundings from Amartya Sen's works on personal freedoms and development and is heavily influenced by Michael Young's theory of powerful disciplinary knowledge. Lambert (2017) argues that what makes the capable citizen isn't only the information and marketable skill-set one obtains in school and that "powerful knowledge" allows them to visualise the world and make well informed decisions beyond their everyday life (p. 12). Lambert (2017) argues that this knowledge is found within the realm of the disciplines and thus highlights the importance of specialised disciplinary knowledge in the students' education in school. Lambert (2017) highlights arguments made by Maude (2015) (p. 15) in that geography inherently encourages students to visualise the world and to look beyond the everyday with concepts such as space and place, and gives the example of how an individual with powerful geographic knowledge, can visualise climate change as a multi-faceted issue that has affects both local and global.

Donert (2015) adds further to the curriculum arguments of Lambert (2017), as he argues that

“Capabilities reflects a concern that access to PDK (Powerful Disciplinary Knowledge) should be inclusive, an entitlement for all young people, whoever they are and whatever their circumstances. A capabilities approach seeks to ensure equal access as a matter

of social justice, such that schools have a duty to mainstream knowledge domains (like Geography) that take students beyond their direct experiences” (p. 6).

Lambert (2017) further highlights that to achieve an F3 curriculum, what is essential, is that the teacher delivering the content of the syllabus, possesses the skills necessary to deliver powerful geographical knowledge to the students. Lambert highlights that while the syllabus does possess content for the students that are useful for them, without the teacher, the textbook alone cannot provide a “*curriculum of engagement*” for the students (p. 14-15). In this regard, the teacher would allow students to make sense of this content and give it meaning within the context of their lives, whether it be in a local or global context. Lambert (2017) argues that this process cannot occur without the teacher's skills, and therefore the place of the teacher, is essential in achieving an F3 curriculum. One can further stress these arguments made by Lambert when making comparisons to the ever-present F1 style of curriculum making where the textbook features the main focus of content in the syllabus. In this regard, while offering much disciplinary content, the textbook lacks the means to empower the student with higher-order thinking skills and inherently leads to a lack of important skills needed to navigate third level education and the workplace

Uhlenwinkel et. al. (2016) demonstrates the importance of the teacher as a curriculum leader in this regard, where in a series of interviews conducted by Uhlenwinkel with Geography teachers within the Finnish educational system, it was found that many geography teachers, were also teachers within the sciences, with Biology being the most prominent (p. 5). It was found that within the six respondents, four placed the value of geography education on the importance of acquiring different types of knowledge, it was commonly stated by the teachers that

“By acquiring knowledge of physical and human environments and of different cultures, their students could find ways to act responsibly; one of them mentioned that geography education could help her students construct understandable wholes from the fragmented facts”. Another argued that geography education (as well as other school subjects) could affect students’ development of thinking skills as well as recognizing and developing their own competencies”. (p. 5)

As can clearly be seen from the respondents in the interviews, that they considered the value of geography education in the number of ways in which the subject could empower the student to think geographically.

3.3: “powerful knowledge” within the discipline of Geography

When applying Michael Young’s vision of how “powerful knowledge” may benefit students in their overall life development, one can argue that geography as a discipline, finds itself in an advantageous position. This can be seen in the overarching objective of geography education, which seeks to empower students with the skills to analyse and understand the local and global processes that happen around them. It can be further argued that through the provided contextualisation of thinking geographically (see Jackson, 2006, ESRI, 2003, McDougall, 2011), along with the abundance of opportunities for students to bring their knowledge into the classroom, this can result in an educational environment, where students from all aspects of society, can receive a powerful geographical education. Maude (2015), in her article *“What is “powerful knowledge” and Can It Be Found in the Australian Geography Curriculum?”*, is one such scholar that has sought to analyse the theory of “powerful knowledge”, and assess to what extent can it be found within Australia’s secondary level geography curriculum. Within her paper, Maude produces an abundance of evidence demonstrating evidence of what she determines, as “powerful knowledge”, within the

curriculum. The first argument given by Maude, is that a critical source of “powerful knowledge”, can be found in the ideological concepts of place and space; these concepts inherently encourage students to consider from different perspectives, what they see around them (p. 20). The concept of space and place, are one such critical source found within geography that Jackson (2006) determines to be the cornerstone behind thinking geographically. Mainali quotes Bloom’s taxonomy in this regard, in that she argues that by developing higher-order thinking skills, students become better equipped for higher education and the workplace (Mainali, 2012, p. 6.). Maude highlights that the “powerful knowledge” contained within the geographical curriculum, are not only found within the concepts of geography, but can be found in the physical, with the place of the environment featuring prominently within the curriculum (p. 19). The environment in the public consciousness cannot be understated, and Maude argues that the education on the environment is dynamic. The curriculum examines issues of sustainability, destruction, restoration and how environments can be shaped by the social. Maude contextualizes this further, that studying the environment, empowers the student with powerful geographical thinking skills, and allows students to construct links between the environment and how it is shaped by the social influences placed on it (ibid).

As is previously mentioned, one of Young’s defining explanations of what “powerful knowledge” is, is that “powerful knowledge”, is knowledge that provides individuals, reliable explanations and different perspectives of seeing the world, and to envision new possibilities. As Maude demonstrates, geography can be seen as a discipline where “powerful knowledge” can shine and allow students to think geographically, giving the students the “powerful knowledge” necessary to understand the world around them. One must note that although Maude speaks explicitly about the powerful capabilities of geographical education in Australian secondary schools, geography as a subject inherently is global in nature, and as such,

has the potential to be equally as powerful in the respective curricula within Irish and Maltese secondary schools.

Chapter 4: Methodology

This chapter seeks to establish the epistemology used during the dissertation and the reasoning behind why I chose to conduct a comparative study between the secondary school education systems in Ireland and Malta. The first part of this chapter will detail the epistemology used and describe the meaning behind the epistemology from figures within academia and how this epistemology is salient to detailing the arguments of Michael Young and John White. The second part, meanwhile, will be the justification for why I have chosen to include a comparative analysis of both Ireland and Malta's secondary school curriculum models

4.1: The Epistemology

This study was conducted using the social realist epistemological approach to investigate and answer the key research questions this study seeks to answer. In their definition for what can be defined as a social realist approach to education, Lilliedahl (2015) quotes from (Maton, 2014; Wheelan, 2010 & Young, 2008), that

“A social realist approach to curriculum and didactics is ‘social’ because it recognises knowledge as socially constructed in practice. Knowledge is neither universal, nor is it a given, unmediated representation of the world; rather, it is a fallible product under social, cultural and historical constraints. At the same time, social realism is ‘realist’ in the sense that knowledge is about something independently real in an objective world beyond discourse” (p. 42)

Maton and Moore (2010) further argue that social realism puts knowledge as an object centre-stage in thinking about education. Giving such importance to knowledge in this regard is done to raise questions of the characteristics of knowledge, how it is created, and how it is developed

over time. Social realism further looks at the modes of creating knowledge, the forms it takes, and how their effects are shown within policies and practices. (p. 2). Social realism as an epistemological thought, owes its origins to sociology, much of the development of social realist thought in academia can be attributed to the works of Basil Bernstein, who Maton & Moore (2010) attributes Bernstein to still provide much inspiration to theorists within the academia surrounding the sociology of knowledge (pp. 11-12). Bernstein would notably focus much of his work on social justice and differentiation of social classes within education provision (Morais, 2006, p. 2). Sadovnik (2001) notes on the academic influences of Bernstein where he states that

“Although structuralist in its approach, Bernstein’s sociology drew on the essential theoretical orientations in the field— Durkheimian, Weberian, Marxist, and interactionist— and provided the possibility of an important synthesis. Primarily, however, he viewed his work as most heavily influenced by Durkheim”. (p. 2)

In the previous chapter, what was clearly detailed throughout the chapter was that knowledge was determined to be a product of the social and was further influenced by the cultural and the historical. What was clear to see from the curriculum arguments of Young, was his reflection of his own work and that it took liberal influence from the works of Durkheim and Vygotsky, two influential educational sociologists of their time. Furthermore, what was evident was that David Lambert in his writings on the importance of taking a capabilities approach to geography education, would be heavily influenced by Young’s writings on “powerful knowledge”. As such particularly with these two academic figures, it was determined that a social realist approach to this research study was appropriate for the research area being investigated. Furthermore, whilst one can argue that John White is not cast from the same mould as Young and Lambert, it can be seen in his aims-based curriculum arguments, that the social, cultural and historical influences within knowledge creation are readily acknowledged by White, as he

places educating the student of their historical societal background and their place within it, at the centre of his aims-based curriculum arguments.

As was aforementioned within chapter 1, the sources used for the construction of this study would be grounded through the use of primary sources from government bodies responsible for providing education, government agencies, and insight from both respective countries' legal acts and constitutions. Furthermore, the study would be further contextualised through contributions from academia, who would provide supporting insight into the educational systems in Irish and Maltese secondary schools, with a specific focus on geography education.

The NCCA in Ireland, are the national authority responsible for the management of the curriculum framework within Irish primary and secondary schools, and are a statutory body of the Irish Department of Education and Skills (NCCA, 2021). The Department of Education and Skills, further defines the extent to which the NCCA are involved throughout the formation of the curriculum framework, where it is noted that while the Minister for Education is ultimately responsible for enacting changes to the curriculum, the Minister for Education carries out his actions, on the recommendations given to him by the NCCA. (Department of Education and Skills, 2021). As a result of the NCCA being the body behind the formulation of the curriculum frameworks in Ireland, I will draw my analysis of the curriculum framework documents of the Junior and Senior Cycle from the archives of the NCCA.

Furthermore, in Malta, national curriculum frameworks such as the NMC and NCF, as well as ancillary policy documents like the LOF, are directly managed by the Ministry for Education and Employment, and as such will base my analysis on the Maltese secondary school educational system from the documents provided directly by MEDE. I have further chose to implement references from constitutions and acts in both respective countries, as in Ireland and In Malta, the grounding for our educational systems are grounded within education acts or from

within articles within the constitution, thus making them legally binding. By providing excerpts from these important acts of government legislation, it provides further depth to the responsibilities held by the state as the provider of education, and provides context historically to how the educational system has developed.

4.2: The comparative case study

The decision for why this study seeks to compare the curriculum models of secondary school educational systems in Ireland and Malta, comes from the perspective of being a student who was the product of the Irish educational system, and is currently doing their Masters degree in education with a view of the current Maltese secondary school educational system. As such, throughout my time in the Master's degree, I have spent these previous two years making comparatives between the educational experiences I have had between both Ireland and Malta. At present, both countries are seeking to modernise their educational systems within their secondary schools, with Ireland in 2015 having introduced a reform of their Junior cycle curriculum framework, and Malta in the same year, having introduced the Learning Outcomes Framework, which acts as a programme of learning for the National Curriculum Framework, which is implemented at all levels of Maltese compulsory schooling. As such, with both countries having recently implemented frameworks seeking to modernise their educational systems, and with a prospective view to implement changes beyond to Senior Cycle and Sixth form respectively (see chapter 6), this has provided an opportunity to compare and contrast the curriculum frameworks used within the Irish and Maltese secondary school educational systems, and from a social realist perspective, determine to what extent are the recommendations of Young and White for what should be reflected within a modern curriculum model, be seen within the Irish and Maltese secondary school curriculum frameworks.

Chapter 5: An analysis of the Irish and Maltese secondary school curriculum frameworks in respect to the curriculum arguments of White and Young.

As was stated within chapter 1, the purpose behind the construction of this study, was to provide a detailed analysis of the Irish and Maltese secondary school curriculum framework, and critically assess to what extent are the theories and recommendations of Michael Young and John White reflected within the curriculum framework. To provide a judgement on this study, this dissertation sought to establish a set of two key research questions that were to be examined and assessed to arrive at an informed conclusion. With previous chapters providing a detailed analysis of the curriculum arguments of Young, White with insight from other academics, this chapter seeks to provide a detailed case study analysis of the curriculum framework within Irish and Maltese secondary schools, with a focus on geography education. As this dissertation aims to provide a comparative study of Irish and Maltese secondary curriculum frameworks in the field of geography, this chapter will provide a detailed analysis that will directly address the key research questions this study seeks to answer. The Irish secondary school curriculum framework analysis will begin with a detailed analysis of the curriculum vision of the Junior Cycle and how this vision is reflected within the programme of work, that of which in the case of geography, being the prescribed syllabus. The analysis of the curriculum vision and the syllabus will then be given further analysis by supporting figures in academia and the testimonies of teachers and students, due to both groups being key stakeholders throughout the educational process. This chapter will then conclude with a comparison between the curriculum framework of the Junior and Senior Cycles, and to what extent are the curriculum theories and recommendations of White and Young reflected within the heart of the curriculum framework.

When establishing the current curriculum frameworks in place for both junior and Senior Cycle in Irish secondary schools, it is important to note that at present, both curriculum frameworks in recent years, have either been modernised, such as the reformed Junior Cycle framework in 2015, and the Senior Cycle, which is currently under review as of 2018 by the NCCA. Due to the Senior Cycle framework still being reviewed by the NCCA as of the construction of this study, I will base my analysis on the most recent, concluded review by the NCCA on the Senior Cycle, from 2009. I will furthermore base my analysis on the Junior Cycle from the updated Junior Cycle framework document published by the Minister for Education in 2015. In conclusion, I will reference the current review of the Senior Cycle framework, and how the state seeks to replicate the reforms in the Junior Cycle framework, and implement it into a future Senior Cycle curriculum framework.

5.1: Comparing the Senior Cycle curriculum framework with the Geography syllabus

Within the review of the Senior Cycle curriculum that the NCCA conducted in 2009, it is noted within the document that the curriculum is grounded within five key skills (p. 21). These key skills are stated as.

1. Information processing
2. Being personally effective
3. Communication
4. Critical and creative thinking
5. Working with others

It is further stated that the purpose behind grounding the curriculum within the context of the five skills, is to allow students to become independent thinkers, and to help them develop a lifelong commitment to learning. (p. 24)

With insight into how the document envisions how the Senior Cycle curriculum wants to achieve within the students studying under it, we will now compare the programme of work and assess how effective the curriculum is represented within the syllabus for senior-level geography.

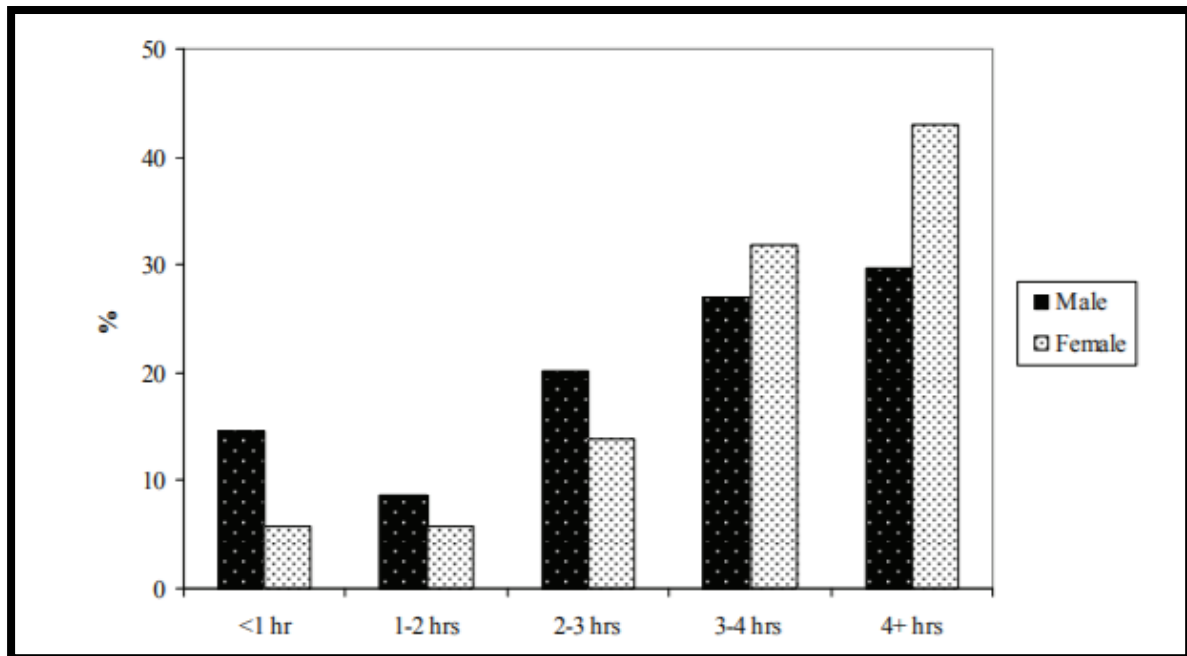
As noted previously, one of the five key points indicated within the government vision, was the need for effective learning and assessment, and that the curriculum grounds itself in skills such as working with others and critical and creative thinking. This is reflected within the prescribed Geography syllabus for Senior Cycle (Department of Education and Science, 2003), where it notes that Geographical investigation is a core area of study and is compulsory for all students studying under the syllabus. This is further made evident where field work and investigations using primary and secondary sources, are also obligatory for all students, and are deemed central to the geographical education and experience of all students (p. 4). However, one important detail that becomes apparent when one analyses the current prescribed Senior Cycle Geography syllabus, is that as of the construction of this study, the syllabus has not been updated since its introduction in 2003 (p. 46).

Furthermore, it is noted that within the geography syllabus, due to the nature of the Senior Cycle being assessed as a single set of high stakes examinations, the majority of the geography syllabus reflects the assessment process, by placing a vast emphasis on rote learning, and applying to questions in the paper (80%), that are only assessing lower order thinking skills. (p. 6). This remarks back to the research findings of Doyle (2019) in chapter 1, where it was found that for Junior Cycle prior to the 2015 curriculum reforms, teachers were found to teach to the test, and treat the Junior Cycle as a “*test-run*” for Leaving Certificate (p. 3), due to the nature of the curriculum being predominantly assessed under a set of high stakes examinations over a 2–3-week period (State Examinations Commission, 2018). In a report conducted by Baird, Caro and Hopfenbeck (2014), on the predictability of subjects within Irish Leaving

Certificate examinations, it was found that content-driven subjects such as Biology and Geography, relied heavily on fact memorization, and that students would often employ rote-learning memorization tactics in order to achieve high test scores. It was further commented that *“Students had a lot of test-wisness. The topics that were likely to come up, the marking criteria, past papers and model answers were all part of the preparation from teachers”*. (p. 22). The research findings of the testimonies of secondary schools teaching within Banks, McCoy and Smyth’s (2018) report directly support the research found in Smyth, Banks and Calvert’s (2011) paper which examines student experiences in their final year of secondary school. Within the student testimonies found within Smyth, Banks and Calvert’s (2011) paper, students highlighted the stresses placed on them with the amount of syllabus content they had to study and the homework given to them by their teachers. Smyth, Banks & Calvert (2011) would further support their research findings with the aid of a diagram.

Figure 3.

Hours spent doing homework or studying on weekday evenings



In a question asked by the researcher on how long they spend doing homework or studying on weekday evenings after school, over 40% of females, and just under 30% of males, spend over 4 hours a night doing homework or studying on weekday evenings. (Smyth, Banks & Calvert, p. 74)

Smyth, McCoy & Banks (2019). lend further weight to the problems reflected in the Leaving Certificate, as the report echoes much of the issues found within the research findings of Banks, McCoy and Smyth (2018), with teachers specifically highlighting the extensive list of subjects that students need to cover, as well as the vast amount of content within each specific syllabus for each subject, this can be found within the testimonies of students, where one student noted that

“The Leaving Certificate, while ‘brutally fair’, is a high stakes examination. Much depends on one day. The large number of students who undertake grinds in multiple subjects is giving rise to ‘burn out’ and mental health problems. The need for such grinds stems from fear of underachieving on the day and a pressure from friends to do more and more. What a student does in school is never seen as enough” (Smyth, McCoy & Banks, 2019, p. 14).

While the geography syllabus does include an elective topic where students can conduct fieldwork scenarios such as investigating weather and oceanic systems, where students can go to the beach to record tides, observe coastal landmarks and record the weather, this only forms a small part of the overall geography syllabus (p. 6). When analysing the prescribed geography syllabus within the Senior Cycle curriculum, this contradicts the claim within the NCCA’s review of the Senior Cycle curriculum, where it is stated, that the Senior Cycle syllabi,

“are developed with a view to allowing teachers and learners the flexibility to select a variety of rich learning activities that are engaging and provide opportunities for learners to become more self-directed in their learning as they progress through Senior Cycle, and that the embedding of the key skills within the curriculum enabled students to develop key learning skills”. (p. 7)

With insight from academia as to the issues raised with assessment at senior cycle level, and the inherent problems faced by students and teachers alike when working with the syllabus and wider curriculum framework, it becomes clear to see that the syllabus is not actively reflecting the vision of the curriculum framework at senior level and is not reflecting the recommendations of White and Young’s curriculum arguments.

5.2: Contrasting the curriculum vision with research findings from academia

It is further commented that the Senior Cycle curriculum framework seeks to achieve within schools, a culture that respects the learners, encourages them to develop a love of learning, and takes responsibility for their own learning over time (p. 6). However, when we compare the curriculum vision of the Senior Cycle curriculum framework to a report conducted by Banks, McCoy and Smith (2018), on student experiences of Senior Cycle, it was found that students did not take responsibility for their own learning, and in fact, were drawn to becoming dependent on teachers who taught their lessons in a manner that taught them to the test (p. 12). This dependency from the students on teachers teaching to the test, as well as the market of private tuition outside of schools, is stated by Smyth, McCoy & Banks (2019), to lead to high levels of pressures placed on students (p. 14), with emphasis placed that even students who were in Junior Cycle, had noted that they felt anxious about the stresses and pressures faced by students within Senior Cycle (p. 72). The studies conducted by Banks, McCoy and Smyth (2018) and Smyth, McCoy and Banks (2019), further contradict one of the main skills that the NCCA state as grounding the curriculum, as the accounts of the students clearly contradict that the curriculum empowers students with critical and creative thinking. In the elaboration the NCCA gives for how critical and creative thinking can empower students as part of learning under the curriculum, the NCCA states that the curriculum, assists learners in

“being aware of different forms and patterns of thinking so that they become more skilled in higher order reasoning and problem solving. In engaging with this key skill, learners reflect critically on the forms of thinking and values that shape their own perceptions, opinions and knowledge” (p. 21).

As has been previously stated by reports such as those conducted by Banks, McCoy and Smith (2018), Smyth, McCoy and Banks, (2019) and Baird, Caro and Hopfenbeck (2014), figures in

academia as well as interest groups, such as the National Association for Principals and Deputy Principles (NAPD)(2019), have repeatedly called for the Senior Cycle to be examined due to what is argued, as outdated and ineffective in educating students for the requirements needed of them to navigate tertiary level education and the workplace once they leave secondary school (pp. 2-4). In light of these demands, the Irish Minister for Education of the day, Jan O’Sullivan, introduced a new curriculum framework for Junior Cycle (2015), that sought to replace the curriculum for Junior Cycle, who’s own curricula were similar in structure to the Senior Cycle. Prior to the Junior Cycle reforms of 2015 as noted by Doyle (2019), there had been previous attempts made at curricular reform, with the aforementioned green paper (1992) “Education for a changing world” seeking to transform pedagogical practices in Irish secondary schools. Doyle notes in this regard however that with each reform, these reforms ended in failure, as the assessment model for Junior Cycle was conducted through the Junior Certificate, which structurally, was identical to the Leaving Certificate. Students would sit the Junior Certificate and would be assessed through high stakes examinations from 1st year to 3rd year. In this regard, Doyle (2019) states that many teachers would regress to rote-learning memorization tactics, would teach to the test, and would teach Junior Cycle as a “test-run” for Senior Cycle (p. 3). Doyle further contends in this regard, that in order to effectively reform Junior Cycle, assessment would need to be reformed. With this in mind, the Junior Cycle reform (2015) would seek at its heart, to reform Junior Cycle by implementing more diverse forms of assessment.

5.3: Curriculum vision and assessment within the revised 2015 Junior Cycle framework

Detailed within the Junior Cycle curriculum framework (2015), it is outlined that the curriculum and assessment arrangements sought to provide students with learning opportunities that achieved a balance between subject specific knowledge, and developing a

wide range of skills and thinking abilities (p. 7). These curriculum and assessment arrangements would then promote students' participation in collaborative learning actively. It is argued further that within the curriculum, learners would be empowered to analyse information in new and creative ways, investigate issues themselves, explore, think independently, and apply their newfound knowledge to new challenges and situations (p. 7). Furthermore, the curriculum vision refers to the nature of the workplace moving quickly and shifting positions and argues that the curriculum will empower students to have the skills necessary to navigate the workplace and broader society. (p. 7)

When addressing the question of assessment for the reformed Junior Cycle curriculum (2015), the Junior Cycle differs vastly from the high-stakes, formative assessment of the Senior Cycle, and instead incorporates a dual-system of assessment. Within the assessment framework for the Junior Cycle, the framework has in place, summative assessment throughout the three-year cycle to document student progression of learning, and at the climax of the cycle, students sit a series of formative assessments that test them on the disciplinary knowledge they learned over the three years (p. 7). An important note to add, is that while the Junior Cycle framework has in place formative assessment in the form of a series of exams, these exams do not constitute all of the marks given to the student for those three years, but instead only constitute a portion of the total marks, with summative assessment having a higher share of the total grade (pp. 35-36). This distinction in marks awarded is important, as the emphasis for marks, lies in continuous assessment of the students, and places a more significant portion of the assessment on student's progression of learning throughout the cycle. This is given special attention within the framework document, as it notes that the change of assessment emphasises the "acknowledgement that students learn best when teachers provide feedback that helps students *understand how their learning can be improved*". (p. 7)

The curriculum framework provides further details on subject-specific assessment, where it is detailed that two structured classroom-based assessments will contribute and build upon the use of formative assessment in the classroom, one of these assessments take place in second year, and the other in third year (p. 37). Depending on the subject, the classroom-based assessment will differ to reflect the subject taught, with various assessments including project tasks, oral language tasks, investigations, or practical tasks. In third year, it is detailed that once the students have finished their second classroom-based assessment, students will be tasked with completing a written assessment task, where they are asked to write on what they have learned and the skills and competencies they have gained from doing that assessment (p. 8). Upon completion of the classroom-based assessments and the exam-based formative assessment, it is then stated that these will be marked by the SEC (State Examinations Commission), at the end of the Junior Cycle in third year (p. 8). It is argued by the NCCA, that by diversifying the assessment carried out throughout the Junior Cycle, as well as offering different forms of assessment that students partake in according to the subject discipline, students partake in different forms of learning throughout their education in Junior Cycle, and benefit from a more fully rounded assessment over the duration of their cycle, (p. 8) in comparison to that of which is seen in the current Senior Cycle, which only has high-stakes summative assessment at the end of sixth year, as the main form of assessment for the cycle.

In each subject's case, two structured Classroom-Based Assessments will be introduced, which will contribute to and build on the use of formative assessment in the classroom. One of these Classroom-Based Assessments will take place in second year, and the other during third year (p. 8). Each assessment will be drawn from various types of assessment, which might include project tasks, oral language tasks, investigations, practical or designing and making tasks, field studies and artistic performance. After the second of the Classroom-Based Assessments, students will complete a written Assessment Task on what they have learned and the skills and

competencies that they have developed in that assessment. The Assessment Task, along with the final examination at the end of third year, will be marked by the State Examinations Commission (SEC). The dual approach to assessment will recognise and value the different types of learning in schools and allow for a more rounded assessment of the education of each young person.

The focus on having students fulfil an aims-based approach to learning, can be further found within the syllabus for Geography at Junior Cycle level (Department of Education and Skills, 2018), where the syllabus acts as the programme of work for how the curriculum is enacted within the classroom. If one were to analyse the syllabus, it becomes evident that the syllabus similarly reflects the desire for students to develop “*organised thinking and cognitive abilities – not only in the area of important factual knowledge, but in application, analysis, synthesis, evaluation, creativity and imagination*” (p. 5) Furthermore, the syllabus options up the option of differential assessment modes, with students being offered the chance to not answer as many questions during the final examination at the end of junior cycle, should they opt to partake in field work as part of their assessment, this further reflects the aims of the revised junior cycle curriculum framework, where diversifying assessment was a key point within the reform (p. 29).

5.4: Comparing and contrasting the Junior and Senior Cycle curriculum frameworks in Irish secondary schools

As can be seen in the comparative analysis of the Junior and Senior cycle curriculum frameworks in Irish secondary schools, what is evident, is that the reformed Junior Cycle curriculum demonstrates a detailed procedure to the diversification of assessment, as well as places the importance of the student having their progress monitored throughout the cycle, at the focus of the curriculum. What this results in, is a curriculum where assessment is highly

relevant to the discipline being studied, and is structured in such a way where the assessment tasks, are focused more on gauging and improving on the student's educational progress, instead of emphasizing the assessment on what a student knows, and how much of the content they understand. This results in an assessment that has skills and aims at its centre and is a means of learning for students, where they can gain knowledge from this form of assessment and further their own learning, these are recommendations that were provided by White and Reiss in this regard. Furthermore, if one is to analyse the Junior Cycle (Department of Education and Skills, 2018) syllabus, it becomes apparent that the syllabi emphasis' the development of the student's capacity to think geographically and to imbue within the student the capabilities to develop powerful geographical knowledge, this is evident throughout how the syllabus defines its purpose where it states that

“Geography can make an important contribution towards enabling young people to function more effectively as members of society. This syllabus was drawn up with the intention that it should make that contribution. It recognises that the geography teacher is involved in a body of knowledge which has wide horizons, and in a methodology which contains many and varied techniques and skills.” (pp. 2-3).

In comparison, when one analyses the Senior Cycle curriculum framework, whilst the curriculum framework review of 2009, states that it follows key skills at the heart of the curriculum, it quickly becomes evident that what is advocated within the curriculum framework, is not reflected within the syllabus for geography at Senior Cycle level. Testimonies from Banks, McCoy and Smyth (2018) and Smyth, McCoy and Banks (2019), have provided much evidence to suggest that due to the curriculum having so much syllabus content, students are discouraged from developing skills and competencies in critical thinking and other higher order skills, and instead feel compelled to seek out tuition and teachers who

feel pressured to teach to the test, instead of prepare them for the higher capacity skills and competencies needed for tertiary education and the workforce (p. 12). I will reiterate a previous quotation that has been made in this regard, as Smyth, McCoy & Banks (2019) notes

“The Leaving Certificate, while ‘brutally fair’, is a high stakes examination. Much depends on one day. The large number of students who undertake grinds in multiple subjects is giving rise to ‘burn out’ and mental health problems. The need for such grinds stems from fear of underachieving on the day and a pressure from friends to do more and more. What a student does in school is never seen as enough” (p. 14).

5.5: To what extent are the arguments of Michael Young and John White present within the Irish curricular frameworks?

In an analysis of the Senior Cycle curriculum and the programmes of work for enacting the curriculum in classrooms, one can argue that throughout senior level, the recommendations for White and Young are not at the heart of the Senior Cycle framework. The reason given for this conclusion, is that while the curriculum does advocate for key skills such as critical thinking, communication, and collaboration with others, these key skills do not find themselves reflected within the geography syllabus at senior level. The NCCA (2021b) states that for Leaving Certificate, the majority of students take seven subjects for the penultimate examinations, Smyth, McCoy and Banks (2018) have commented on this matter, through their arguments that such a burden being placed on students, have given rise to ‘burn-out’ and mental health problems (p. 14). White and Reiss highlight in this regard, that in curricula where students are overburdened with compulsory subjects (for the majority of students, these subjects are English, Irish and Mathematics) students should have the opportunity to diversify their learning opportunities (p. 40). As is clear in this regard, with such a burden being placed on students, and a points-per-grade system in place currently at Senior Cycle level, this actively pressurises

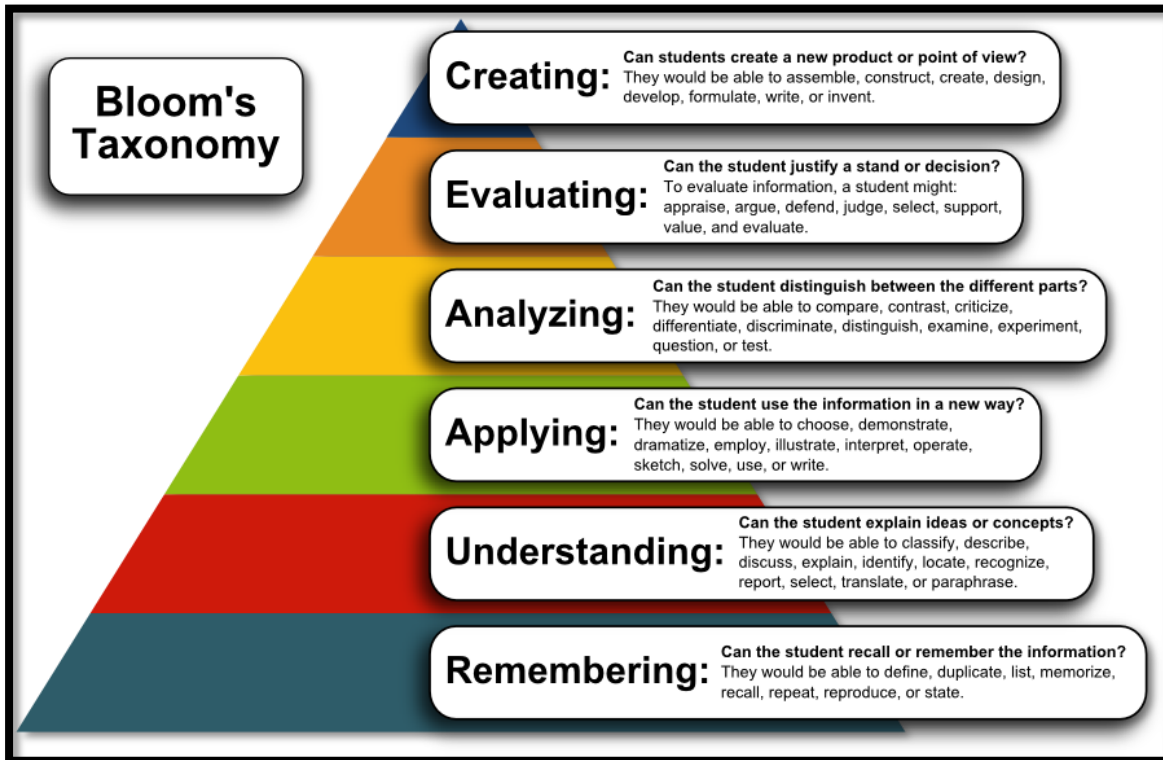
students to take many subjects at higher (advanced) level in order to compete for points with other students to get into their desired course at university. With this in mind, with a senior cycle framework that is overburdened in content and with an assessment model that fails to demonstrate student's capabilities and skills but only how much knowledge they can memorize, it is clear that White's recommendations are not implemented in this regard into the Senior cycle framework. White (2013) in this regard instead, has made arguments proposing the concept of continuous recording of student progress during their schooling (p. 56), where the outcome of this assessment would be to show the gradual progress that student's make in their gathering and understanding of knowledge (p. 55), White (2013), would quote in this regard that

“Students who have barely reached adulthood are placing their own self-worth solely on the grades they receive in their penultimate examinations. If a student receives good grades, they believe themselves to have good prospects for the future, and often proceed to further education, however, for those students who are not satisfied with their grades, these students look to seek salvation elsewhere” (p. 58).

Furthermore if one were to analyse what outcomes were expected of students studying Geography within Senior Cycle syllabus, it becomes apparent that students are only expected to “Explain, Understand, Show or Illustrate” the majority of geographical concepts that they will encounter in the compulsory study units (Department of Education and Science, 2003, pp. 9, 13, 17). This stands in contrast to Bloom's taxonomy, which sets out a pyramidal model that advocates for a progression of thinking from basic skills such as recall and understanding, and gradually apply higher orders of thinking such as the creation of new pieces of knowledge and understanding, and wider innovative ways of thinking.

Figure 4:

Bloom's taxonomy pyramidal model for progression of thinking (California Baptist University, 2020)



As one can see, with student's expected in the majority of scenario's to "explain, show, understand or illustrate" Geographical concepts, these only conform to the lower levels of Bloom's taxonomy, and do not encourage students to practice higher order thinking, such as differentiating, evaluating, applying or appraising geographical concepts.

With students not being encouraged to develop the means to which to evaluate the knowledge being received, and are not being given the means to apply it within the context of their own lives and envision new alternatives, then one can argue that Geography at Senior Cycle level furthermore fails to imbue students with powerful knowledge. In this regard, Young (2008) would state the aforementioned quotation

“Powerful knowledge” refers to what the knowledge can do or what intellectual power it gives to those who have access to it. “powerful knowledge” provides more reliable explanations and new ways of thinking about the world and ...can provide learners with a language for engaging in political, moral, and other kinds of debates. (p. 14)

White and Reiss (2013), noted previously in their recommendations of assessment in an aims-based curriculum, that a record of work that progresses continuously and records a student’s educational progress, acts not only as a valuable record to student, teacher and parent, of how a child is developing in his education, but can act as a valuable learning tool to further their own learning (p. 56). This was reflected within the Junior Cycle curriculum framework, but is absent from the Senior Cycle curriculum's assessment. Furthermore, Michael Young advocates for “powerful knowledge” in schools, where *Knowledge is ‘powerful’ if it predicts, if it explains, if it enables you to envisage alternatives”* (Young, 2014, p 74, In Maude (2015, p, 18), *and can then apply that “powerful knowledge” in the context of everyday life* (Young, 2013, p. 235)”. When one analyses the expected outcomes for students studying Geography at Junior Cycle level, it clearly demonstrates that students should be able to

“Synthesise and evaluate information (e.g. distinguish fact from opinion, draw conclusions, prove simple hypotheses, make informed judgements, suggest sensible solutions to problems and, where appropriate, suggest realistic plans for action)” (Department of Education and Skills, 2018, p. 8)

When one contextualises, the outcomes expected of students at Junior Cycle level, it becomes clear that students are expected to apply higher order thinking skills grounded within specialised knowledge found in the disciplines, which are key to Young’s arguments on the production of powerful knowledge (Young, 2013, pp. 230, 236).

In light of the analytical findings on the curriculum framework and Geography syllabi for Senior and Junior Cycle level. One can argue that the framework and syllabus for Junior Cycle demonstrate a number of recommendations of White and Young contained within, to which are absent at Senior Cycle level. In contrast, it becomes apparent that the Senior Cycle framework and syllabus represent much of what Lambert has defined as the F1 approach to curriculum modelling, and are the curriculum framework to which Young and White would seek to make alternatives to in their curriculum arguments.

5.6: Introducing the National Curriculum Framework in Malta

The Maltese National Curriculum Framework (NCF), which was formally introduced in 2012 into Maltese schools from Kindergarten to Secondary school, builds upon the groundwork set by the National Minimum Curriculum, which was introduced in 2000. The NCF, was Malta's first national curriculum since the country joined the European Union in 2004, and in the words of Mayo (2012a), would base its vision on the importance of "lifelong learning", in keeping with the dominant discourse that emerged not only across the European Union, but with the OECD (p. 50). One can argue that the journey towards the construction of the NCF was gradual, as one can see the groundwork being laid for the framework in previous policy documents such as the "*For all children to succeed*" (MEDE, 2005). Duca (2018) notes that the policy document would particularly note how the school would offer their educational services to children, with the document highlighting the learning process of being that of a journey from early years to senior school, where children would gain knowledge and Master skills (pp. 20-21), these would be visions that would in the future, become integral to the overall vision of the NCF.

Although the NCF is a national curriculum framework that not only is present in secondary school, but is the curriculum in place across different levels of the education system. I will

primarily draw my analysis of how the NCF is applied within the context of Maltese secondary schools which compares to the age groups of the Irish Junior and Senior Cycles.

With a detailed analysis of the Irish secondary school framework having been conducted, this section of this chapter is a counterpart to the analysis conducted on the Irish secondary school curriculum framework, and seeks to fully answer the key research questions detailed in chapter

1. These research aims were

1. To what extent are the writings of John White and Michael Young reflected within contemporary curricula in Malta and Ireland
2. Do the programmes of work in Ireland and Malta allow for the national curriculum to be reflected clearly within the classrooms of secondary schools, with specific reference to school geography.

As such, this chapter seeks to detail the curriculum vision of the NCF, and how the LOF seeks to provide the programme of learning in enacting the aims and ambitions of the NCF with a particular focus on geography education in Maltese secondary schools. Analysis of the curriculum vision of the NCF and the LOF, will then be given further analysis by supporting figures within academia, as well as interest groups such as the Maltese Union of Teachers (MUT), in order to detail to what extent are the curriculum theories and recommendations of White and Young reflected within the heart of the NCF and LOF.

5.7: The grounding of the vision of the National curriculum framework

As mentioned previously, the vision of the NCF (2012) would draw heavily from previous policy frameworks from MEDE (Ministry for Education and Employment) (see “*National Minimum Curriculum*”, 2000 & “*For all children to succeed*”, 2005) and influence from the dominant discourse from OECD and the European Union. Within the framework, this becomes

evident where the vision statement notes that the framework aimed to “*increase flexibility and thus increase the relevance of the teaching process to meet the needs of individual learners*” (p. xi). Mayo (2012b) develops further on this point where he notes that this shifts the onus of responsibility onto the individual rather than the state and the social collectively (p, 266). It is noted further within the NCF, that in order to ensure that the aims of the curriculum are successfully implemented within classrooms, the framework will be further supported by ancillary policy documents, that will be developed by MEDE (p, xi). The Learning Outcomes Framework (LOF) is one such policy document of notable importance and will be studied further within this research. One can note the influence of the “*for all children to succeed*” (2005) policy document as the overarching statement of the NCF states that the vision of the framework

“Considers education as a continuous journey which starts at birth and is formalised during three cycles of schooling leading to higher education. It is a curriculum which aims to cater for the three educational service providers: state, church and independent schools whilst acknowledging variation in the educational provision caused by the autonomy of each sector and the ethos of each school” (page xi).

It is further defined that the framework seeks to enable teachers to respond to student’s interests, arouse a sense of curiosity and inquiry based learning to students, develop their sense of wonder and a joy in learning and to ultimately prepare them for certification and qualification, that are necessary to proceed to tertiary education and the workforce. Personal growth, social justice, active citizenship, and the student's employability in a modern workforce are all noted as major anchoring points of the framework. As such, one notes here the importance the framework places on the individual and developing that individual holistically through a variety of learning strategies to address the student's needs. (page xiv).

With the curriculum clearly stating the importance the framework places on the holistic development of the student as an individual, and learning as a journey across their time in education, it is stated that to achieve these ambitions, eight key learning objectives (p. xvi) and six cross-curricular themes (p. 32) form the heart of the NCF. It is noted that the range of experiences in compulsory education, “*provides students with key competences necessary for lifelong learning, employability and responsible citizenship*” (p. x). As such the NCF (2012) defines the eight key learning areas critical to achieving it’s goals as being (pp. 8-9)

Figure 5:

The eight learning objectives of the Maltese National Curriculum Framework (2012)

<p>Languages</p>	<p>For both Maltese and English, the exposure to language learning is to be interpreted in the broader sense and thus incorporate both language and literature with at least a minimum of half the lessons being devoted to the development of the different language skills.</p> <p>In addition to the compulsory languages (Maltese and English), learners choose one or two foreign languages during their Secondary years. Students following individual learning programmes may have some adaptation to this entitlement.</p>
<p>Mathematics</p>	<p>This Learning Area will include financial literacy aspects such as mathematical and financial understanding as learning outcomes.</p>
<p>Science and Technology</p>	<p>This Learning Area is directed to provide a clear understanding across the education Cycles of how the process of inquiry and investigation leads to the development of solutions and their application. This is to be achieved through a pedagogical approach of “purposeful design and inquiry” that combines technological design with scientific inquiry, engaging students or teams of students in scientific inquiry situated in the context of technological problem-solving.</p>
<p>Health & Physical Education</p>	<p>This Learning Area remains unchanged from the original proposals presented in the Draft Consultation Document.</p>
<p>Religious and Ethics Education</p>	<p>The Working Group acknowledges the importance of an alternative programme to Catholic Religious Education (CRE) for students opting out of CRE. This is being identified as Ethics Education. It also recognises the position presented by the Church Schools namely that the essence of their schools is deeply rooted in a core set of beliefs derived from the Catholic Religious Faith. The Working Group therefore recommends the delivery of an Ethics Education Programme provided that the ethos of each individual school and / or logistical considerations, allow this provision. An Ethics Education Programme is preferred over a Comparative Religious Education programme.</p>

Humanities	The consultation feedback was negative with regard to the placement of Geography and History within the Citizenship Education Learning Area. This concern is now addressed by placing the study of Geography and History in a specifically focused Learning Area.
Education for Democracy	Education for Democracy will replace the Citizenship Education Learning Area and will be directed towards developing responsible citizens. The Working Group recommends that aspects of Environmental Studies, Social Studies, Personal and Social Development and Home Economics related to Consumer Education are placed within this learning area. The Working Group acknowledges elements of overlap between this Learning Area and the Humanities Learning Area.
Visual and Performing Arts	The consultation feedback with regard to the Arts Education Learning Area was positive. It underlined that given the emphasis on the four disciplines of dance, music, theatre and visual art, it would be more correct if this Learning Area is termed as Visual and Performing Arts.

Furthermore, these eight key learning areas will further develop the student holistically as an individual by weaving six key cross-curricular themes. These themes encompass all subjects within the curriculum, and seek to instil within students, critical 21st-century skills that are important to their personal development (pp. 9-10).

Figure 6:

The six cross-curricular themes of the National Curriculum Framework (2012)

Literacy	The foundational nature of literacy as a prerequisite to all learning has been repeatedly highlighted internationally, such that through the Programme for International Student Assessment (PISA) and Progress in International Reading Literacy Study (PIRLS) international surveys, as well as very recently in the Report 'Literacy for All' launched in September 2012 by the EU High Level Group of Experts on Literacy ⁵ . Placing Literacy as the first cross-curricular theme highlights the fact that all learning happens primarily through language in its various forms, and that therefore all educators need to see themselves as guarantors of the language mastery required of their learners in their particular area of knowledge.
Digital Literacy	Through this cross curricular theme students will acquire skills that include confident and critical use of Information Society Technology for communication, work and leisure. They will acquire basic skills in ICT organised around four major overlapping strands: data sources and manipulation; information communication and presentation; programmed control; and social, ethical and personal aspects.
Learning to Learn and Co-operative Learning	<p>Learning to learn is seen to be a priority in Malta's education context as it provides the ability to pursue and persist in learning – which in turn ties to increased importance of lifelong learning within a knowledge society and economy.</p> <p>The co-operative learning concept allows a learner to actively engage with his or her peers. In doing so they are together able to learn several processes such as processing and synthesising information, solving problems, and creating products together. Such a context also allows for social development among students. This will ensure that the learning moves towards learner-centred approaches.</p>
Education for Sustainable Development	This cross curricular theme remains unchanged from the original proposals presented in the draft Consultation document.

Education for Entrepreneurship Creativity and Innovation	The National Strategy for Research and Innovation: 2007-2010, and subsequently reinforced by the draft 2011-2020 Research and Innovation Strategy respectively establish a rational need for the development of a pro-innovation culture supportive of invention, risk-taking and entrepreneurship. Thus, the Working Group, in order to assure coherency with the 2011 – 2020 National Strategy for R&I, converges the previously separate cross curricular themes of Education for Entrepreneurship and Creativity and Innovation as one cross curricular theme entitled 'Education for Entrepreneurship, Creativity and Innovation'.
Education for Diversity	<p>The cross curricular theme of Intercultural Education as presented in the draft NCF, is too narrow and tends to limit diversity to multiculturalism.</p> <p>The Working Group agrees that this theme should seek to imbue values that respect diversity. This encompasses that an individual is unique and recognises individual differences whether these stem from dimensions of race; ethnicity; gender; sexual orientation; socio-economic status, age; physical, mental or intellectual abilities; religious beliefs; political beliefs; or other ideologies.</p>

In the NCF, the document places History and Geography within the category of “humanities”, and outlines their importance, in that they allow students to develop essential life skills, such as observing, recording, and collecting evidence to draw their own conclusions (p. 36).

One can further note in this regard, that the NCF contains at its heart, a set of outcomes to be achieved by students, and notes that by doing humanities subjects such as Geography, that students should have the capabilities to

- Introducing learners to what is involved in understanding and interpreting the past.
- Making pupils aware of similarities and differences between life today and in the past and use familiar words associated with the passing of time to establish a chronology of time.
- Simulating discussion of why things happen or change and the results.
- Enabling learners to acquire knowledge and understanding of places in Malta, Europe and the world.
- Increasing the learner’s knowledge of other cultures and, in so doing, teach respect and understanding of what it means to be a positive citizen in a society that has people from different cultures.
- Understanding geography information, and developing enquiry and problem solving skills.
- Enabling learners to understand environmental problems in Malta, Europe and globally.
- Encouraging children and young people to commit to sustainable development. (p. 36)

One can argue in this regard, that at the heart of the curriculum framework, reflects the curriculum recommendations of White and Young, as the NCF clearly demonstrates an emphasis on aims, where the goals of humanities, is to enrich and empower the student’s self. Furthermore, it also demonstrates clearly the empowering effect of geography education, and

the importance of demonstrating the importance of recognising the place of the student within the role they have locally, globally and their place in relation to the environment. The expected outcomes of the capabilities of students studying geography under the NCF, clearly falls in line with the importance Jackson (2006) gives to thinking geographically, as Jackson (2006), would also seek to provide contributions to the importance of thinking geographically, as he argued that “*Geography enables the individual to see the world from a unique perspective, a way of understanding complex problems and thinking interconnectedly at a variety of scales from the local to the global*” (p. 199). Lambert (2017) would further promote the importance of thinking geographically in empowering student’s with “powerful disciplinary knowledge” in his arguments for GeoCapabilities as the centrepiece for an F3 curriculum model. The GeoCapabilities approach (2016b), would argue that by student’s developing the capabilities to think geographically, students are equipped with the skills to analyse the world around them, and become informed in their own decision making and choices. As such, one can argue that the Geography education under the NCF, falls clearly in line with the aforementioned arguments Young makes for the capabilities of powerful knowledge in that “*Knowledge is ‘powerful’ if it predicts, if it explains, if it enables you to envisage alternatives*” (Young 2014, p. 74).

5.8: The aims and assessment within the Learning Outcomes Framework

The NCF further promotes the LOF as the means to which the targets sought by the NCF will be achieved. In this regard, the purpose of the LOF can be argued to be a framework for how teaching and learning should be conducted within the classroom. Additionally, the LOF would further address issues in schools surrounding absenteeism as well as early school leavers (p. 5), to which in 2018, Malta had registered the highest rate of within the European Union (Carabott, 2018). Within Geography education, the LOF follows on from the vision outlined

in the NCF, and further promotes an aims-based approach, where the emphasis is placed on the outcomes that a student will reach, rather than the means taken. This is reflected within the purpose given for the existence of the LOF, where it states that its purpose was to

“free schools and learners from centrally-imposed knowledge-centric syllabi and to give them the freedom to develop programmes that fulfil the framework of knowledge, attitudes and skills-based outcomes that are considered national education entitlement of all learners in Malta”. (p. 5)

In relation to how the LOF further defines how it envisions student learning, it further states that

“The framework is designed in such a way where there are a set of Subject learning outcomes (SLO), with a guideline for what students should know, understand and should be able to do, where students engage in content material through a variety of different teaching strategies and methods of delivery. The emphasis on framework, is put on the outcomes rather than the journey itself, and as such, offers students, schools and teachers the freedom to reach the desired objectives in a variety of methods.” (p. 7)

Pedagogy takes centre stage within the framework of the LOF, as the teacher takes centre stage not only as a role model to students, but as a key curriculum leader. This is further built upon with commentary by the European Commission (2015 in MEDE, 2014), which details likewise that *“Teachers play a crucial role in guiding their learners towards their goals and shaping their perceptions”* (p. 28). Tonna & Bugeja (2016) notes that with the introduction of the LOF, greater emphasis has been placed on developing crucial 21st-century skills within students, of which is evident with the framework highlighting the importance of ICT and developing skills using a wide range of different software (p. 170).

Assessment within the LOF is carried out at two levels, assessment for learning occurs throughout the process where learning occurs, and assessment of learning comes into effect at the end of a study unit, term, or the scholastic year. It details that during the assessment process, information and judgements about learning are made to report to parents and share information with other teachers on the students' progress (p. 41-42). The NCF (2012) outlines that assessment should be

“formative in nature and based not only on individual achievement but include group and self-assessment. This encourages the learners to develop a sense of themselves as “young scientists” within their class community”. (p. 54)

As can be seen, the LOF framework keeps in line with the vision of the NCF, which sought to develop geographical skills, where students were expected in the outcomes, to understand, apply, differentiate, and inquire. (p. 54, 63). Within Geography education specifically, the LOF only accounts for years 7 to 10, with no such framework existing beyond those years. When one analyses the expected outcomes throughout the years, one notes that at lower levels such as year 7, students are only expected to produce lower levels of thinking skills contained within Bloom's taxonomy, such as understanding and explaining, for example an year 7, an outcome is *“I can explain the use of the rocks of the Maltese Islands.”* (p. 10). However, once students progress to later years, students gradually develop higher order thinking skills with students expected to question the knowledge obtained, to actively seek alternatives, and to link and apply concepts, for example in Year 10, an outcome is *“I can question established policies and suggest alternatives”* (p. 16).

One argument that has been established with regards to assessment of the NCF in Geography education, is the question of whether enough time is being allocated to teachers in order to fully satisfy the instruction of the aims of the curriculum. Bonello (2018), provides a very

informative study in this regard, where in a series of interviews conducted by Bonello with secondary school teachers. It was found that for the majority of teachers, the time allocated to geography education was found to be a limiting factor, as students were only prescribed a single 40-minute lesson per week for geography (p. 63). Teachers commented that due to the limited time with students, with a vast amount of content to cover within the national curriculum, the geographical content within the curriculum, were reduced to the delivery of facts, rather than encouraging enquiry and higher order thinking skills.

In this regard, one can make the argument that the reducing of the time allocated to geography education, particularly at state schools, has actively hindered geography education due to time constraints in carrying out the aims of the curriculum. By reducing geography to the delivery of facts, one can reasonably question the effectiveness of the NCF if teachers are not given the time to allow students to develop vital geographical skills.

Figure 7:

Interview extracts from Maltese secondary school geography teachers on the limitations facing geography education (Bonello, 2018, p. 64)

<i>Extracts from interviews</i>
<i>"Due to the syllabus. I mean, I mostly cover what is there in the syllabus you know. We do not have a lot of time but we do have a lot of content to teach the students for exams."</i>
<i>"If you take geography as a one lesson a week, then yes it is being reduced only to the delivery of facts"</i>
<i>"First of all, with one lesson a week, geography is losing its importance and makes it hard to bond with the children and take them where you want to with the information"</i>
<i>"If I had more time, if I was on time with the scheme of work I can go a step further and do more thinking skills but the probability is that I will not go further the learning intention."</i>

Bonello (2018) highlights that many factors limiting their capacity get students to "think geographically" for teachers. Jackson & Massey (2005), highlight thinking geographically, as "geography education that empowers learners with knowledge that will allow them to develop an understanding of the world. This knowledge could allow learners to understand major world issues such as climate change, migration and globalisation, and provide knowledge to make interconnections between various aspects at different scales" (p. 3).

5.9: To what extent are the arguments of Michael Young and John White present within the curriculum frameworks in Maltese secondary schools?

It can be argued that when assessing the extent to which Young and White's recommendations are present within the Maltese curriculum framework, one can make the argument that much of their advocations, have been reflected in the policy documents. As demonstrated previously,

much of the framework advocates for an aims-based approach focused on outcomes, where students are actively encouraged to develop important capabilities. These skills and experiences that the students develop are stated by the framework to enrich the student's self, much like what is advocated by White and Reiss' curriculum arguments within chapter 4. Moreover, with the analysis that was conducted on the LOF, it is clear to see that the framework actively challenges students to develop more complex geographical skills as they progress throughout their education. This can further be argued to fall in line with the works of Lambert and the importance of thinking geographically within Geography education and developing powerful geographical knowledge, furthermore the NCF builds on this where it argues that it is the students own experiences and knowledge that binds the newfound skills developed throughout the learning process under the NCF. One important point that must be noted however, is whether the teachers are given enough time to satisfyingly cover the aims of the curriculum, and whether they will have the time to develop these important capabilities throughout the student's learning process. This has been seen to be a problem within state schools' provided within the teacher testimonies as shown by Bonello (2018). In this regard this study notes that while the LOF satisfyingly conveys the aims of the curriculum at classroom level, time allocations given to the discipline have led to questions of successful implementation, particularly within state schools, where teachers are only allocated 40 minutes contact time with students per week.

Chapter 6: An analysis of national standardized assessment in Ireland and Malta

With this research study thus having given context to the curriculum arguments of White and Young, and a detailed analysis of to what extent are their recommendations present within curriculum frameworks and policy documents in Irish and Maltese secondary schools, this chapter seeks to briefly analyse issues surrounding assessment within upper secondary education in Ireland, and sixth-form in Malta. The Leaving Certificate in Ireland and Matriculation Certificate (MATSEC) in Malta, are both national standardized examinations that act as a gateway for further progression in education into tertiary level, and at present, have not undergone curricular reforms in contrast to the Junior Cycle curriculum framework in Ireland, and the NCF in Maltese secondary schools. Although in Malta and Ireland, national governments have implemented reforms to modernise teaching and learning, such as the aforementioned changes to qualifications required for teaching (see page 8), it is important to note that curricula such as the Leaving certificate (Smyth, McCoy & Banks, 2019, p. 23) and MATSEC, still reflect within their classrooms, a conforming to a traditional style of teaching and learning. (MEDE, 2017, p. 123).

Emaliana (2017) details traditional approaches to teaching and learning, as inherently teacher-centric, where the teacher plays an essential role within teaching and learning, teachers are seen as information providers and are evaluators, and the role of the students is to passively receive information from the teacher (p. 60). This teaching style often fails to engage students during the learning process and not becoming actively involved with their education, as the teacher directs all classroom activities. Furthermore, when we see teachers following a teacher-centric approach to learning, this is also characterised by an emphasis on rote learning, this style of learning emphasises the mass collection of data collection and memorisation over a short period

of time. This system rewards memorisation over meaningful understanding and is particularly prevalent within the assessment of the matriculation certificate in Malta, and the Leaving certificate in Ireland.

6.1: The weaknesses of a teacher-centric system

A report conducted by Banks, McCoy and Smyth (2018), demonstrates the weaknesses present in a teacher-centric system, where in a series of interviews conducted with secondary school teachers, there emerged two dominant themes with teachers teaching the Senior Cycle in Irish secondary schools (p. 12).

1. Teachers often spoke of the pressures placed on teachers and students, the implications of this resulted in widespread rote-learning memorization tactics for students, and teachers teaching to the test.
2. As a direct result of the implementation of these teaching and learning tactics, the negative impacts on students became clear to teachers, with students often showing lack of motivation, high levels of stress, increased anxiety (p, 55), dropping of extra-curricular activities due to content overload (p. 13), as well as sleep deprivation (p. 40).

As was previously mentioned within chapter 5, student and teacher testimonies had very often indicated that the leaving certificate inherently favoured rote memorization tactics in order to succeed, with students often coming under immense stress. This is further developed by Smyth, McCoy & Banks (2019), where a key research finding, concluded that the leaving certificate inherently favoured academically minded students who could memorize large amounts of information and provided little in the means of skills. This in turn means that students who have a more vocational orientation and those with special educational needs inherently found themselves at a much more significant disadvantage (p. 90).

6.2: Reviewing the SEC and MATSEC assessment models in Maltese schools

With context given to flaws present within the Irish Senior Cycle in Chapter 5, it is important to note that such critiques of a teacher-centric system where assessment is based mainly on high-stakes sit down examinations, are not unique to Ireland, but are also found within Malta's secondary examinations certificate (SEC) and MATSEC. Within a report conducted by the MEDE (2017), on recommendations for changes to examinations and curricula in Maltese post-secondary institutions, much of the research findings found within the report show very similar research outcomes to that seen within the analysis of the Irish Senior Cycle (see Banks, McCoy & Smyth, (2018), Smyth, McCoy & Calvert (2011), Smyth, McCoy & Banks (2019), Baird, Caro and Hopfenbeck (2014). Within the report (2017), the MATSEC examinations were critiqued extensively as a

'one-size-fits-all', summative, 'paper and pen' exam-based assessment system. Supporters of alternative learning systems believe that it rewards memory as opposed to learning skills, and that it propagates a model of teaching and learning that is reinforced in higher education . . . Success is associated with accommodating knowledge for the purpose of passing an examination". (p. 83).

Camillieri, Chetcuti & Falzon (2019) provide further critiques on the flaws on the structure of the SEC and MATSEC examinations, with a report grounded in detailing the personal experiences of dyslexic students, who had just finished their SEC or MATSEC examinations at the time. A key outcome of this research study, were that dyslexic students were eager to question the fairness of the examinations specifically. Students supported their claim that these exams were not adequately fair, due to the nature of SEC and MATSEC exams being predominantly written based, exam papers often used complicated language, and a feeling that the questions were designed in a way to "catch students out", instead of encourage them to

demonstrate what they know. It is commented that for dyslexic students, these students face higher than average anxiety than students without dyslexia, due to inhibitive factors such as not allotting extra time, presentation of the paper, size of print and the language of the paper (p. 3). Burden (2018) (in Camilieri, Chetcuti & Falzon, 2019) notes that research findings have shown evidence that the development of self-worth, is closely associated with academic success and doing well in school.

When considering the testimonies of dyslexic students and their experiences of having sat the SEC and MATSEC exams, Camilieri, Chetcuti and Falzon (2019) together with the research findings within Banks, McCoy & Smyth (2018) (See also Smyth, McCoy & Calvert, 2011, Smyth, McCoy & Banks, 2019) demonstrate how the stress that is placed on students facing high stakes examinations, can lead to instances of high levels of stress, anxiety, depression and lower self-worth, which collectively impact student's capacity to succeed academically.

6.3: Conclusions drawn from the current challenges facing geography education in Irish and Maltese secondary schools

What is consistent across all the aforementioned reports conducted on the Irish Leaving Certificate and the Maltese SEC and MATSEC (See Banks, McCoy & Smyth, (2018), Smyth, McCoy & Calvert (2011), Smyth, McCoy & Banks (2019), Baird, Caro and Hopfenbeck (2014), MEDE (2017) & Bonello (2018)), show that for geography education within each of these periods in secondary school or sixth-form, the predominant method used by students in order to succeed in their exams, involved rote-learning memorisation of facts, with direct implications involving students experiencing high levels of stress and anxiety. What one can note here, is a lack of assessment that actively encourages the development of important skills for students and the practicing of higher-order thinking and reasoning. This stands in contrast to Bloom's taxonomy, which sets out a pyramidal model that advocates for a progression of

thinking from basic skills such as recall and understanding, and gradually apply higher orders of thinking such as the creation of new pieces of knowledge and understanding, and wider innovative ways of thinking.

6.4: The importance of key skills for students progressing beyond secondary education

Evidence of a lack of higher order thinking skills within the Senior Cycle in Ireland, can clearly be demonstrated in a report conducted by O’Leary and Scully (2018), with first-year students at Dublin City University (DCU). A key research finding within the report, found that in subjects such as Biology, Home economics and Engineering, as much as 50% of questions asked in leaving certificate papers, contained words that conformed to the lowest bands of Bloom’s taxonomy. (p. 3). These findings directly support Baird, Caro and Hopfenbeck’s (2014) findings, where as aforementioned, noted that Biology and Geography were found to have particularly noticeable test paper predictability, and students employed rote-learning fact memorisation to succeed in Geography.

O’Leary and Scully’s research study consists of interviews with first-year university students at DCU, with questions specifically researching student perceptions of how the leaving certificate prepares students for university. A key outcome from the testimonies provided by students, shows that as much as 84% of the interviewees, did not believe that the leaving certificate adequately prepared them for university education (p. 11.). Ballinger (2003) (in Denny, 2015), notes that the high stakes examinations at Junior and Senior Cycle level, have oft been blamed for the difficulties in bridging the gap between secondary and tertiary education, as it is believed that rote-learning for the exams is being rewarded, instead of the development of key skills (p. 21). The presence of high-stakes examinations, it is argued, creates a “*learn-and-forget*” culture not unique to Ireland (ibid), but is also present within SEC

examinations in Malta, as evidenced by the report conducted by MEDE (2017) on MATSEC examinations.

Table 2:

Extract of the questionnaire conducted by O' Leary & Scully (2018), on to what extent did the leaving certificate provide 1st-year university students with skills needed for university (p. 9)

Table 3. Students' Responses Pertaining to their Experiences of the LCP and of First Year

Frequently/ Very Frequently	<-This was required of me in First Year The LCP prepared me well for this ->	Agree/ Strongly Agree	<i>Difference</i>
%		%	
73	use technology to improve my learning	24	49
88	think independently	39	49
73	identify sources of information	28	45
77	be open minded	33	44
79	perform well across different types of assessments	40	40
62	interrogate/critically evaluate information or ideas	25	37
59	compare information from different sources	27	32
73	use social skills for teamwork	43	30
58	explore ideas from a number of different perspectives	30	28
86	think logically	58	27
67	use evidence to inform opinions	40	27
45	critically review evidence	19	26
48	use a range of research strategies to investigate a problem	23	25
66	be intellectually curious	41	25
89	take responsibility for my learning	65	24
70	present information or ideas I learned in my own words	45	24
42	learn with a global context in mind	18	24
64	be flexible and responsive to change	40	24
55	consider myself as a lifelong learner	32	24
62	build on the ideas of others to form my own opinion	39	23
60	be confident in reaching decisions	38	22
61	reflect on my learning	42	19
62	think critically to solve problems	46	16
30	critically examine my cultural values and beliefs	18	12

In the questionnaire, it is evident that students felt that the leaving certificate was inadequate for preparing students for the academic demands of university. This is especially notable with the very low positive response rate to questions that asked whether students had been provided with skills synonymous with higher orders of thinking as proposed by Bloom's taxonomy. As is previously stated, Bloom's taxonomy seeks to implement a model for progression of thinking. As was seen in the research findings of Banks, McCoy & Smyth, (2018), Smyth, McCoy & Calvert (2011), Smyth, McCoy & Banks (2019), Baird, Caro and Hopfenbeck (2014), MEDE (2017) and Bonello (2018), it is evident that content-rich curricula, where assessment largely is relegated to high stakes examinations, lead to assessment that is largely void of higher orders of thinking and is relegated to the rote-memorization of facts. This is supported through insight from students in Dublin City University, who largely felt that the leaving certificate failed to prepare them with the vital higher-order skills needed for University.

6.5: Epilogue to key arguments from academia to modernise Irish and Maltese secondary and post-secondary curricula and assessment models

It is clear from what we have seen, that these curricula have faced extensive scrutiny and criticisms levelled against it. Due to the syllabus's examination methods and content size, curricula such as that seen in the Irish leaving certificate and Maltese matriculation certificate have both shown that their curricula require modernisation that compliments modern theories of teaching and learning.

As was previously mentioned within research papers that critiqued upper secondary level curricula in Ireland and Malta (see Banks, McCoy & Smith (2018), ESRI, MEDE, O'Leary and Scully (2018)), the structure of the Irish and Maltese upper-secondary curricula, ultimately led to the mass gathering and recall of knowledge, where the learning goals that students should

achieve, are assessed through standardized testing which seeks to examine what students know. Furthermore, the reports concluded that a flaw with the standardized testing present within these curricula often lacked measuring for higher-order thinking skills within students, as proposed within Bloom's taxonomy. A consequence of such a curriculum with standardized testing as the assessment, is that student's do not give meaning to the knowledge they learn at school and as was aforementioned in Ballinger (2003) in his critique, of the leaving certificate assessment, this method of assessment has often been blamed for not adequately bridging the gap between secondary education, and further education. This is further reflected in Malta through the insight of Vella (2014), where in a research study investigating the frequency of students dropping out of university in the Bachelors of Science and Engineering courses, it was found that as much as 35% of first year students in both courses, had dropped out of the course (pp. 8-9). Lack of communication between sixth-form collages and university, inadequate preparation for university life and issues with time management, were reported as the main factors influencing difficulty in transitioning to University (pp 11-12).

6.6: Expanding curricular reforms towards Leaving Cycle and sixth form

As we have seen throughout this chapter, evidence has been shown from academia as well as from government review bodies, that clearly demonstrate the issues currently present within assessment at senior cycle level in Ireland, and at MATSEC level within Maltese secondary schools. Chapter 5 demonstrated that in Ireland, the government sought to move away from the teacher-centric approach present at senior cycle level, and implement curricular changes more in line with the recommendations of White and Young. Moreover in Malta, we see within the NCF that there has been a concious effort on the Maltese authorities to implement capabilities within students and allow the students to work towards aims and develop powerful

geographical knowledge. As such, it has been noted within both countries, that there is a clear need to expand upon these curricular reforms at all levels up to tertiary education.

In Ireland, O'Brien (2021), notes that as of April 2021, there is no formal document published at present for curricular reforms for senior cycle level in Ireland, however very shortly, there is expected to be a published 68-page long document, outlining future changes to senior cycle, by the Minister for Education, Norma Foley. It is detailed that the report, soon to be published, will follow much of the changes made in the curricular framework at Junior Cycle level, emphasising continuous assessment and projects over the course of senior cycle level.

However, in Maltese sixth forms, despite the publishing of a document from MEDE (2017) outlining the recommended changes that should be made to sixth-form education in Malta. There has been no information available to suggest that the government is proposing to reform the curriculum framework at sixth-form level at any time in the present. One form however that has been proposed at government level for sixth forms, has been the potential obligatory requirement to study a foreign language at sixth form level (Martin, 2019).

Chapter 7: Conclusions

7.1: Key research findings of this study

The purpose of this chapter seeks to provide to the reader, a short overview of the research findings that were found over the duration of this study.

Within chapter 1, this study had constructed two important research questions in order to determine the extent to which the curriculum arguments of White and Young were present in the Irish and Maltese secondary school curriculum, with a specific focus on Geography education. These two research questions were

1. To what extent are the writings of John White and Michael Young reflected within contemporary curricula in Malta and Ireland
2. Do the programmes of work in Ireland and Malta allow for the national curriculum to be reflected clearly within the classrooms of secondary schools

This study first investigated the historical development of modern secondary school curriculum frameworks in Ireland and Malta. A detailed comparative study was then performed with the curriculum arguments of John White and Michael Young, where White and Muller, had established their arguments for a curriculum model grounded in aims, whilst Young would establish his arguments for a curriculum model grounded in the theory of “powerful knowledge”. The current in-use curriculum models in Irish and Maltese secondary schools were then analysed, compared and contrasted, to see to what extent the curriculum arguments from these figures in academia present within each country's respective secondary school curriculum framework, and to what extent were the programmes of work able to implement the curriculum framework within the classroom. In conclusion, a study was then conducted to

investigate the penultimate assessment responsible for progression to university, with investigations performed on how academics, students, and teachers perceive assessment within these curriculum frameworks.

When analysing the current curriculum framework model in Irish secondary schools, it became evident over the course of the study that within Irish secondary schools, there was little evidence of the recommendations of White and Young to be found in the Senior Cycle curriculum framework. The Irish Senior cycle framework was found to primarily be dependent on a high-stakes formal set of examinations that had been heavily critiqued across the board, with businesses, teachers, students and figures within academia collectively coming to a consensus that the Leaving Certificate assessment had failed to assess students to demonstrate their own learning and capabilities adequately, and would fail to prepare students in developing important skills needed for further education and for employment (see Banks, McCoy & Smyth, (2018), Smyth, McCoy & Calvert (2011), Smyth, McCoy & Banks (2019), Baird, Caro & Hopfenbeck (2014) & O'Brien (2017a, 2017b, 2020, 2021). Furthermore, the syllabus for senior-level geography, had not been updated since 2003, with the syllabus placing little emphasis on students personal development.

This had been remedied somewhat in the study conducted in the Junior Cycle curriculum framework (2015), where likewise in Malta with the Learning Outcomes Framework (2015), would place a great emphasis on students demonstrating their skills and capabilities through in-class continuous assessment, and a greater emphasis placed on the journey of students towards meeting the outcomes expected of them within the curriculum. Moreover, in both countries governments in Ireland and Malta have sought to build upon the newly introduced curriculum frameworks by expanding the Junior Cycle curriculum framework into Senior Cycle in Ireland (O'Brien, 2021), and the Maltese government seeking to implement various

reforms at sixth-form level, such as the proposed requirement for the compulsory study of a foreign language (Martin, 2019).

When assessing whether the frameworks in both countries had allowed teachers to implement the curriculum models within Irish and Maltese classrooms practically, it became evident that in Ireland, it became apparent that the syllabus emphasized the development of the student's capacity to think geographically and to imbue within the student the capabilities to develop powerful geographical knowledge. This was evident throughout the syllabus, as the syllabus had been found to encourage students to practice their newfound geographical skills in a national and global dimension throughout various aspects of physical and human geography. This is keeping in line with the curriculum vision of the Junior Cycle which had grounded itself that students would have the capabilities to “*analyse information in new and creative ways, investigate issues themselves, explore, think independently, and apply their newfound knowledge to new challenges and situations.*” (p. 7)

In Malta the LOF has further demonstrated a clear improvement over previous models of integrating the program of work into Maltese secondary school classrooms, with the LOF being implemented by the vast majority of teachers in Maltese secondary schools, this comes as a direct result of the implementation of the MTL degree at UOM, where students in MTL spend a large part of their education learning about modern curriculum models and implementing them successfully with the aid of a designated tutor. However, one important point to note within Geography education, as stated by Bonello (2018), was the reduction of in-class teaching time dedicated to Geography education. Teachers have noted the difficulties in implementing the NCF within the classrooms due to difficulties covering the syllabus load. With this in mind, a recommendation that could be made to teach geography within the LOF better, would be to designate an extra lesson of Geography a week to students across all levels

of schools, as church and independent schools, may given extra dedicated time to Geography education, than to the state schools, which are directly mandated to designate 40 minutes a week to Geography as part of environmental studies. (p. 63). Prior to the introduction of the NCF, geography was allotted 2 lessons of 40 minutes per week.

7.2: Limitations of this research study

When researching this study, this study came with some challenges and opportunities for further exploration that unfortunately couldn't be achieved due to the coronavirus pandemic during the construction of this thesis. Due to the nature of the pandemic, this study initially intended to use in-person interviews with teachers and academic professors to obtain first person accounts of the practical realities of implanting the national curriculum into the classroom. It must be acknowledged that such a source of primary source data, would prove invaluable to the practical realities to which teachers and students face in schools in both countries. Furthermore, as a result of this dissertation seeking to shed light on an area with a very small bibliography, finding academic papers and books on the state of Geography in Ireland, and Malta in particular, posed a challenge

7.3: Recommendations for further reading

A recommendation I would give for any researcher looking to follow up and improve on this research study would be implementing primary data collection gathering, which was not possible within this study given the worldwide travel repercussions of the coronavirus pandemic. As noted previously within my writings on the limitations of this study, the insight from teachers on their own experiences would have contributed immensely. Moreover, a comparative study that could bring further depth into this field of research, particularly in a study into the Maltese curriculum framework, would be to conduct a comparative study between the secondary school curriculum frameworks in both England and Malta. The reason

for this is that the Maltese educational system is identical to the English educational system. In this regard for a more direct comparative study, this would be an area of further research I would advocate for.

Finally in the near future, an unpublished doctoral thesis will be published by Dr. Borg Axisa (2018b), explicitly investigating the status of Geography in Maltese secondary schools, and will in the future, provide an invaluable tool to build upon this area of research.

7.4: Final comments

In this section, I would like to mention a number of Irish and Maltese academics to which this study would not have been possible without the insight provided by their work.

A special mention must be given to Dr. Borg Axisa, for her academic studies of Geography education in Maltese schools for which she was essential to this study (see Borg Axisa, 2018a). Furthermore, I will give special mention to Michael Young's articles of "*What are schools for*" (2007), "*Bringing Knowledge Back In: From social constructivism to social realism in the sociology of education*" (2008) and "*On the powers of "powerful knowledge"*" (2013) as significant academic contributions that formed a key cornerstone for my analysis on Michael Young's arguments for "powerful knowledge". Moreover, for John White, it must be noted that his papers "*The weakness of "powerful knowledge"*" (2018), "*The end of "powerful knowledge?"*"(2019) and his co-authored work with Michael J. Reiss "*An Aims-based Curriculum: The Significance of Human Flourishing for Schools*" (2013), formed the cornerstone of my analysis for his arguments for an aims-based curriculum".

As noted previously within Chapter 5, I would like to again give a special mention to Curmi's (1994) study on the National Minimum curriculum. as his study does a fantastic job investigating the years following the implementation of Malta's first national curriculum and the practical realities of its implementation in secondary school classrooms.

Furthermore, I would also like to give a special mention to Bonello (2018), who did a fantastic study investigating the experiences of geography teachers implementing the National curriculum framework within Maltese secondary schools. Bonello in her study would devote a large part of her research defining key geographical concepts from academics such as Lambert and Young, and would investigate through a series of interviews with geography teachers in Maltese state secondary schools, and their experiences implementing the curriculum framework within their classrooms.

Finally, I would like to give a special mention to the literary contributions of Banks, Smyth and McCoy (See Smyth, McCoy & Calvert (2011), Banks, McCoy & Smyth, (2018), Smyth, McCoy & Banks (2019)), for their numerous contributions within academia into investigating the experiences of teachers and students at senior level. Their academic contributions formed the groundwork for my own study of the Irish secondary school curriculum framework and was invaluable in my study of assessment at Senior Cycle level in Ireland.

References

- Bachika. R. (2015), “*On the sacred and the profane*”, Bukkyo University, found at: <https://archives.bukkyo-u.ac.jp/rp-contents/DY/0065/DY00650L159.pdf>, accessed on: 30/05/21
- Baird. J.A, Hopfenbeck. T.N , Elwood. J, Caro. D & Ahmed. A. (2014), “*Predictability in the Irish Leaving Certificate*”, Queens University Belfast, Oxford University Centre for Educational Assessment, found at: https://www.researchgate.net/publication/276270165_Predictability_in_the_Irish_Leaving_Certificate, accessed on: 30/05/21
- Banks. J, McCoy. S & Smyth. E. (2018), “*Senior Cycle Review: Analysis of discussions in schools on the purpose of senior cycle education in Ireland*”, Working paper No. 607, The Economic and Social Research Institute, Dublin, found at: <https://www.esri.ie/system/files/media/file-uploads/2018-12/WP607.pdf>, accessed on: 30/05/21
- Bartolo. E. (2016), “Education system is unjust for students and for teachers”, *Times of Malta*, 14th August, found at: <https://timesofmalta.com/articles/view/education-system-is-unjust-for-students-and-for-teachers.621907>, accessed on: 30/05/21
- Baujard. A. (2013). “*Utilitarianism and anti-utilitarianism*”, Groupe D’analyse et de Théorie Économique, Lyon, found at: <https://halshs.archives-ouvertes.fr/halshs-00906899/document>, accessed on: 03/06/21
- Bonello. K. (2018). “*School geography teachers’ pedagogical choices: The claim for ‘geographical thinking*”, Faculty of Education, University of Malta, Msida, Masters Thesis, found at: <https://www.um.edu.mt/library/oar/bitstream/123456789/67097/1/18MTL005.pdf>. accessed on: 30/05/21

Borg Axisa. G. (2018a), “*A Change in the Language Policy for School Geography: Breaking Barriers or Creating New Ones?*”, Faculty of Education, University of Malta, found at: <https://www.um.edu.mt/library/oar/bitstream/123456789/38159/1/Glorianne%20Borg%20Axisa.pdf>, accessed on: 30/05/21

Borg Axisa, G. (2018b), “*Intercultural Education through School Geography in Malta*”, Unpublished PhD Thesis, University College London, UK

California Baptist University, (2020), *Assessment handbook*, version 5.1, California, found at: https://calbaptist.edu/educational-effectiveness/Assessment%20Handbook%20Version%205.1%20Final%20Version_Approved.pdf, accessed on: 30/05/21

Camilleri. S, Chetcuti. D & Falzon. R. (2019), “*They Labeled Me Ignorant*”: *Narratives of Maltese Youth With Dyslexia on National Examinations*, University of Malta, Malta, found at: https://www.um.edu.mt/library/oar/bitstream/123456789/59031/1/They_Labeled_Me_Ignorant_Narratives_of_Maltese_You.pdf, accessed on: 30/05/21

Carmody. P, Croke. J, Hickey. K, Kearns. G, Lynch. K & McCafferty. D. (2019), “*Putting geography back on the map*”, *The Irish Times*, 25th February, found at: https://www.irishtimes.com/opinion/letters/putting-geography-back-on-the-map-1.3803579?mode=sample&auth-failed=1&pw-origin=https%3A%2F%2Fwww.irishtimes.com%2Fopinion%2Fletters%2Fputting-geography-back-on-the-map-1.3803579%3Ffbclid%3DIwAR1AucnE6Ms4tt5YEqajyjNjh_Bnp_H-YHkVUJuVfqw0-RLyYQF-R-Pxvms, accessed on: 30/05/21

Carabott. S. (2018). “Early school leavers in Malta are highest in the EU”, *Times of Malta*, 20th October, found at: <https://timesofmalta.com/articles/view/early-school-leavers-in-malta-are-highest-in-the-eu.692022>, accessed on: 01/06/21

Caruana. S. (2016), “Taking teaching to masters’ level”, *Times of Malta*, 6th March, found at: <https://timesofmalta.com/articles/view/Taking-teaching-to-Master-level.604784.amp>, accessed on: 30/05/21

Chang. O. (2015), “Australian schools are scrapping history and geography and replacing them with coding classes”, *Business Insider Australia*, 19th September, found at: <https://www.businessinsider.com.au/australian-schools-are-scrapping-history-and-geography-and-replacing-them-with-coding-classes-2015-9>, accessed on: 30/05/21

Constitution of Ireland, 1937a, “*Religion*”, Article 42, 29th December, Government of Ireland, Office of the Attorney General, Dublin, found at: <http://www.irishstatutebook.ie/eli/cons/en#article44>, accessed on: 30/05/21

Constitution of Ireland, 1937b, “*Education*”, Article 44, 29th December, Government of Ireland, Office of the Attorney General, Dublin, found at: <http://www.irishstatutebook.ie/eli/cons/en/html#article42>, accessed on: 30/05/21

Coolahan, (2007), “*A Review Paper on Thinking and Policies Relating to Teacher Education in Ireland*”, The Teaching Council of Ireland, found at <https://www.teachingcouncil.ie/en/publications/research/documents/a-review-paper-on-thinking-and-policies-relating-to-teacher-education-in-ireland.pdf>, accessed on: 30/05/21

Curmi. G. (1994). “*State secondary school teachers attitudes towards the national minimum curriculum - (secondary level)*”, Faculty of Education, University of Malta, Msida, Undergraduates dissertation, found at: https://www.um.edu.mt/library/oar/bitstream/123456789/68616/1/Curmi_George_1994.PDF, accessed on: 30/05/21

Cutajar. M. (2007). “*Educational Reform in the Maltese islands*”, Faculty of Education, University of Malta, Msida, found at: <https://www.um.edu.mt/library/oar/bitstream/123456789/19586/1/1.%20EDUCATIONAL%20REFORM%20IN%20THE%20MALTESE%20ISLANDS.pdf>, accessed on: 30/05/21

Daly. A. (2019), “The importance hasn't gone away!: Calls for geography to be brought back as core subject”, *The Journal.ie*, 25th February, found at: <https://www.thejournal.ie/calls-for-geography-to-be-reinstated-as-core-subject-4511988-Feb2019/>, accessed on: 30/05/21

Debono. C. (2019), “*An analysis on how students relate school geography to their living experience*” , Faculty of Education, University of Malta, Msida, Masters Thesis, found at: <https://www.um.edu.mt/library/oar/bitstream/123456789/51737/4/19MTL030.pdf>, accessed on: 30/05/21

Debono. J. (2021). “State schools took bulk of international students with 700% increase: data”, *Maltatoday*, 5th March, found at: https://www.maltatoday.com.mt/news/national/108013/state_schools_took_bulk_of_international_students_with_700_increase_data#.YJ7QPrUzZEZ, accessed on: 30/05/21

Denny. E. (2015), “*Transition from second-level and further education to higher education*”, Focused Research Report No. 6, Department of Economics, Trinity College, Dublin, found at: <https://www.teachingandlearning.ie/wp-content/uploads/NF-2015-Transition-from-Second-Level-and-Further-Education-to-Higher-Education.pdf>, accessed on: 30/05/21

Department of Education and Science, (2003), “*Leaving Certificate: Geography Syllabus*”, Government publication sales office, Dublin 2, found at: file:///C:/Users/Admin/Downloads/SCSEC17_Geography_syllabus_eng.pdf, accessed on: 30/05/21

Department of Education and Science, (2004), “*Rules and Programmes for Secondary Schools 2004/2005*”, Dublin: Stationery Office, found at: <https://www.education.ie/en/Schools-Colleges/Information/Rules-and-Programmes-for-Schools/Rules-and-Programmes-for-Secondary-Schools.pdf>, accessed on: 30/05/21

Department of Education and Skills, (2012), “*OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes: Country background report for Ireland*”, Dublin: Stationery Office, found at: <https://www.oecd.org/education/school/Country%20Background%20Report%20for%20Ireland%20-%20Evaluation%20and%20Assessment%20Frameworks.pdf>, accessed on: 30/05/21

Department of Education and Skills, (2015), “*A Framework for Junior Cycle*”, Department of Education and Skills, Marlborough Street, Dublin 1, found at: <https://www.education.ie/en/Publications/Policy-Reports/Framework-for-Junior-Cycle-2015.pdf>, accessed on: 30/05/21

Department of Education and Skills, (2018), “*The Junior Certificate: Geography Syllabus*”, National Council for Curriculum and Assessment, Dublin: found at: https://www.curriculumonline.ie/getmedia/3c3aec51-89c3-47ca-964c-4bcfa1f62853/JCSEC10_Geography_syllabus.pdf

Department of Education and Skills, (2021), “*Ministers for Education From 1921 to Date*”, Dublin, found at: <https://www.education.ie/en/The-Department/Ministers/Ministers-for-Education-From-1921-to-Date.html>, accessed on: 30/05/21

Department of Education and Skills (2021), “*National Council for Curriculum and Assessment, Agencies*”, found at <https://www.education.ie/en/The-Department/Agencies/National-Council-for-Curriculum-and-Assessment-NCCA-.html#:~:text=The%20role%20of%20the%20National,changes%20resulting%20from%20this%20work>, accessed on: 30/05/21

Dewey. J. (1906). “*The child and the curriculum*”, Contributions to education, vol. 5. University of Chicago Press, Chicago, found at: <https://quote.ucsd.edu/childhood/files/2013/05/dewey-childcurriculum.pdf>, accessed on: 30/05/21

Donert. K. (2009), “*Karl Donert: European Perspectives in Geographic Education*”, Youtube video, 20th November, found at: https://www.youtube.com/watch?v=iyQhoUg_Kl0, accessed on: 03/06/21

Donert. K. (2015), “*GeoCapabilities: Empowering teachers as subject leaders*”, Transforming Teaching: Inspiring Learning, 1st ed, Higher Education Academy found at: https://www.researchgate.net/publication/303767123_GeoCapabilities_Empowering_teachers_as_subject_leaders, accessed on: 03/06/21

Doyle. A.M. (2019), “*Curriculum Becoming in the Assemblage of Lower Secondary Education in Ireland*”, Department of Education, Maynooth University, Doctoral thesis, http://mural.maynoothuniversity.ie/11201/1/Audrey_M_Doyle_PHD_final.pdf, accessed on: 30/05/21

Duca. T. (2018), “*Exploring educators dispositions to pedagogical transformation in Malta by using evidence from the Scottish experience: A comparative study*”, Euro-Mediterranean Centre for Educational Research, University of Malta, Masters thesis, found at: <https://www.um.edu.mt/library/oar/bitstream/123456789/39850/4/18MACEMES002.pdf>, accessed on: 30/05/21

Duffy. R. (2018). “*The 25 bonus CAO points for Higher Maths has more than doubled participation*”, TheJournal.ie, 20th August, found at: <https://www.thejournal.ie/cao-points-maths-4187925-Aug2018/>, accessed on: 03/06/21

Emaliana. I. (2017), “*Teacher-centered or Student-centered Learning Approach to Promote Learning?*”, Jurnal Sosial Humaniora, Vol. 10, 2nd ed, Faculty of Cultural Study, Universitas Brawijawa Malang, Indonesia, found at: file:///C:/Users/Admin/Downloads/TEACHER-CENTERED_OR_STUDENT-CENTERED_LEARNING_APPR.pdf, accessed on: 30/05/21

GeoCapabilities, (2016a), “*The approach*”, found at: <https://www.geocapabilities.org/geocapabilities/the-approach/>, accessed on: 30/05/2021

GeoCapabilities, (2016b), “*Glossary*”, found at: <https://www.geocapabilities.org/glossary/>, accessed on: 30/05/21

Government of Malta, (1988), “*Education act*”, Chapter 327, found at: Education act: https://education.gov.mt/en/Documents/Malta_education_act_2010.pdf, accessed on: 30/05/21

Harris. A. (2018). “*The Liberal Arts May Not Survive the 21st Century*”, *The Atlantic*, 13th December, found at: <https://www.theatlantic.com/education/archive/2018/12/the-liberal-arts-may-not-survive-the-21st-century/577876/>, accessed on: 30/05/21

Hogan, P. (1983). “*An overview of the educational ethos*”, The Crane Bag Vol. 7, No. 2, found at: <http://mural.maynoothuniversity.ie/1115/1/EdEthos.pdf>, accessed on: 30/05/21

Houghton. F & Houghton. S, (2016), “*Exploring the Judgements of Powerful Outsiders on the Discipline of Geography in Ireland*”. Irish Geography, 49(2), found at: <file:///C:/Users/Admin/Downloads/1235-4721-1-PB.pdf>, accessed on: 30/05/21

House of the Oireachtas, (1924), “*Intermediate Education (Amendment) Bill – Second Stage*”, 4th July, Vol. 8, No. 5, found at: <https://www.oireachtas.ie/en/debates/debate/dail/1924-07-04/33/>, accessed on: 30/05/21

House of the Oireachtas, (1992) “*Green Paper on Education: Statements*”, 22nd October, Vol. 134, No. 5, found at: <https://www.oireachtas.ie/en/debates/debate/seanad/1992-10-22/3/>, accessed on: 30/05/21

Idrisa. F, Hassana. Z, Ya’acoba. A, Gillb. S.K. & Awal. M. (2011), “*The role of education in shaping youth’s national identity*”, Social and Behavioral Sciences (59), UKM Teaching and Learning Congress, found at: <https://core.ac.uk/download/pdf/81145809.pdf>, accessed on: 30/05/21

Jackson, P. (2006). “*Thinking geographically*”. Geography, 91(3), found at: https://people.uwec.edu/kaldjian/1Courses/GEOG401/401Readings/Thinking_Geographically_Jackson_2006.pdf, accessed on: 03/06/21

Lambert D. (2013), “*Geography in school and a curriculum of survival*”. Theory and Research in Education, 11(1)

Lambert. D. (2017). “*Who thinks what in geography classrooms? Powerful disciplinary knowledge and curriculum futures*”, The New Geography, 65 (3), the Geographic Education Society of Japan, Japan, found at: https://discovery.ucl.ac.uk/id/eprint/10042097/1/Lambert_Who_thinks_what_geography.pdf, accessed on: 30/05/21

Lilliedahl. J. (2015) “*The recontextualisation of knowledge: towards a social realist approach to curriculum and didactics*”, Nordic Journal of Studies in Educational Policy, found at: <https://www.tandfonline.com/doi/pdf/10.3402/nstep.v1.27008>, accessed on: 30/05/21

Mahmoudi. A, Khoshnood. A & Babaei. A. (2014). “*Paulo Freire Critical Pedagogy and its Implications in Curriculum Planning*”, Journal of Education and Practice, Vol. 5, No. 14, Payame Noor University, Tehran, Iran, found at: <https://www.iiste.org/Journals/index.php/JEP/article/viewFile/12993/13309#:~:text=From%20Freire's%20perspective%2C%20curriculum%20planning,participation%20if%20teachers%20and%20students>, accessed on: 30/05/21

Mainali. B. P., (2012), “*Higher-order thinking in education*”, Academic Voices A Multidisciplinary Journal, Vol. 2, No. 1, found at: <https://pdfs.semanticscholar.org/e409/15a12d8b8fba558db8847a0414e44ed322f6.pdf>, accessed on: 30/05/21

Martin. I. (2019). “Sixth form could soon change significantly: here's how”, *Times of Malta*, 8th July, *Times of Malta*, found at: <https://timesofmalta.com/articles/view/sixth-form-could-soon-change-significantly-heres-how.720211>, accessed on: 01/06/21

Maton. K & Moore. R. (2010). “*Social Realism, Knowledge and the Sociology of Education: Coalitions of the Mind*”. Continuum International Publishing Group. London, found at: [file:///C:/Users/Admin/Downloads/2010Coalitions_Intro%20\(1\).pdf](file:///C:/Users/Admin/Downloads/2010Coalitions_Intro%20(1).pdf), accessed on: 30/05/21

Maude. A. (2015), “*What is “powerful knowledge” and Can It Be Found in the Australian Geography Curriculum?*”, Geographical Education, Vol. 28, Flinders University, Adelaide, found at: <https://files.eric.ed.gov/fulltext/EJ1085994.pdf>, accessed on: 30/05/21

Maude. A. (2016), “*What might powerful geographical knowledge look like?*”, Geography Vol. 101, Part 2, found at: https://www.researchgate.net/publication/303301470_What_might_powerful_geographical_knowledge_look_like, accessed on: 03/06/21

Mayo. P. (2012a), “*Adult education in Malta: Challenges and prospects*”, Journal of Adult and Continuing Education; 18(1), found at: <https://journals.sagepub.com/ejournals.um.edu.mt/doi/pdf/10.7227/JACE.18.1.5>, accessed on: 30/05/21

Mayo. P. (2012b), “*Lifelong learning and Schools as Community Learning Centres: Key aspects of a National Curriculum Draft Policy Framework for Malta*”, Rizoma freireano, Instituto Paulo Freire de España, found at: <https://www.um.edu.mt/library/oar/bitstream/123456789/1466/3/Rizoma%20freireano-paper.pdf>, accessed on: 01/06/21

McDougall. W.A. (2001). “*Why Geography Matters*”, American Federation of Teachers, found at: <https://www.aft.org/periodical/american-educator/spring-2001/why-geography-matters>, accessed on: 30/05/21

Ministry of Education, Youth and Employment, (2000), “*National Minimum Curriculum*”, Floriana, Malta, found at: https://education.gov.mt/en/resources/Documents/Policy%20Documents/national%20minimum%20curriculum_english.pdf, accessed on: 30/05/21

Ministry of Education, Youth and Employment, (2005), “*For all children to succeed: A new network organisation for quality education in Malta.*”, Floriana, Malta, found at: https://education.gov.mt/en/resources/Documents/Policy20Documents/for_all_children_to_succeed.pdf, accessed on: 30/05/21

Ministry of Education and Employment, (2012), “*A national curriculum framework for all*”, Floriana, Malta, found at: <https://curriculum.gov.mt/en/Resources/The-NCF/Documents/NCF.pdf>, accessed on: 30/05/21

Ministry of Education and Employment, (2014), “*Educators’ guide for pedagogy and assessment: Using a learning outcomes approach*”, Floriana, Malta, found at: https://www.schoolslearningoutcomes.edu.mt/files/documents/33_ICT.144501400569.pdf, accessed on: 30/05/21

Ministry of Education and Employment, (2015), “*Language Education Policy Profile*”, Floriana, Malta, found at: <https://rm.coe.int/language-education-policy-profile-malta/16807b3c39>, accessed on: 06/06/21

Ministry of Education and Employment, (2017), “*The working group on the future of post-secondary education*”, Floriana, Malta, found at: <https://education.gov.mt/en/Documents/Post-Secondary%20Education.pdf>, accessed on: 30/05/21

Moynihan. J.A. (2015). “*The Transition Year: A Unique Programme in Irish Education Bridging The Gap Between School and The Workplace*”, International Electronic Journal of Elementary Education, Vol. 8, Issue 2, University College Cork, found at: <https://files.eric.ed.gov/fulltext/EJ1085870.pdf>, accessed on: 30/05/21

Morais. A.M. (2006). “Basil Bernstein: Sociology for Education”, In C. A. Torres & A. Teodoro (Eds.). *Critique and Utopia; New Developments in the Sociology of Education*. Boulder, Rowman and Littlefield, found at: <https://core.ac.uk/download/pdf/12423957.pdf>, accessed on: 30/05/21

Mulenga. M. (2018), “*Conceptualization and Definition of a Curriculum, Journal of Lexicography and Terminology*”, Volume 2, Issue 2, University of Zambia, found at: https://www.researchgate.net/publication/332152068_Conceptualization_and_Definition_of_a_Curriculum, accessed on: 30/05/21

National Association for Principals and Deputy Principals, (2019), “*Senior Cycle Reform: What do you want?*”, Dublin, found at: https://www.napd.ie/wp-content/uploads/2019/01/NAPD_report_final.pdf, accessed on: 30/05/21

National Council for Curriculum and Assessment, (2009), “*Towards learning: An Overview of Senior Cycle Education*”, Dublin 2, found at: https://ncca.ie/media/2511/towards_learning_an_overview.pdf, accessed on: 30/05/21

National Council for Curriculum and Assessment, (2021a), “*What we do*”, Dublin 2, found at: <https://ncca.ie/en/about-ncca/about-us/what-we-do>, accessed on: 30/05/21

National Council for Curriculum and Assessment, (2021b), “*Curriculum*”, Senior Cycle, found at: <https://www.curriculumonline.ie/Home/>, accessed on: 06/06/21

O’ Brien. C, (2017a), “Is our education system fit for purpose in the 21st-century?”. *The Irish Times*, 17th April, found at: <https://www.irishtimes.com/news/education/is-our-education-system-fit-for-purpose-in-the-21st-century-1.3051073>, accessed on: 30/05/21

O’Brien. C. (2017b), “Fifty years after free secondary education, what big idea do we need in 2017?”, *The Irish Times*, 14th February, found at: <https://www.irishtimes.com/news/education/fifty-years-after-free-secondary-education-what-big-idea-do-we-need-in-2017-1.2967984>, accessed on: 30/05/21

O’Brien. C, (2020), “Graduates 'not well-equipped' for future workplace”, *The Irish Times*, 25th February, found at: <https://www.irishtimes.com/news/education/graduates-not-well-equipped-for-future-workplace-1.4183717>, accessed on: 30/05/21

O’Brien. C. (2021), “Plan to reduce focus on ‘stressful’ final exams in Leaving Cert reforms”, *The Irish Times*, 19th April, found at: <https://www.irishtimes.com/news/education/plan-to-reduce-focus-on-stressful-final-exams-in-leaving-cert-reforms-1.4540837>, accessed on: 30/05/21

O’Leary. M and Scully. D, (2018), “*The Leaving Certificate Programme as Preparation for Higher Education: The Views of Undergraduates at the End of their First Year in University*”, Centre for Assessment Research, Policy and Practice in Education, Dublin City University, found at: https://www.dcu.ie/sites/default/files/carpe/lc_report_sept_12.pdf, accessed on: 30/05/21

O’Reilly. B. (2012). “*Education policy in Ireland since the 1940s*”. Italian journal of sociology of education, vol. 1, Padova university press, found at: http://ijse.padovauniversitypress.it/system/files/papers/2012_1_10.pdf, accessed on: 30/05/21

PISA National Centre, (2018), “*PISA 2018: Malta report*”, Educational Assessment Unit, Department of curriculum management, found at: https://curriculum.gov.mt/en/international_studies/Documents/PISA_2018_Malta_Report.pdf accessed on: 30/05/21

Qu. P. (2018). “*A Defence of Utilitarian Pedagogy: Whether Education Should Focus More on Human Utilitarianism*”, *Advances in Social Science, Education and Humanities Research*, vol. 196, 2nd International Conference on Social Science, Public Health and Education, Atlantis press

Richardson. H. (2011). “*Geography declining in many English schools – Ofsted*”, BBC News, 4th February, found at: <https://www.bbc.com/news/education-12359446>, accessed on: 06/06/21

Rickard. A and Walsh. T, (2019), “*Policy, practice and process in team teaching: a pilot project with co-operating teachers and student teachers on school placement*”, *Irish Educational Studies*, 38:3, found at: http://mural.maynoothuniversity.ie/13887/1/AR_policy.pdf, accessed on: 30/05/21

Sadovnik. A.R. (2001). “*Basil Bernstein (1924-2000)*”, UNESCO: International Bureau of Education), vol. 31, no. 4. Found at: https://www.infoamerica.org/documentos_pdf/bernstein03.pdf, accessed on: 30/05/21

Sen. A. (1999), “*Development as freedom*”, Anchor books, New York, found at: <http://fs2.american.edu/dfagel/www/Philosophers/Sen/DevelopmentAsFreedomIntroNch1NEW.pdf>, accessed on: 30/05/21

Smith. H. (2009), “*Perceptions of Geography as a vocation: a study of secondary school students in the Illawarra and South East region of New South Wales*”, Faculty of Science, Medicine and Health, University of Wollongong, Undergraduate dissertation, found at: <https://ro.uow.edu.au/cgi/viewcontent.cgi?article=1100&context=thsci>, accessed on: 30/05/21

Smyth. E, McCoy. S and Banks. J, (2019), “*Student, teacher and parent perspectives on senior cycle education*”, Research series No. 94, The Economic and Social Research Institute, Dublin, found at: https://www.esri.ie/system/files/publications/RS94_0.pdf, accessed on: 30/05/21

Smyth. E. Banks. J & Calvert. E. (2011). “*From Leaving Certificate to Leaving School: A Longitudinal Study of Sixth Year Students*”. The Economic and Social Research Institute, The Liffey Press, Dublin, found at:

https://www.researchgate.net/publication/258225291_From_Leaving_Certificate_to_Leaving_School_A_Longitudinal_Study_of_Sixth_Year_Students, accessed on: 30/05/21

State Examinations Commission, (2018), “*Leaving Certificate Examination Timetable*”, Athlone, Westmeath, found at: <https://www.examinations.ie/misc-doc/EN-EX-36626279.pdf>, accessed on: 30/05/21

State Examinations Commission, (2021), “*State examination Statistics*”, Athlone, Westmeath, found at: <https://www.examinations.ie/?l=en&mc=st&sc=r19>, accessed on: 30/05/21

Sultana. R.G. (2011). “*Lifelong guidance, citizen rights and the state: reclaiming the social contract*”, British Journal of Guidance & Counselling, 39:2, found at: <https://www-tandfonline-com.ejournals.um.edu.mt/doi/pdf/10.1080/03069885.2010.547055?needAccess=true>, accessed on: 30/05/21

The Economic and Social Research Institute, (2003), “*Geography enquiry: Thinking Geographically*”, ESRI Schools and Libraries Program, found at: <https://www.esri.com/content/dam/esrisites/sitecore-archive/Files/Pdfs/industries/k-12/pdfs/geoginquiry.pdf>, accessed on: 01/06/21

The Organisation for Economic Co-operation and Development, (2004), “*Schooling for tomorrow: Think Scenarios, Rethink education*”, found at: <https://www.oecd.org/education/school/36702582.pdf>, accessed on: 30/05/21

The University of Malta, (2020), “*Statistical Report: Secondary Education Certificate Examinations*”, MATSEC Examinations Board, Msida, found at: https://www.um.edu.mt/__data/assets/pdf_file/0004/459877/SECStatReport20203.3.21.pdf, accessed on: 30/05/21

Tonna. M.A & Bugeja. G. (2016). “*A reflection on the Learning Outcomes Framework Project*”, Malta review of educational research, Vol. 10, No. 1, found at:
[https://www.um.edu.mt/library/oar/bitstream/123456789/20758/1/9.%20A%20REFLECTIO
N%20ON%20THE%20LEARNING%20OUTCOMES%20FRAMEWORK%20PROJECT.p
df](https://www.um.edu.mt/library/oar/bitstream/123456789/20758/1/9.%20A%20REFLECTIO%20N%20ON%20THE%20LEARNING%20OUTCOMES%20FRAMEWORK%20PROJECT.pdf), accessed on: 01/06/21

Ullenkamp. A, Beneker, T, Bladh, G, Tani. S, & Lambert. D. (2016), “*GeoCapabilities and Curriculum Leadership: balancing the Priorities of aims-based and knowledge-led Curriculum Thinking in Schools*”. International Research in Geographical and Environmental Education, Vol. 26, found at:
[https://discovery.ucl.ac.uk/id/eprint/1540929/1/Uhlenwinkel%20et%20al%20IRGEE_GeoCa
pabilities%20and%20curriculum%20leadership.pdf](https://discovery.ucl.ac.uk/id/eprint/1540929/1/Uhlenwinkel%20et%20al%20IRGEE_GeoCapabilities%20and%20curriculum%20leadership.pdf), accessed on: 03/06/21

Vella. P.E. (2014), “*Student Transition to University: Difficulties Experienced by Students following Science and Engineering Courses*”, Faculty of Education, University of Malta, Msida, Undergraduate dissertation, found at:
<https://www.um.edu.mt/library/oar/bitstream/123456789/2009/1/14BED143.pdf>, accessed on: 30/05/21

Waddington. S. (2011). “*Second Level Geography in Ireland: Past, Present and Future*”, Geographical Viewpoint, Vol. 39, Department of Geography, Maynooth University, found at:
<https://core.ac.uk/download/pdf/297014944.pdf>, accessed on: 30/05/21

White. J & Reiss. M.J. (2013), “*An Aims-based Curriculum: The Significance of Human Flourishing for Schools*”, institute of education, University of London, found at:
[https://www.researchgate.net/publication/280840026_An_Aims-
based_Curriculum_The_Significance_of_Human_Flourishing_for_Schools](https://www.researchgate.net/publication/280840026_An_Aims-based_Curriculum_The_Significance_of_Human_Flourishing_for_Schools), accessed on:
30/05/21

White. J. (2018), “*The Weakness of “powerful knowledge”*”, London Review of Education 16 (2), found at:
[https://www.researchgate.net/publication/323587483_The_Weakness_of_Powerful_Knowled
ge](https://www.researchgate.net/publication/323587483_The_Weakness_of_Powerful_Knowledge), accessed on: 30/05/21

White. J. (2019), “*The end of “powerful knowledge”?*”, London Review of Education, 17 (3), found at: <https://files.eric.ed.gov/fulltext/EJ1234809.pdf>, accessed on: 30/05/21

White. M. (2021). “*Book Review: ‘An Aims-based Curriculum: The significance of human flourishing for schools’*”, Philosophy of Education Society of Great Britain, found at: <https://www.philosophy-of-education.org/book-reviews/book-review-an-aims-based-curriculum-the-significance-of-human-flourishing-for-schools/>, accessed on: 30/05/21

Young. M. (2007). “*What are schools for?*”, Educação & Sociedade, no. 32, found at: https://www.fpce.up.pt/ciie/revistaesc/ESC32/ESC32_Arquivo.pdf, accessed on: 30/05/21

Young. M. (2008), “*Bringing Knowledge Back In: From social constructivism to social realism in the sociology of education*”, Routledge, London, found at: http://mehrmohammadi.ir/wp-content/uploads/2019/07/Bringing-Knowledge-Back-In_-Fro-Michael-F.D.-Young.pdf, accessed on: 30/05/21

Young. M. & Muller. J. (2013), “*On the powers of “powerful knowledge”*”, Review of Education Vol. 1, No. 3, found at: https://www.researchgate.net/publication/259542650_On_the_powers_of_powerful_knowledge, accessed on: 30/05/21

Young. M. (2014). “powerful knowledge” as a curriculum principle”. In M. Young, D. Lambert, C. Roberts & M. Roberts, *Knowledge and the future school: curriculum and social justice*, London: Bloomsbury Academic

Zhang. L. (2011). “*The Humanities: Their Value, Defence, Crisis, and Future*”, Diogenes, Vol. 58, No. 1-2, City University of Hong Kong, Hong Kong, https://www.researchgate.net/publication/254088153_The_Humanities_Their_Value_Defence_Crisis_and_Future, accessed on: 30/05/21

Zhou. N. (2020), “*Australian universities to cut hundreds of courses as funding crisis deepens*”, The Guardian, 30th September, found at: <https://www.theguardian.com/australia-news/2020/sep/30/australian-universities-to-cut-hundreds-of-courses-as-funding-crisis-deepens>, accessed on: 30/05/21