Cross–Curricular Teaching Within the Learning Outcomes Framework: The Experiences of Primary Teachers in Two State Schools in Malta

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Abstract

This study looks at the potential use, as well as the benefits and challenges, of a cross–curricular teaching approach embedded within the Learning Outcomes Framework in Malta. Since the inception of the National Curriculum Framework and its advocacy for student–centred approaches, the authors believe that teachers in Malta have been given more flexibility to tailor–make lessons around their students' needs. Then it follows that the use of the Learning Outcomes Framework should also facilitate the implementation of a cross–curricular approach and aid teachers in moving away from segregated teaching (and learning). Despite such claims, teaching in primary state schools in Malta is predominantly segregated by subject, with rare occasions of cross–curricular teaching. This qualitative study explores the experiences of six teachers who teach in Year 3 or Year 4 in two state primary schools. The aim is to understand what teachers perceive as barriers and enablers to the use of cross–curricular teaching as a connection–making device that integrates much needed skills anticipated for the 21st century alongside content. Findings reveal that there is a pronounced need for more guidelines and policies that are clear and practical to implement a cross–curricular approach. Teachers also remarked that there is too much prescribed material, including textbooks and timetables, which compromises their autonomy and flexibility.

Keywords

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Introduction

Terms such as interdisciplinary, integrated or thematic approach define an approach that denounces subject teaching and assumes that applying skills and competences across subjects is beneficial for the student's development (Earley, 2019). These approaches make use, or potentially are underpinned by, a cross–curricular approach. The authors will use such terms interchangeably to respect the integrity of the literature, and will use them as per their merit of connecting and combining subjects and disciplines to create relevant learning for the 21st century.

In a fast–changing world (Ayet Puigarnau, 2018), today's students face an uncertain future (Barnes, 2015b); in fact, Renjen et al. (2018) predict that "two–thirds of today's 5–year–olds will find themselves in jobs that do not exist today" (p. 3). Moreover, at present, there is a pronounced "mismatch between youths' skills and employer needs", resulting in 17% of youths in Europe who are unemployed (Renjen et al., 2018, p. 3). In Malta, as in other countries, many people are employed in jobs predicted to become obsolete. On the other hand, there are not enough professionals to work in future jobs (Malta Investment Management Company Limited [MIMCOL], 2021). Schools play a vital role in preparing today's students by equipping them with, competences that will help them thrive in tomorrow's society and economy (Ayet Puigarnau, 2018; MIMCOL, 2021; Renjen et al., 2018).

Education can address such needs by providing meaningful (Barnes, 2015b; Earley, 2019; Zerafa, 2019), relevant, and engaging learning methods that reflect the realities in Malta's societies and that can teach content alongside direly needed competences and skills. Locally, MIMCOL (2021) recognises the need to align the curriculum to the skills needed for the future economy. The idea that schools should reflect what goes on in society is not novel (Barnes, 2015; Gouëdard et al., 2020; Kelly, 2009; Ministry for Education and Employment [MEDE], 2012). Schools need to shift from the factory model (Royal Society for Art, Manufactures and Commerce [RSA], 2010) toward a curriculum that facilitates the learning of 21st–century skills (Kivunja, 2015) and key competences (European Commission, Directorate–General for Education, Youth, Sport and Culture, 2019) that will transport today's students into the future. The most effective curriculum must be contextual (Johnson, 2014) and cross–curricular to teach knowledge and competences (Timmerman, 2019). Although local past studies (Cutajar et al., 1995; Grima, 2018) have shed light on

barriers to cross–curricular teaching, they failed to look for possible solutions that would facilitate its implementation. Hence, this paper attempts to narrow this research gap in the local context.

The Context of the Research

This study took place in Malta, a small island state in the Mediterranean with a population of a little over 500,000 (National Statistics Office, 2021). Education in Malta is provided via three sectors: independent, church, and state schools. State schools are free to all students and the system is divided into College Networks (Government of Malta, 2020) that group students according to geographical catchment areas. Each College Network has several primary state schools in various towns and villages, and compulsory education is between the ages of five and sixteen (Eurydice, 2021).

Ever since Malta's independence in 1964, the local educational system has undergone significant reforms, mainly to increase Malta's "intellectual capital" and provide a better quality of education to ensure that all children succeed and reduce the "top–down and bottom–up" separation (Cutajar, 2007, p. 3). In the Education (Amendment) Act (2006), which was introduced in parliament in the same year, the ministry proposed the creation of a new directorate that would ensure quality standards so that "Maltese education becomes relevant to the 21st century needs of Maltese children" (Cutajar, 2007, p. 9). This would ensure that the local system is more "effective and relevant" to the needs of both students and local society (Cutajar, 2007, p. 9).

In the National Minimum Curriculum (MEDE, 2000), then–Education Minister Louis Galea defined education as being the "womb in which our society reproduces itself and re–creates itself for the future" (MEDE, 2000, p. 5). For the first time in local policy, one finds mention of the 21st–century skills such as "creative thinking, reasoning, decision–making, and problem–solving and a sense of curiosity" (MEDE, 2000, p. 5). This document proposed the use of interdisciplinary learning whereby these skills are taught in an integrated manner with the subject areas.

This concept is later reinforced system–wide through explicit recommendations found in the introduction of the National Curriculum Framework [NCF]. With this policy document, there has been an attempt for the local educational system to move towards a paradigm shift from teacher–led to student–centred teaching and learning, from a prescriptive–based curriculum to an outcomes–based curriculum (Schembri, 2020), coined as the Learning Outcomes Framework [LOF] (MEDE, 2012). The LOF claims that it will enable flexibility whilst encouraging lifelong learning in students. Apart from this, the LOF aims to shift from an approach that is exclusively subject–based, where knowledge is fragmented and compartmentalised, towards a "more cross–curricular, thematic, interdisciplinary and collaborative approach" that mimics reality and encourages skills to be transferred from different learning areas (MEDE, 2012, p. xiii).

Since the allusion to a cross–thematic approach in the NCF, for every subject there is a document entitled *Learners' Guide for Pedagogy and Assessment document* (Directorate for Quality and Standards in Education [DQSE], 2015), suggesting how to implement this approach. It claims that:

> The Cross–Curricular Themes have been introduced in the Learning Outcomes Framework to ensure that all learners, as they progress through the levels, come into continual contact with the types of knowledge, skills and understanding needed to participate actively, prosper and contribute to Maltese society. (DQSE, 2015, p. 26)

This document provides a general idea of how teachers can identify the different cross–curricular themes and use them in conjunction with student learning objectives to create cross–curricular teaching. The document also proposed ways of assessing students when using a cross–curricular approach.

At the primary level, another document encourages the use of a thematic or cross–curricular approach. This is the Supporting Document issued by the Education Officer (EO) for English (Zerafa, 2019). This document indicates that an integrated–skills approach must be adopted at the planning stage to ensure "motivation and meaningful context" (p. 2). It also enumerates a set of prescribed themes that Year 3 and Year 4 students are to cover during a scholastic year, and teachers are highly recommended to use a thematic approach to integrate both the curriculum and skills in a context (Zerafa, 2019).

The local policies and documents which were mentioned earlier all point toward a desire to move to a student-centred curriculum that teaches skills in context. These documents all mention an integrated, cross-curricular or thematic approach to learning. However, apart from such documents, local literature is short on effectively suggesting modes of delivery of a cross-curricular approach. In Malta, there is a lack of concrete guidelines offering support with explicit and straightforward strategies on how to implement the approach (Grima, 2018).

To date, there has been a considerable amount of research carried out locally on cross-curricular teaching and learning. The earliest study was done by Cutajar et al. (1995), who argued in favour of an integrated approach using topic work. They define topic work as a means through which curricular areas are integrated into a theme (Cutajar et al., 1995). Another study done by Muscat (2005) explained the possible implementation of an interdisciplinary approach in Malta. Both Scerri (2017) and Grima (2018) focused their research on implementing a cross-curricular approach when teaching Physical Education while Camilleri (2017) focused on using a thematic approach in the primary sector.

It is remarkable how these studies have all yielded very similar results in presenting the approach as "desirable" (Muscat, 2005, p. 58) because subjects are intertwined together, reflecting what goes on in real life (Grima, 2018; Muscat, 2005). However, despite these studies, which have spanned from 1995 to 2018, education in Malta is still predominantly subject-based. One noteworthy change has been the introduction of the LOF (MEDE, 2012), and the authors wanted to identify whether its introduction has solved, in part, the problem identified by most teachers who claimed that the syllabus was too content-centred and exam-focused.

This study asks whether the LOF (MEDE, 2012) has made it easier to implement a cross-curricular approach since it is meant to help teachers be more flexible and autonomous in creating tailor-made lessons around their students' needs, thus making the system a genuinely student-centred one (MEDE, 2012).

To answer this overarching research question, the authors pose the following questions:

- What are the perspectives of Year 3 and Year 4 teachers on the use of a cross–curricular approach in two Maltese primary state schools?
- What barriers exist to the implementation of a cross–curricular approach in two Maltese primary state schools?
- What, according to the teachers, would be conducive conditions for the implementation of a cross–curricular approach in two Maltese primary state schools?

Literature Review

In his talk, Sir Ken Robinson (RSA, 2010) argues that for education to prepare students to find their place in the 21st–century economy, institutions, schools included, cannot think about the future by doing what has been done in the past. The first schools were designed on a factory model where all was separated, including school subjects. Robinson stressed the need to move away from that model and think of ways in which students can be better engaged (RSA, 2010). Reality is not subject–based. Literacy and numeracy are interlaced with many everyday happenings. Simply put, teaching cannot keep taking place in domains. Subject–based education does not promote multiple perspectives, judgement and risk–taking, speculation and interpretation, and intellectual values are thus diminished (Eisner, 1996, as cited in Kerry, 2015).

A cross–curricular approach is when teachers draw links between subjects (Barnes, 2015a) and combine (Barnes, 2015a; Johnson, 2014; Purcell et al., 1998) skills, disciplines, "knowledge and competences" (Timmerman, 2017, p. 20) from several subjects to problem–solve real–life situations (Barnes, 2015a; Earley, 2019; Kerry, 2015). Learning occurs when these elements are applied to a theme, problem, concept or experience (Barnes, 2015b). It thus becomes a means for students to make connections in their learning (Barnes, 2015a, 2015b).

The most significant characteristic of this approach is its nature of connection–making, which provides opportunities for deep and relevant learning (Johnson, 2014). A cross–curricular approach is also a student–centred approach (Kerry, 2015) which addresses a topic by using contributions from different disciplines and points of view (Collins English Dictionary, 2021). As

teachers combine subjects, a cross–curricular approach allows students to learn how to integrate learning experiences into their schemes of meaning in ways that broaden and deepen their understanding of themselves and the world they live in (Beane, 1995). To this end, Timmerman (2017) encourages teachers to make a conscious effort to apply various subjects because this approach creates students who are "autonomous citizens, solidary and responsible, intended for a democratic, inclusive and fair society" (p. 20).

Advantages of Using a Cross–Curricular Approach

A cross–curricular approach helps students learn to make connections and apply what they learn in meaningful and relevant ways (Barnes, 2015b; Earley, 2019; Kerry, 2015). Breaking subject boundaries provides a context that makes it easier to embed knowledge and skills that can be applied to real–life contexts (Costley, 2015; Kerry, 2015; Purcell et al., 1998). Moreover, according to Beane (1995), students who learn through a cross–curricular approach seek, acquire and use knowledge in an "organic – not an artificial – way" (p. 616). Purcell et al. (1998) say that interdisciplinary learning mirrors everyday life since we are constantly practising cross–disciplines in life. In fact, settings using the cross–curricular approach often boast of "high levels of cultural and personal authenticity" (Earley, 2019, p. 4037). The cross–curricular approach enables students to link what they learn to their personal lives (Costley, 2015) and to see relationships between subjects (Kerry, 2015). Timmerman (2017) says that a cross–curricular approach helps students to understand better "reality as a whole" (p. 2) in all its complexity.

Students are more excited to learn (Costley, 2015; Purcell et al., 1998) since they are more actively engaged, which helps them learn faster (Brand & Triplett, 2012). In addition, as students learn new ways of discovering and applying new knowledge in context, they experience more profound levels of meaning that extend their critical thinking skills and improve their self–confidence (Costley, 2015). Kerry (2015) claims that it is easier to cover large areas of the curriculum with this approach since one activity can address more than one objective at a time.

Disadvantages of Using a Cross–Curricular Approach

Most of the disadvantages reported in the literature emerged from fears and concerns of teachers and parents rather than concrete criticism about the

approach itself. For example, a central concern was that subject areas would be lost or diluted (Brewer, 2002; Greenwood, 2013; Purcell et al., 1998). Another area of concern was that teachers might not have adequate knowledge in every subject area; therefore, they might not be able to interweave concepts and skills (Purcell et al., 1998). Greenwood (2013) noted that the main fears were that teachers were afraid that learning would become artificial because integrating subjects can be more contrived when opposed to subject teaching, making it tempting for teachers to add too much content. Moreover, subject teaching may be more straightforward for teachers to track what has been covered and assess students. However, these teachers need to consider that they do not need to integrate every lesson interdisciplinarily. Both Barnes (2015b) and Greenwood (2013) agree that de-contextualised teaching is preferable when introducing important facts if the teacher aims for a more in-depth and detailed lesson.

Relevance of Cross-Curricular Teaching in Acquiring 21st Century Skills

MIMCOL, which acts as a consultancy arm to the Cabinet of Ministers in Malta, recognises the need to create an educational system with the right environment for human capital to learn the appropriate knowledge and skills to build the future economy (MIMCOL, 2021). The idea is to create a competitive labour force and for this to happen, there needs to be an alignment between education curricula and "the skills required for tomorrow's economy" (MIMCOL, 2021, p. 36). Lately, the Organisation for Economic Co-operation and Development (OECD) countries are reforming curricula to equip children with "knowledge, skills and competences needed for tomorrow" (Gouëdard et al., 2020, p. 4). They believe that reform is essential for introducing schools to the 21st century and effectively responding to an ever-changing world (Gouëdard et al., 2020). This vision aligns with Dewey's (1907) opinion that what society accomplishes needs to be made available to future members of society through the school.

Ayet Puigarnau (2018) argues that curricula need to become "competence-oriented", where students go beyond knowledge and understanding into how to apply them (skill) and the mindset (attitude) towards them. Shifting to a competence-oriented curriculum could be advantageous when considering how knowledge is developing so fast and that skills need to be transferred

to adapt to different social contexts, including those in the unknown future (Ayet Puigarnau, 2018). This is reflected in Belfiore and Lash's (2017) claim that, alongside literacy and numeracy skills, students need to acquire a set of adaptable skills, relevant social–emotional patterns, and an ability to apply all of these to create their paths in life. But what are the skills and competences that schools need to target?

Different organisations hold different ideas of the skills and competences required to succeed in an unforeseen future. According to the Council of the European Union, every state member should promote eight key competences (Table 1) to enable flexibility in adapting to a fast–changing and "highly interconnected world" (Timmerman, 2019, p. 7).

Table 1

Eight key competences for lifelong learning identified by the European Parliament and the Council

	The Eight Key Competences
1.	Literacy competence
2.	Multilingual competence
3.	Mathematical competence and competence in science, technology and engineering
4.	Digital competence
5.	Personal, social and learning to learn competence
6.	Citizenship competence
7.	Entrepreneurship competence
8.	Cultural awareness and expression competence

Note: Adapted from European Commission, 2019

Other entities, such as Renjen et al. (2018) and MIMCOL (2021), centre their arguments around the need to prepare students for the Fourth Industrial Revolution, defined as "the marriage of physical assets and digital technologies" (Renjen et al., 2018, p. 5). As the world moves from what Knowles–Cutler (2015) has coined a "brawn to brains" (p. 1) age, education needs to focus on teaching soft skills. Renjen et al. (2108) also mention the idea of whole–person learning objectives across multiple intelligences. Among the soft skills mentioned, one finds creative thinking, collaboration, communication and critical thinking; all skills that should prepare students for the 21st century (Kivunja, 2015).

Every country will have a different vision of the curricular changes needed according to the specific needs of the place (Gouëdard et al., 2020). Locally, the MIMCOL report (2021) recognises the need to equip students with skills to respond to international green markets as the need to live sustainably becomes more pressing. The report also acknowledges the importance of the following skills: ICT skills, literacy, numeracy, analytical and problem–solving skills, aligning education and skills development to the sectors and jobs we have and aspire to have on the islands, entrepreneurship, ethics and communication skills.

In order to create a competence–oriented curriculum, Ayet Puigarnau (2018) argues that there needs to be a paradigm shift in education whereby a cross–curricular approach is implemented. In Malta, even though all the evidence points toward a competence–based curriculum, studies reveal that teachers still think that the syllabus is taxing (Cutajar et al., 1995; Grima, 2018) and still operate in a system based on exams (Camilleri, 2017; Cutajar et al., 1995; Grima, 2018). These findings prove that Maltese education is still highly content–based. The argument being posed here is that content can still be taught through skills because the primary purpose of skills is to process content and, on the other hand, content provides the context through which skills can be taught (Shulman, 1986). Content is also essential for a robust cross–curricular approach (Beane, 1995; Kerry, 2015; Timmerman, 2017). There are certain pitfalls that one needs to be wary of: not to over–focus so much on content that the curriculum no longer remains student–centred (Belfiore & Lash, 2017), because in so doing, exams become overly central to a student's learning, which places conceptual understanding aside (Kerry, 2015).

Achieving the above is not a straightforward feat; however, the NCF offers a solution to the conundrum. Figure 1 illustrates how the learning areas and cross–curricular themes as identified in the NCF can be interwoven together to create a less fragmental mode of teaching (Ministry of Education and Employment, 2012).

Figure 1

Learning areas and cross–curricular themes as identified in the NCF
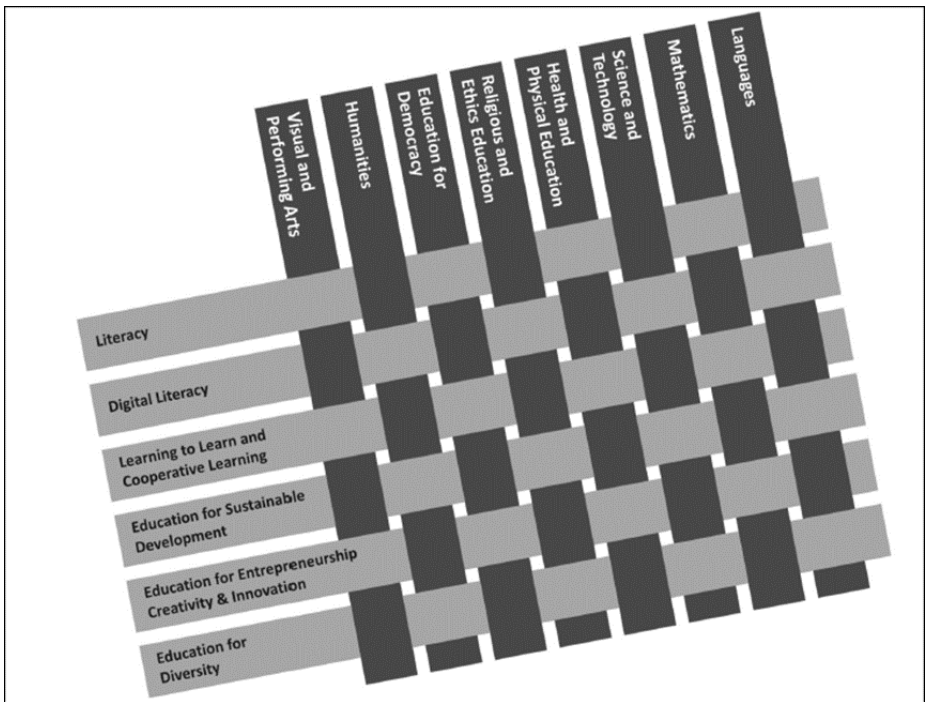
Source: "The National Curriculum Framework for All" by MEDE (2012), p. 39.

Methodology

To gain an in-depth insight into the teachers' perspective vis-à-vis a cross-curricular approach when using the LOF (DQSE, 2015), the research adopted a qualitative design. This design was chosen over a quantitative design to elicit more "why" and "how" data from the participants.

For this study, the authors used purposive sampling, knowing that the small group does not represent a wider population but only represents itself (Cohen et al., 2018). With this type of sampling, "information-rich cases" on the phenomenon under study are chosen (Palinkas et al., 2015, para. 1). For this study, six teachers were interviewed who are most likely to answer the study's research questions (Creswell & Creswell, 2018) because they have been devising their teaching in state schools based on Level 5 of the LOF for the last couple of years. In addition, all of them have taught using the previous syllabus, which allowed the authors to gain insight into how these two systems compare. The interview guide had 16 questions in total, each interview lasted around 45 minutes and was later transcribed verbatim.

Teachers were chosen from two different schools. These two schools fall under two different college networks and considerably differ in the school population, with S1 having less than 230 students and S2 having over 500 students. Table 2 provides an overview of the participants and the schools where they teach.

Table 2

Overview of demographic data concerning study participants

Teacher pseudonym	School pseudonym	School population	Total years of teaching	Years teaching Year 3	Years teaching Year 4	Years teaching in the same school
T1	S1	Under 230 students	22	6		19
T2			3		3	3
T3			11		11	11
T4	S2	Over 500 students	5	4	1	5
T5			15		4	15
T6			12	9		6

Ethical Issues

In small island states such as Malta, ensuring full anonymity might prove tricky because disclosing the area of the school under study would automatically make it easier to recognise the participants (Schembri & Sciberras, 2020). Therefore, the authors have omitted the geographical area of the schools under study and used pseudonyms to identify the schools. Also, the authors did not mention the exact student population. To ensure that participants were not identified, pseudonyms such as T1, T2, and T3 were used to represent each teacher.

Data Analysis

For the purpose of this study, the authors aimed at developing themes from emerging data, hence the use of thematic analysis (Braun & Clarke, 2006). The authors acknowledge that an inductive or "bottom–up" method was used, where the analysis was data–driven and not determined by their own theoretical beliefs. Thus, themes were generated from the data (Braun & Clarke, 2006). The authors used an inductive, semantic approach to analyse the data, which

means that coding and developing themes emerged from the data and not from pre-existing concepts (Maguire & Delahunt, 2017). In addition, a critical/realist approach has been adopted. The authors recognised that any meaning the participants attributed to their experiences was influenced by society and limited by "reality" (Braun & Clarke, 2006, p. 9).

Discussion

A Cross-Curricular Approach is Beneficial

When asked to provide their perspective on a cross-curricular approach, all teachers agreed, in varying degrees, that it carries a lot of benefits. Both T1 and T3 remarked that students learn literacy skills in both Maltese and English when covering the same topic.

All participants agreed that a cross-curricular approach carries advantages such as that students enjoy learning more, it helps them understand better, and it makes more sense than subject-based learning. Other advantages include that it is more appealing and meaningful, students are more motivated and engaged, and it helps students develop soft skills such as critical thinking and problem-solving. The latter aligns with Ayet Puigarnau's (2018) claim that the best way to teach such competencies is through a cross-curricular approach.

T1 used a cross-curricular approach in a school-initiated project with Art as a central theme. They remarked that "projects are more effective because you are using all subjects at once. When you are at work, you will not use Maths only, or English only, or Maltese only." This aligns with Kerry (2015) and Robinson (2017) saying that no subject stands on its own in real life. T2 also commented along these lines, saying that students "do not understand the subject for that moment or they understand the subject only, they understand, so that helps them in the future." This is a clear illustration of how breaking subject boundaries through a cross-curricular approach not only provides context but facilitates its application in real-life situations (Costley, 2015; Kerry, 2015; Purcell et al., 1998). This is achieved as per the merit of the cross-curricular strength to integrate skills and content together. Students learn transferable skills that can be later applied to different situations via contextual teaching. Both teachers thus

acknowledge the cross–curricular approach as a connection–making device between subjects, as Johnson (2014) explained.

Limitations in the Present Curriculum

The NCF's contention of providing teachers more flexibility has been negated in this study, and the primary cause seems to be the persisting highly content–based nature of the syllabus, as indicated earlier by Cutajar et al. (1995) and Grima (2018). This is a sentiment that resounds with T1 and T3, both teachers having over ten years of experience in the field. The latter maintains that "the syllabus is very, very vast", a claim backed by T1. T1 states that creating a project is challenging because they must "see how they will do it whilst covering all the syllabus material". Having said that, this teacher seems unaware that a cross–curricular approach would be the best device to help them cover large areas of the curriculum because it addresses more than one objective at a time (Kerry, 2015). Only T4 seems to realise this, saying that they try to use the approach "since there are too many things to cover".

Another concern raised by T3, who teaches Year 4, was the constant pressure to cover all the syllabus in time for the annual exams due in June and says that "it is like a time bomb", which hinders their creativity and experiment ability, so they do the essential and do not try new things. Even Kerry (2015) claims that exams have become too central in schools. This reflects findings in studies carried out by Camilleri (2017), Cutajar et al. (1995) and Grima (2018), that a system based on exams hinders teachers' autonomy, motivation and creativity in developing their schemes of work and lesson plans.

From the findings, the authors conclude that the LOF seem to have brought on superficial changes that did not carry to the core of the local educational system, which could be the result of what Gouëdard et al. (2020) call the implementation gap between the inception of a new curriculum and its application. When asked whether the shift to an LOF as an objective–based approach facilitated the use of a cross–curricular approach, some teachers had solid and adverse reactions to the question. T1 insisted that despite having had the shift, the material to cover remains substantial. T3 and T5, who have taught Year 4 for the last five years, claimed that it might appear like there has

been a fundamental change to an outsider looking in, but they still feel that "the amount of work and pressure did not change or decrease" (T3).

The syllabus promotes a fragmented and non–cross–curricular approach because each subject is presented separately and certain subjects remain heavily content–based, making them difficult to integrate. T3 says that "the fact that the schemes of work are not cross–curricular does not help because we have subjects and planning becomes more complicated to make it cross–curricular because it involves a lot of thought". T3, T5 and T6, who have all been teaching for over ten years, blame the EOs. T3 said, "The EOs created the LOs [learning outcomes], I think, but for their specific subjects, they didn't think about what other subjects were doing. It is still divided quite clearly." The veracity of this statement is contestable because the EOs were only part of the process. The creation of the LOF was a collective effort between the Ministry for Education and the Directorate for Learning and Assessment Programmes. On the one hand, this statement illustrates that teachers are not adequately informed on administrative procedures. On the other hand, teachers' statements on a lack of synchrony in the system are valid and lead the authors to question the effectiveness, if not the existence, of local quality assurance measures (Directorate for Learning and Assessment Programmes, n.d.).

Prescribed Material

Stenhouse (1988) argues how teachers should be more autonomous and flexible in designing a curriculum around their students' needs so that curricula enhance what he coins as the "art of teaching" (p. 50). So then, when changing curricula, the role of the teacher is paramount. Teachers in this study remarked on the imposed, prescribed material such as themes, textbooks and timetables and described them as very oppressive and limiting in reaching their students' needs. T1 and T5 feel limited by the English themes: "We are obliged to do [cover] certain themes" (T5). T1 admitted that there were times when they wished they could do something other than what was prescribed, perhaps even choose themes aimed toward their students' interests, thus creating a student–driven practice, just as Watkins (2017) suggested. However, they struggled because "it is not listed and if you want to do it, you have to see how to cover all the syllabus". Although said prescribed themes in English are offered as a suggestion, eventually, they feature in the final exams so that teachers are truly bound to follow them prescriptively. Having prescribed materials direly

impinges on the teacher's ability to be creative and flexible (Gouëdard et al., 2020; Stenhouse, 1975) in designing a curriculum around their students' needs. In the process, a student–centred approach is hindered. This sheds light on a persisting centralised system, as Farrugia (1992) and Wain (1991) outlined, leaving teachers with little to no autonomy and flexibility. However, in light of all this, issues such as having prescribed textbooks are questionable since these are meant as a resource to facilitate learning rather than something that needs to be followed religiously. On another note, when, in an early exercise, teachers were given autonomy to use Mathematics LOs at Level 5 as per their students' needs, they did not accept it and delegated the division of said LOs per Year group to the EOs.

Teachers' Predisposition to the Implementation of the Approach

Lack of training could be one of the reasons why teachers in this study rarely use a cross–curricular approach; in fact, most teachers received close to no training at all on this approach. Only T4 received training at a pre–service teacher training at the University of Malta, but it was "a lot of theory, but no practical examples" (T4). Timmerman (2017) identifies training teachers as an enabler for implementing a cross–curricular approach. T4 was also the only participant who claimed to have researched how to implement this approach, which drives an inquiry into why other teachers have not tried doing the same. Teachers need to seek research (Stenhouse, 1975) to be able to address their students' needs, thus making the system a genuinely student–centred one.

Lack of confidence and familiarity with the approach were also key to the teachers' resistance to the approach. Another factor related to parents was, as T1 remarked, that by shifting to cross–curricular teaching, parents might fear that students are not being taught properly. Brewer (2002), Greenwood (2013), and Purcell et al. (1998) shed light on such fears as expressed by teachers and parents alike. However, they all claimed that such fears were not founded and remain just that. Moreover, professional teachers should be "able to justify and articulate" the way in which they work (Kerry, 2015, p. 5), should the need arise.

T2 claimed that there isn't enough time to plan and that resources are limited. T3 adds that with so many subjects with different requirements, "planning is more complicated when using a cross–curricular approach because you have to think harder". They, therefore, find it a lot easier to plan individual schemes

of work for each subject rather than to plan for an integrated scheme of work. These issues could be solved with more collaboration, which is key to sharing the load when planning (Johnson, 2014). T1, T5 and T6 alluded to collaboration between educators, including LSEs. This goes with what the literature on cross-curricular planning is saying. Johnson (2014), Kerry (2015), and Timmerman (2017) all agree that educators need to collaborate to create successful cross-curricular teaching. Having said this, T1, T5 and T6 mirror what Timmerman (2017) says, that the administration needs to allocate time for collaboration. The authors speculate the need to decentralise schools effectively (MEDE, 2012). According to Stoll (2014), when decision-making becomes decentralised, teachers need to collaborate more and build better personal and professional skills. This will help them feel more empowered and more involved and satisfied, and as an outcome, students will benefit greatly (Stoll, 2014).

Support at National Level

Grima (2018) remarked that implementing a cross-curricular approach remains improbable unless there is explicit support and straightforward strategies on how to do it. T2, T3 and T4 all agreed that they need more guidelines and policies on how to implement a cross-curricular approach. T4 thinks that having "clear and specific guidelines" with "concrete, as opposed to the broad guidelines that exist at the moment" would facilitate the implementation of the approach. T4 says that teachers need practical ideas and national policies with simplified ideas that are not difficult to understand and where they do not need to "read between the lines", and "policies need to be clear" (T4). This is backed up by T3, who affirms the statement about having clear policies but goes on to say that "teachers need more than just theories". It is noteworthy, however, that no teacher mentioned the DQSE (2015) document, *Educators' Guide for Pedagogy and Assessment*. This document provides teachers with ways to identify the cross-curricular themes outlined in the NCF and how to use these with Student Learning Objectives to create cross-curricular learning.

Another common suggestion was that EOs collaborate so that "when they plan a syllabus or framework, they work together ... There should be teamwork at *that* level ... At planning level" (T3). T5 seconds this and adds that resources need to stop being brought in from foreign countries and should be created in Malta to cater for Maltese students' needs. T6 claims that if EOs work in synchrony, they can develop viable resources across themes that teachers

can quickly adapt and use in their teaching. This would be preferable to having different EOs wanting different things, leaving the teacher to fend for themselves in finding ways to bring resources together and implement them in their classrooms.

Support at School Level

Four out of the six teachers commented on the need to have support teachers and professionals assist them in their daily school life at school. Both T2 and T5 suggested sharing good practices between educators where one educator shares their success story and then inspires others. T4 called for specialised teachers to provide work samples, including resources and schemes of work where they are shown how to implement them and not simply told. T6 also suggested that peripatetic teachers liaise with the class teacher to coordinate topics so that the peripatetic teacher follows the class teacher's topic.

With most of the teachers expressing the need to be shown how to plan and implement, and requesting a sample of work to visualise what needs to be done, the authors observed two factors at play. On one hand, teachers are clearly pining for assistance considering the taxing syllabus they mentioned earlier on. On the other hand, they have come across as enactors versus creators.

It is justifiable for teachers to expect schools to organise Professional Development sessions to provide practical examples of how to implement this approach. But as T4 suggests, schools need to "provide training and the teachers decide whether to use this approach or not" because, as Stenhouse (1988) claims, curricula should not be imposed on teachers but should come from them. However, with T2 saying that teachers need "practical examples of what we can do and not everything up in the air" and T4 wanting "more concrete examples and less theory", one questions whether these participants are truly viewing themselves as agents of change (Snoek, 2017) who are willing to take the leap and try implementing this approach.

Teachers Lack Motivation

According to Dhankar (2015), one of the main reasons behind teacher demotivation is that they feel they are powerless because they are not included

in deciding on timetables, textbooks, methodology and assessment methods. Those in higher ranks, not teachers, take such decisions, and the latter are left to implement them. Moreover, teachers are held responsible when learning standards are not achieved (Dhankar, 2015).

In this study, only T4 showed enthusiasm and efforts to experiment with the approach, asserting that "I even research about it", while most of the participants expressed a sense of demotivation when implementing a cross–curricular approach. As T2 rightly said, it cannot occur unless the teacher is motivated: "if you have motivation and time, it can be done". T3 and T5, who each have over ten years of experience, expressed frustration and tiredness. T3 said, "with all the barriers, I go in survival mode and just focus on doing the essential things at the end of the day". T5 feels demotivated to try new things, saying that "it is exhausting and demotivating with everyone imposing on you, and you see no results". This phenomenon is perfectly summarised by Sikes (2014), who maintains that although change is expected, changes have been taking place faster due to a fast–changing world. Policymakers are imposing these changes on teachers without knowing anything of their work context. Such changes may be viewed as impossible by the educators, and thus make them feel that their professional liberty and independence are diminished.

Perhaps the School Leadership Team needs to become more aware of their staff's motivational levels and address it through Attitude–Focused Professional Development, a new professional development intervention focused on attitudes (van Aalderen–Smeets & van der Molen, 2015).

Suggestions for Future Research

In light of such findings, the authors suggest the following studies:
- Observation studies using case studies to find out how to implement the cross–curricular approach in the Maltese system. For example, observations could be carried out in a Maltese primary school where a cross–curricular approach is already being implemented.
- A narrative inquiry to assess how curricular changes in Malta affect educators and how giving more agency to teachers might motivate them further.
- Conducting a similar study employing a quantitative design whereby a larger cohort is used to generalise the data. EOs and the School Leadership Teams may also be included.

Limitations of this Study

Due to the in–context and in–depth nature of the study, findings cannot be generalised because of the small sample of participants (Creswell & Creswell, 2018). One of the limitations of the study was that interviews were conducted remotely due to the COVID–19 pandemic restrictions. As a result, non–verbal communication during remote interviews was limited and the data collected might have been poorer than that collected during a face–to–face interview (Crow, 2021).

The study focused on how the LOF, as proposed by the NCF, impacts the implementation of a cross–curricular approach. Analysing policies is a complex endeavour. It is difficult to define and explain problems pertaining to policy because there are many parties involved, all with different interests, perspectives and approaches to the problem (Ghimire, 2006).

Ouwehand et al. (2022) consider the student population in schools as a decisive variable in teaching quality. The population in the two schools used in this study varied considerably. This variance could generate a discrepancy in the data collected from participants from both schools.

The Way Forward

Fullan (2011) asserts that system reforms fail because they do not centre around teachers and educators. He claims that reform needs to elicit motivation and invest in acquiring skills. Stenhouse (1975) maintains that all change needs to come from educators. This sentiment is echoed by Gouëdard et al. (2020), who insist that stakeholders need to feel ownership and it must make sense at both an individual and a collective level. From the findings of this study, it transpired that teachers do not feel empowered. They view themselves as enactors of the work handed to them rather than creators of it. Teachers need to start viewing themselves as agents of change (Snoek, 2017), seeking research (Stenhouse, 1975) to "justify and articulate" (Kerry, 2015, p. 5) their teaching to address their students' needs, thus making the system a genuinely student–centred one.

The authors believe that Maltese education is doing students a great disservice by rearing them in a cross–curricular fashion from Kindergarten up to Year 2 within the Early Years by using an emergent curriculum approach, and

then plunging them into a highly compartmentalised system. The system shifts from focusing on the learner to focusing on subjects. If a curriculum is based on a country's values and priorities (Gouëdard et al., 2020), then it appears that Malta's curriculum values and prioritises segregation and compartmentalisation. This is unfortunate since such an approach does not prepare students for the future. The authors hope that this study veers teaching and learning towards a direly needed cross–curricular approach so that Maltese primary teaching targets content and soft skills simultaneously.

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