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**Programme:** M.Sc. in Education & Training Management (eLearning)

**Title**:

Can the development and implementation of a multimedia artefact enhance parental involvement in their child’s education during the primary school years?

**Overview of Proposed Research Study:** (max. 200 words in length)

What is the research question (statement) or concern or the hypothesis that your dissertation sets out to address. You should have a single research question/statement but you can also develop this question into a number of sub-questions.

*Can the development and implementation of a multimedia artefact enhance parental involvement in their child’s education during the primary school years?*

This research aims to investigate the process of designing, creating and implementing an interactive multimedia artefact to help enhance parental involvement in their child’s education at home. The multimedia artefact will supplement a predominantly text-based Parent and Pupil Handbook available in PDF (Portable Document Format) on our school website. The Parent and Pupil Handbook contains essential information about how a parent can assist their child with their reading homework, emphasising the importance of reading on a regular basis in order to improve their literacy skills. The artefact will enhance the handbook by providing parents with short demonstration or ‘best practice’ videos of how to best read with their child thus enabling them to become more involved in their child’s homework and education. The artefact aims to improve our pupils academic progress with a particular focus on reading literacy. The implementation of the multimedia artefact intends to empower the parents of our school by enabling them to become more involved in their child’s education. It will also create and maintain lines of communication between the teacher and parent.

**Background / Context:** (max. 200 words). Provide the Background / Context for the study/ enquiry.

I am a primary school teacher and ICT (Information Communication Technology) coordinator in a co-educational inter-denominational junior school located in the South Dublin area. The school consists of approximately 400 pupils and 40 full-time and part-time teaching staff. One of my initial roles as the ICT coordinator was to establish how our school currently engages with eLearning and to determine our eLearning vision for the future.

In order to measure the status of our eLearning culture I decided to use the NCTE’s (National Centre for Technology in Education) eLearning Roadmap, 2009. This eLearning roadmap is a planning tool designed by the Professional Services for Teachers Development or PDST to help schools identify where they currently reside in relation to eLearning. The roadmap uses four units of measurement starting with ‘Initial’ which is the minimum requirement for partaking in eLearning, followed by ‘e-Enabled’, ‘e-Confident’, and finally ‘e-Mature’ which is the optimum status a school can achieve. For our school to transition from the status of ‘eConfident’ to ‘e-Mature’ we need to continue to make progressive changes by modernising our communication methods within our school community, primarily by sharing learning resources with our parents. To accomplish this goal, we need to make our eLearning resources available to staff, students, and parents outside the regular school hours. During our annual parent-teacher meetings I am often asked by the parents to recommend educational websites they could access whilst assisting with their child’s homework. As each school quite often have their own methods of how to teach reading, I find most of the websites unsuitable for their purpose. Therefore, I felt there is a need to create a personalised multimedia artefact that is tailored for the demands of our parents and pupils, one they can easily access in a safe and learning environment.

**Rationale**: (max. 300 words). This is the so what? question, that is why bother doing this research? Having identified the question or concern you need to say something about how and why this question has arisen, that is, is it from a theoretical interest or an issue that has arisen in practice? You should state why you have chosen the question and the potential contribution your research might make to practice, and / or a particular profession, theory and/or policy.

I decided to choose this area of research for a number of reasons. Working as a primary school teacher for the past 10 years and as the ICT coordinator, I have witnessed first-hand the rapid growth of technology in education. The methods by which our pupils learn and communicate with each other has vastly changed since I first started teaching and I feel that we as educators are obliged to stay informed and use the most effective teaching methods that best suit our pupils’ learning needs and styles. eLearning technologies allow students to learn in a manner that is innate to them. Most pupils attending primary schools nowadays were born after the year 2007, to put that into context that was the year the first iPhone was released. Pupils are accustomed to using mobile devices to communicate with each other, accessing online information from anywhere in the world and at any time. Technology enables them to collaborate more freely with their peers, access information within seconds and in multiple learning styles. Currently there are seven recognised learning styles Visual (spatial), Aural (auditory-musical), Verbal (linguistic), Physical (kinaesthetic), Logical (mathematical), Social (interpersonal), and Solitary (intrapersonal). Students will normally possess more than one learning style and technology lends itself perfectly to this. However, working with primary school pupils and using online technology has its limitations. Pupils are not permitted to create social media and email accounts until the age of 13 years and over, therefore limiting the spectrum of teaching resources our pupils can access. This is one of the many reasons parental involvement becomes important. To overcome this obstacle, I propose that the multimedia artefact I am developing is implemented through our password-protected school website, where our parents can access information that is personalised and relevant to their child’s education.

**Preliminary Literature Review:** (max. 800 words in length)

How do current debates/issues in your chosen field of research support the stated research question/statement?

This research has allowed me to review the methods our pupils access their school resources and best practice examples. We as a school are continuing to develop our communication methods within our school community by adapting and developing accessible eLearning resources. The implementation of the proposed multimedia artefact aims to enhance parental involvement in their child’s homework and school life by providing our parents with an eLearning and communication platform.

Over the past few years, there has been much debate surrounding the definition of ‘parental involvement’ and what it actually constitutes. Reynolds and Clements (2005) define it broadly as behaviour with or on behalf of their children; attitudes and beliefs about parenting or education; and the expectations parents hold for the future of their child’s education. Bouffard & Weiss (2008) define parental involvement as all activities by parents that are intentionally “linked to learning”. (Hill et al 2004) define it as ‘parents’ interactions with schools and with their children to promote academic success. Parental involvement, for the purpose of this literature review, refers to the participation a parent, carer, or guardian takes in supporting their child’s schooling, social development, and academic success.

In recent decades, a consensus formed amongst educators, parents, policy makers, and researchers, is that parental involvement in children’s education plays an important part in their academic success and social development (Desforges & Abouchaar, 2003). Parents of school children in most developed countries are now expected to have an active educational role in comparison with previous generations. There may be good validation for this expectation with numerous studies showing that parent involvement is linked to higher pupil academic achievement, improved attendance, and more positive student attitudes toward school and homework (Eccles & Harold, 1996; Epstein & Dauber, 1991; Griffith, 1998; Henderson, 1987).

Dietz (1997) argued that the majority of parental involvement focused primarily on fundraisers, forming and managing parent committees and organisations, and as a result attracts the involvement of very few parents.

McNeal (1999) also inferred that parental involvement in their child’s education can enhance student academic outcomes through three mechanisms. The first mechanism, socialising, refers to how a parent can enhance their child’s learning at home by monitoring and assisting their homework, such as reading aloud with them on a nightly basis. The second mechanism suggests creating social control through school-based involvement such as developing a relationship with the child’s teachers and other parents, opening up the lines of communications so that they are more aware of and involved in the day-to-day schooling and their child’s progress. The third mechanism is being more open to communicating with the school for instance being aware that a speaker is attending the school to give a talk to parents on a particular topic.

Although ethnicity, socio-economic background, and income all play a significant role in a child’s educational opportunities and outcome, Henderson and Berla (1994) meta-analysis deduced, that the most accurate predictor of a student's achievement in school is the extent to which that child's family is able to:

1. Create a home environment that encourages learning  
2. Express high (but not unrealistic) expectations

3. Become involved in their children's education at school and in the community

At the beginning of the 1990s Joyce Epstein developed a framework for parental involvement, inspired by the ecological model of Bronfenbrenner (1979, 1986). The framework model, known as ‘Six Types of Parent Involvement’ assists educators in developing school and family partnership programmes. To improve parental involvement, schools and teachers should assist in integrating the following:

1. Parenting - help all families establish home environments to support children as students

2. Communicating - school-to-home and home-to-school communication

3. Volunteering - enable parents in school volunteer opportunities

4. Learning at home - parents to help with reading at home and homework

5. Decision making - parents given a voice for decision-making at school

6. Community collaborations - play a significant role in the education development and well-being of students

In direct correlation with the many benefits of parental involvement, Patall et al., 2008, Dumont et al., 2012, argue that parental involvement with homework may also have negative effects. They maintain that when parental expectations are too high or unrealistic for the academic capabilities of the child, tension and frustration can develop between the parent and child. The child may perceive their parent(s) as too controlling, and obtaining results below the expectation may lead to lower self-esteem and hinder their performance at school. The researchers found that high parental aspiration led to increased academic achievement, but only when it did not overly exceed a realistic expectation; this is known as over-aspiration (Murayama et al., 2015). Therefore, the implementation of a multimedia artefact that delivers ‘best practice’ demonstrations videos and provides the parents with information and techniques they may require when assisting with their child’s homework, overcomes any of the reverse effects parental involvement may have.

**Proposed Research Methodology** should provide a justification for the research approach: (800 words max). If you are using the EEA approach to action research then the methodology will demonstrate the research process i.e. Explore, Understand, Create, Transform

**The Research Process**

This action research project is being undertaken to study the impact of a multimedia artefact designed to help enhance parental involvement in their child’s education with a particular focus on reading homework. My ontological perspective and personal beliefs and values have informed the focus of my research and the content of the multimedia artefact I am creating. I aim to document and reflect upon my own creative development throughout this process as I work collaboratively with my college peers, supervisors, work colleagues and pupils to produce a multimedia artefact. I hope that this research will highlight both the challenges and advantages of creating an eLearning resource that will help bridge the gap between the school and home relationship, a relationship that I feel is of critical importance for the development of a child’s education.

**Methodology**

Kurt Lewin is regarded as the originator of action research. The social psychologist believed that research was detached from practical issues and solutions and rarely changed the social situation of the people or the participants. To make research more practical and effective he proposed ‘action research’ and developed a cyclical model to capture the essence of process of change. Since then many other models of action research have been established including the work of Jack Whitehead, Stephen Kemmis, Robin McTaggart, and John Elliot. Despite slight variations, the majority of these models tend to have similar characteristics; they are cyclical, requiring separate and yet mutually dependent steps, they involve participation from the researcher(s) and active participants in the research process, the data gathered is usually of a qualitative nature, and the process is reflective (Farren 2005).

Throughout the action research process, I will incorporate an entrepreneurial methodology - an educational entrepreneurial approach to action research (Crotty, 2014). I will be using the four steps involved: exploring, understanding, creating and transforming to guide me through the research process. This research approach involves the planning, designing, and creating of a multimedia artefact, in this case, an interactive collection of short demonstration videos that aim to improve the parental involvement of their child’s education and consequently improving the child’s academic success. I will now briefly explain the four steps involved in this process and how I will encompass them into my research.

**Explore**

I will explore my workplace eLearning culture by communicating with my colleagues, parents of our school and pupils to help me identify how best to involve parents in their child’s education. I will explore various eLearning and online communication platforms to supplement our Parent and Pupil Handbook which is accessible through the school website. This methodology has also helped me to develop professionally by enabling me to explore and systematically reflect on my own learning and creative abilities throughout this process.

**Understand**

The next stage of the research process is understanding and recognising what can be done in order to improve the identified area of need. I understand there is a demand from our parents to provide them with appropriate and meaningful resources they can apply outside of school hours. As I previously mentioned, we as a school will continue to develop our relationship and modes of communication with our parents and pupils. This will be accomplished by sharing learning resources and demonstration videos of ‘best practice’ such as ‘How to read with your child at home’. To accomplish these goals, we need to make our eLearning resources available to staff, students, and parents outside the regular school hours. Sharing of good practice to and beyond our own school community is vital and this could be achieved by using an interactive multimedia artefact accessible through an online communicative space such as our school website.

**Create**

Once I understand how to improve my workplace, I will need to design and create an innovative multimedia artefact with the aim of implementing it through our school website. The ‘Parent Zone’ area of our school’s website is password protected and contains useful information for the parents of our school. The information is accessible in our Parent and Pupil Handbook which is a predominately text-based PDF document. The creation of an interactive version of our Parent and Pupil Handbook will hopefully appeal to our parents and pupils more. The multimedia artefact will enhance the handbook by delivering short animated videos, demonstrating to the parents how best to read with their child as part of their homework.

**Transform**

Once the multimedia artefact has been implemented into the school community, I can then measure the impact of the research and provide evidence of how the research has improved my workplace and made a difference to the wider community. In order to gather data and information I will rely on a quantitative approach using interviews, observations as well as reflective journals to help understand if the initiative has an impact on learning and the pupils academic progress. The teaching staff, parents and pupils will be the subject of the inquiry. Some qualitative analysis will supplement the quantitative data with scores on reading and spelling tests as well as the measurement usage of the interactive videos such as the number of times the video was accessed and viewed and the duration of the engagement.

**Research Methods & Analysis** (approx. 500 words) Describe the specific research methods you propose to use for data collection and provide a justification for each data collection method. You should also state how much data you will collect and how often you will collect the data. Who will take part in the study, that is who are the participants, what is the length of the study.

How do you propose to analyse the data? You should have some sense of how you are going to provide evidence that what you say you have done has actually been done.

As I am undertaking an Action Research methodology for my study, I will primarily be using a qualitative method of research. Action Research is a method of examining real life issues, as opposed to theoretical, in the workplace and applying practical solutions to these problems. I will be exploring the identified areas of concern in my school and will require the support, opinions and collaboration of my colleagues, students and parents for this study to succeed and to improve our workplace practice for the benefit of our students and all involved in the school community. My research methods will rely significantly on data collection methods such as interviews, email correspondence, questionnaires and personal reflective journals.

**Email**

During the creation and development phase of my multimedia artefact, I will correspond with my co-workers, college peers and supervisors to assess and evaluate the effectiveness of the artefact. I will welcome both positive and constructive feedback and consider any recommendations they should put forward in order to enhance the validity and rigour of my work.

I will email the parents of our school a link to my online questionnaire. The questionnaire intends to gather information on the thoughts and opinions of the parents of our school on the ‘Parent Zone’ section of our school website. The questionnaire will gather information on homework and reading routines and their opinions and ideas on accessing our school website.

**Think-Aloud Protocol and Informal interviews**

My professional colleagues will be my main collaborators and evaluators during the production of the videos for the multimedia artefact I wish to implement. During the think-aloud sessions and informal interviews, their feedback will provide an alternative perspective allowing me to hone in on any changes that need to be made. My colleagues will test the usability of my multimedia artefact and think aloud whilst navigating their ways through it. This will hopefully give me an insight into their cognitive processes and make their thoughts and feelings about the design and user experience as explicit as possible. I aim to stay true to my values and objectives while taking into consideration their advice and suggestions, with the goal of creating the best possible version of my multimedia artefact.

**Personal Reflective Journals**

I have been maintaining a reflective journal, documenting and recording my thoughts, learnings and creative development throughout the action research study. I have recorded my insights of my workplace environment and culture as well as my own personal perceptions and educational values. The values I adhere to the most are **creativity, community, excellence and collaboration**. Some of these values have developed over my professional career and some I feel have been instilled in me from a young age.

I will also undertake some quantitative research methods using questionnaires and video usage analytics once the multimedia artefact has been implemented and hosted on our school website. I aim to analyse the number of times the demonstration videos have been viewed and the length of time each video was viewed for; I will then compare these results with how often the text-based version of our Parent and Pupil Handbook was downloaded.

**Significance of research** (max. 100 words)

My multimedia artefact is entitled ‘Castle Park School – Parent Zone’. It will be used to supplement the existing Parent and Pupil Handbook that is available to download in PDF form in the ‘Parent Zone’ section of our school website. The Parent and Pupil Handbook consists of 27 texted-based pages of essential information parents and pupils may require while attending our school. I will be focusing on the Reading as Part of Homework section of the handbook. I aim to make this section more interactive and engaging for our parents as I feel there is a need to firstly emphasise the importance of reading and secondly to demonstrate how to assist with reading.

**Definitions of terms** You should provide a definitions of terms in case the reader is not familiar with the Irish Context.

* **Artefact** =something observed in a scientific investigation or experiment that is not naturally present but occurs as a result of the preparative or investigative procedure.
* **eLearning**  = learning conducted via electronic media, typically on the Internet.
* **Essential Information** – information on the day-to-day routines of the school such as contact phone numbers, emails, school motto, ethos, organisation and class size.
* **Multimedia** = (of art, education, etc.) using more than one medium of expression or communication.
* **PDF** = Portable Document Format (PDF) is a file format used to present and exchange documents reliably, independent of software, hardware, or operating system.

**References**

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