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**An investigation and analysis of the 21st
Century Skills programme 'Magical Leaders'**

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An investigation and analysis of the 21st Century Skills programme 'Magical Leaders'

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Presentation outline

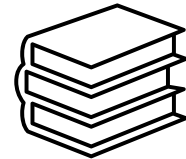
The Zeeko and Hibernia College story



Magical Leaders programme overview



Research design and methodology



Thematic analysis: preliminary themes and subthemes





'Creating a world where young people can safely benefit from Technology and the Internet.'



Established in 2015

Irish company based at the Nova hub in UCD

Delivered seminars on Internet Safety to over 100,000 children, 9,000 parents and 6,000 teachers in Ireland alone

Provided tools and training to over 300 schools





The Zeeko and Hibernia College story



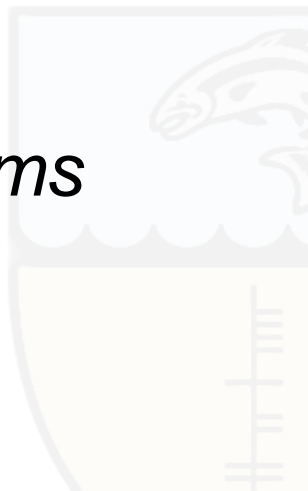
Let's imagine...

If

Tomorrow's world is already taking shape in the body and spirit of our children (Kofi Annan)

How can we

“Prepare them for jobs that have not yet been created, for technologies that have not yet been invented, to solve problems that have not yet been anticipated” (OECD, 2018 p.2)



WooClap: Brainstorming task

1. With the person beside you, or on your own, think of a job that doesn't exist yet. Be as creative as you like!
2. List some skills required to carry out this job effectively.





Entrepreneurship education can be seen as educational practice targeting the knowledge, skills and attitudes of the individual (European Commission Directorate, 2015 p.58)



An Roinn Fiontar,
Trádála agus Fostaíochta
Department of Enterprise,
Trade and Employment



Magical Leaders programme



A peer led programme:

Teaches 21st century skills through the lens of the UN sustainable development goals

6 lessons in total, each of which consists of information, interactive content and activities focused on particular 21st Century Skills



WooClap word cloud: 21st Century Skills?

Think creatively (P21: Creativity and Innovation)

Use a wide range of idea creation techniques (such as brainstorming); Create new and worthwhile ideas (both incremental and radical concepts); Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts

Problem solving (P21: Critical Thinking and Problem Solving)

Solve different kinds of non-familiar problems in both conventional and innovative ways; Identify and ask significant questions that clarify various points of view and lead to better solutions

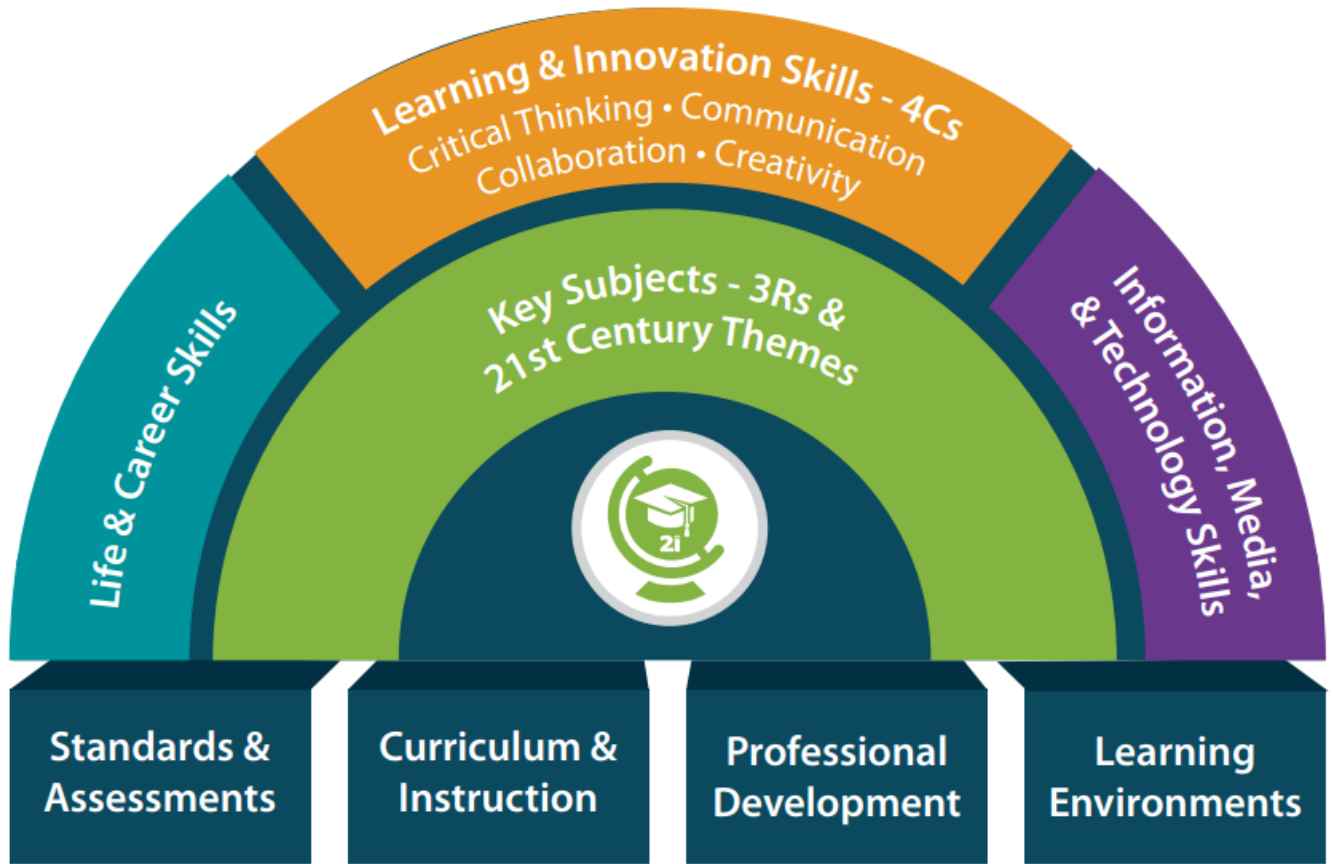
Can you think of any other examples of 21st Century Skills?



Partnership for 21st Century Learning (P21 Framework)



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Explore SEL

Navigate the complex field of social and emotional learning.

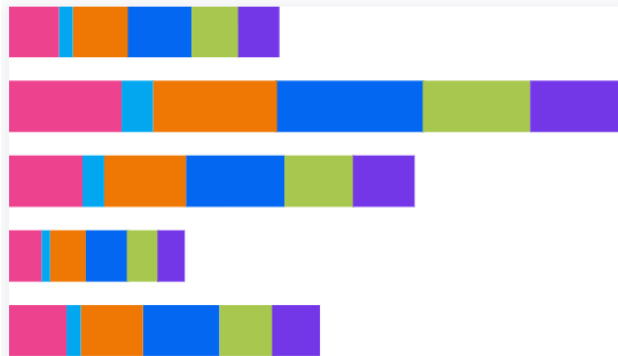
Researchers, educators, employers, and parents agree that social and emotional learning (SEL) and non-academic skills matter for success in school and life, but it can be difficult to decide which skills to focus on – let alone how best to promote and measure them. [Learn More.](#)



Explore SEL

Visual Tools ▾

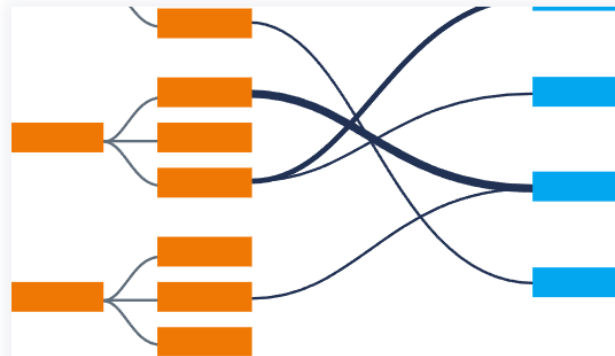
Frameworks



Explore Domain Focus

See how much each framework focuses on six common areas of SEL.

Compare Domains



Discover Framework Connections

See where skills in one framework are related to skills in another.

Compare Frameworks



Identify Related Skills

See where similar SEL skills appear across frameworks.

Compare Terms



Magical Leaders 21st Century Skills focus

Communication
skills

Presentation
skills

Emotional
regulation

Collaboration
skills

Critical thinking
skills

Social skills

Leadership

Critical
feedback



Research design and methodology

The overarching research questions is, *'What are teachers' attitudes and perspectives of the Magical Leaders programme's 21st Century skills outcomes, resources and core teaching methodology?'*

The objectives of the research are as follows:

1. Evaluate teachers' perceptions of the Magical Leaders programme and the achievement of 21st Century skills.
2. Evaluate and summarise teacher insights into the components and outcomes of the Magical Leaders programme.
3. Investigate teachers' perceptions of the programme's peer-to-peer teaching methodology.

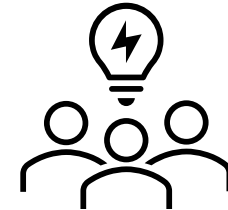


Research design and methodology

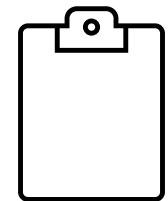
Adopted a mixed-methods approach (Hitchcock & Onwuegbuzie, 2022)

A sequential design approach

initial qualitative focus group strategy



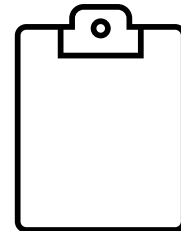
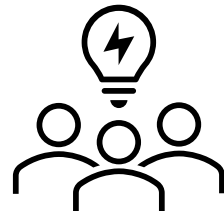
multi-element quantitative self-report questionnaire



Research design and methodology

Using non-probability, convenience sampling, 12 teachers (n=12) were targeted for data collection during four focus group sessions.

Using purposive sampling, 83 teachers (n=83) who implemented the Magical Leaders programme in Spring/Summer 2022 have been invited to complete a self-report 21st Century Skills questionnaire (Hixson, Ravitz & Whisman, 2012)



Research benefits

The findings of this research will:

support future development and iterations of the Magical Leaders programme

improve teachers' pedagogical and content knowledge of 21CS and peer-to-peer teaching approaches

improve teacher and pupil programme resources

inform and improve the delivery of Magical Leaders teacher training



Thematic analysis

A thematic analysis (Braun & Clarke, 2021) identified key themes and subthemes of focus group data.

Preliminary themes identified:

Pupils' 21st Century Skills Development

Pupils' overall experiences of the programme

Barriers to programme delivery

Teachers perspectives of the programme

Suggested areas for future enhancements and improvements



Thematic analysis: preliminary themes and subthemes



Pupils' 21st Century Skills Development	Pupils' overall experiences of the programme
Pupils developed a wide range of 21st Century skills	Pupils enjoyed the programme content, structure and peer-to-peer methodology.
Quieter pupils were given the opportunity to make visible and acknowledge their own voice as being authentic, unique and valued by themselves and others.	Pupils developed an awareness of the planning and preparation process involved when presenting to others and the daily responsibilities of being a teacher.
Pupils enhanced their awareness and understanding of 21st century skills, innovation and entrepreneurship education and sustainable development goals	Pupils enjoyed giving, and replying to, critical feedback.
The programme had a positive impact on pupils both inside and outside of the classroom.	The programme disrupted traditional power relations in the classroom

Thematic analysis: preliminary themes and subthemes



Pupils' 21st Century Skills Development

There's an inner confidence within them. I'm not saying it's all coming from Magical Leaders, but I do think it instilled some really precious gifts within them, or learning opportunities where they just came out a little bit more, that their voice was important, their ideas were important.

Pupils' overall experiences of the programme

They just thrived on it. It was lovely to see how they engaged with each other and how they engaged with all the different groups when they were given the tasks and the feedback. I was a little fearful that it would be rowdy and shouty and all this kind of stuff but it was very rare that I had to step in. For me, I think, the kids were just like, we're the muinteoirs here, we're delivering this.



Thematic analysis: preliminary themes and subthemes

Barriers to programme delivery	Teachers perspectives of the programme's
Reliability, responsiveness and integration of the digital programme elements across devices and school infrastructure.	Teachers liked the well defined structure of the programme.
Teachers lacked the appropriate training, knowledge and confidence to deliver the programme effectively and efficiently.	Teacher felt the programme is current, novel and the learning outcomes and objectives are pitched at the appropriate level for 5th and 6th class.
Preparing, planning and pre-teaching pupils how to deliver the lessons was time consuming and challenging to manage.	Teachers thought there was too much focus on preparing to present and presenting, rather than the development of 21CS.
Time and curriculum constraints made delivering the programme challenging.	Teachers felt there were not enough resources provided to support the explicit teaching of 21CS by teachers
	Teachers believed the programme was a very good introduction to 21CS, innovation and entrepreneurship education and sustainable development goals



Thematic analysis: preliminary themes and subthemes

Barriers to programme delivery

If something doesn't work or come up instantly the children get frustrated. They were getting annoyed. It can slow down and you might just have to stop and go, right well let's talk about this. There was a little bit of improvising and winging it a little.

Teachers perspectives of the programme's

I found that the videos were really good because the children could see how a small idea could just grow into something really, really big with the right people behind you and the right work ethic. I thought the examples that were used of the start-up businesses and things like that, were realistic. They showed that you didn't need a whole load of letters after your name or money after your name to come up with innovative ideas



Thematic analysis: preliminary themes and subthemes

Suggested areas for future enhancements and improvements

Include more active learning, hands on tasks, games or puzzles based on real-world problems and situations, taking place in class to practice 21CS, as opposed to overly focusing on talk and discussion.

During teacher training, model an exemplar lesson from both the teacher and pupils perspectives that clearly show the structure and steps to delivering an effective lesson.

The graphics and interface need to be considered carefully as they are not intuitive, modern or easy to navigate.

Reduce the overall programme content and the teacher guidelines and pupil workbooks.

A Gaeilge version of the programme should be developed to encourage more uptake across Gaelscoileanna.



Thematic analysis: preliminary themes and subthemes

Suggested areas for future enhancements and improvements

The program could do with a bit more doing, a few more activities where the children actually need to go home and critically think about something. I think it needs more games or physical activities for the children to consolidate the skills that they're learning about.



Next steps

Complete the analysis of the teacher self-report questionnaire

Complete thematic analysis of focus group data

Consider forms of integration to merge both data sets





Rererences

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