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Inclusive Disaster Education: Strategies and Challenges

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Presentation Outline

- Research background

- Introduction to the INCLUDE Project

- Research Objectives

- Methodology

- Research findings
    - Online learning strategies
    - Associated challenges

- Conclusion

Research Background

- Disaster events are significant phenomena in the contemporary world that affect the living fabric of the people around the world. During the two decades between 2009 and 2019, it has been recorded that 7,348 disaster events took place, affecting 1.2 million people around the world (The Centre for Research on the Epidemiology of Disasters (CRED) & The UN Office for Disaster Risk Reduction (UNDRR), 2020).

- With this growing significance of disaster impacts, a discourse has been created on the key role played by the education in the field of disaster (Kitagawa, 2021; Shaw et al., 2011). In the early stage of the 2000s, the research interest grew to investigate the challenges in continuing children's education amidst natural as well as manmade disasters (Kagawa, 2005). However, it has been recognised that disaster pedagogy is one of the least studied aspects in the fields of education and disaster (Murphy et al., 2020; Preston, 2012).

- To support lifelong learning, a number of online, distance learning opportunities have emerged in the field of DRR in the recent past (Thayaparan et al., 2015).

- The COVID-19 pandemic in 2020 is considered a turning point in the contemporary disaster discourse (United Nations Office for Disaster Risk Reduction (UNDRR) & United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 2020). The COVID-19 pandemic made a significant contribution towards online and distance learning in the disaster education secotor (Samarakkody et al., 2022).

Project INCLUDE

- INCLUDE (INCLUsive Disaster Education) is a collaborative research project co-funded by EU Erasmus+ programme. This two-year research initiative aims to reimagine online distance learning education so that it better supports the diverse DRR community.

- INCLUDE project is led by the University of Huddersfield's Global Disaster Resilience Centre, based in the UK. The project consortium also consists of the following partners:
  - University of Central Lancashire, UK
  - Lund University, Sweden
  - Vilnius Gediminas Technical University, Lithuania
  - Keio University, Japan

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Research Objectives

- Main objective:
  - To investigate the significant challenges associated with online distance learning in Disaster Risk Reduction (DRR) education.

- Sub objectives:
  - to consider the distance learning strategies used in DRR education
  - to identify their associated challenges

Research Methodology

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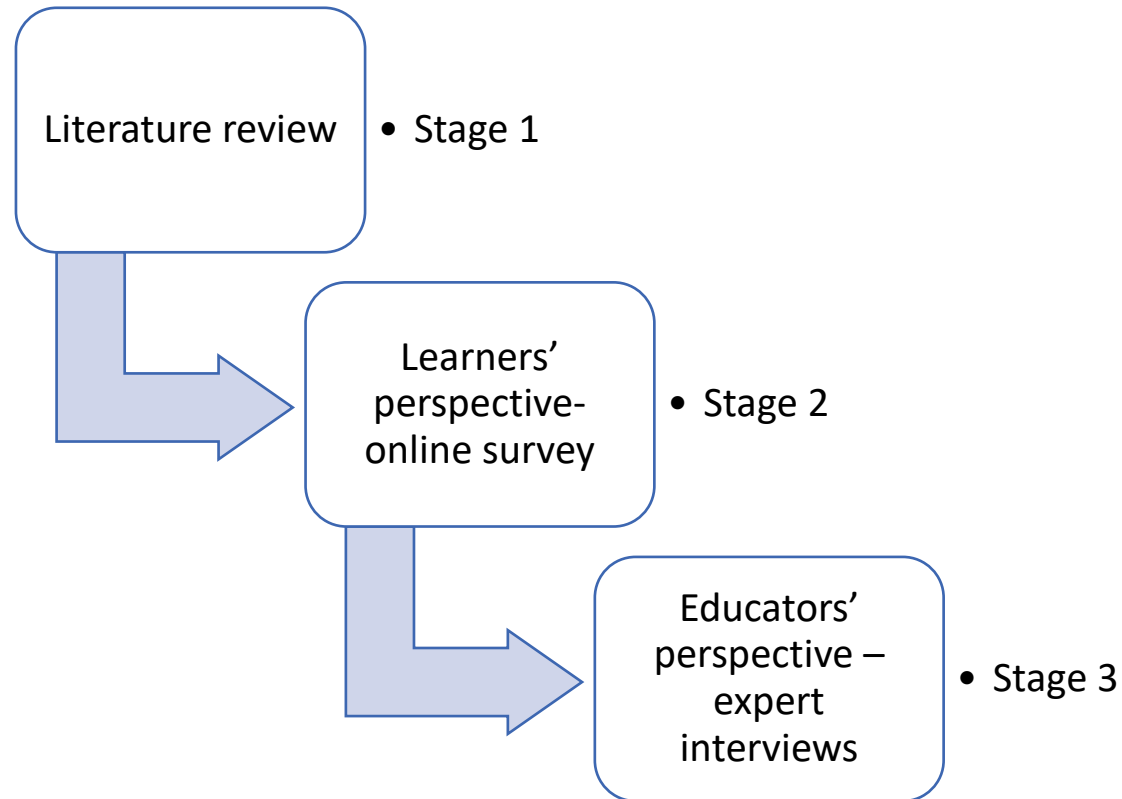
Introduction to the Survey process

- The survey for the output 1 was conducted by all the partners using an online survey platforms covering the following geographical settings:
  - UK - 43
  - Sweden - 17
  - Lithuania - 15
  - Asia Pacific (India, Sri Lanka, Bangladesh, Pakistan, Philippines, Nepal, and Japan) – 66
  - Overall total – 141

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INCLUSIVE DISASTER EDUCATION (Questionnaire for the DRR students)

This questionnaire survey is conducted for the ongoing collaborative research project co-funded by the EU Erasmus+ programme, titled INCLUDE [INCLUsive Disaster Education] (For further information please see http://includeresearchproject.org/about/).The questionnaire is structured in to 5 sections.

Purpose of the questionnaire survey: To understand the existing online and distance learning strategies, associated issues and their effectiveness

Scope of the study: The study is limited to Inclusive digital disaster education offered through;

- Short cycle programmes
- Undergraduate studies
- Postgraduate studies
- Doctoral studies
- Professional education/ training (including lifelong learning, continuous professional development, research, and international cooperation [examples: international curricula, joint degrees, international innovation projects, and the exchange of students, staff, and knowledge])

Confidentiality: The information collected will be used for the sole purpose of this study and academic

Introduction to the interview process

- Interviewees have been selected on the understanding that DRR is a multidisciplinary study and if an academician is research active in the DRR discipline, his/her insights and perspective on the overall teaching (given that it involves DRR elements) reflect on good competency evidence and makes the expert eligible as an interviewee for the study. While some interviewees have experience teaching international students, in international contexts, unless otherwise asked their experience mainly reflects the current context they are based in.

- Hence, the interview was conducted across different universities in the 4 countries where the partner universities are located (United Kingdom, Japan, Sweden, and Lithuania) and further extended to explore the perspectives of educators from different other countries like Sri Lanka, Thailand, Australia, Bangladesh, China, Hong Kong, India, Indonesia, Japan, Philippines, etc.

- Overall 48 interviews were conducted.

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Commonly used pedagogical strategies in online DRR education

Pedagogical strategies presented to the respondents

- Learning Management System (LMS)

- Blended Learning

- Massive Open Online Courses (MOOCs)

- Only Synchronous Learning

- Only Asynchronous Learning

- Flipped Class Rooms (FCR)

- Online learning as a group where a student learns just a piece of the material, then teach it to the group.

- Class blogs

- Game-based learning/teaching (ex: Kahoot)

- An online space for students to link with the practitioners

- A portal site to share knowledge amongst students from different disciplines in the same subject area

- Cogenerative learning

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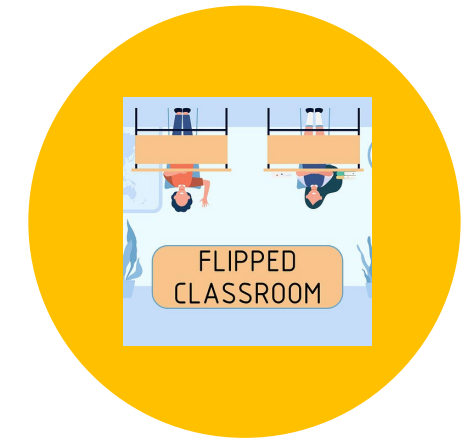leArning for Climate
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Commonly used online learning strategies

LMS

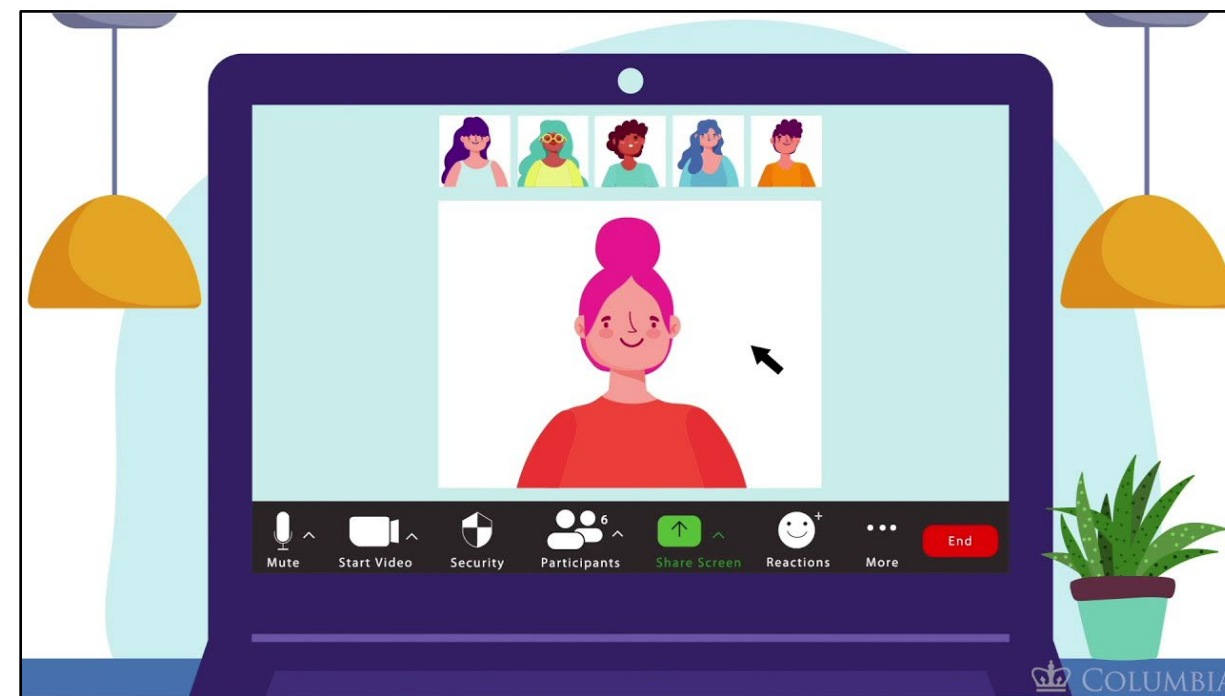ONLY SYNCHRONOUS
LEARNING

FLIPPED CLASSROOMS

Least used learning strategies

- Least used strategies:
  - Class blogs where students explore self-learning by creating a blog individually or in a group about what they have learnt
  - A portal site to share knowledge amongst students from different disciplines in the same subject area
  - Game-based learning/teaching (ex: Kahoot)

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Creative Pedagogical strategies utilized by the educators

- Creative methods:
  - Games
  - Brainstorming sessions
  - Short video methods
  - Film method
  - Word clouds
  - Nature based sessions followed by questions
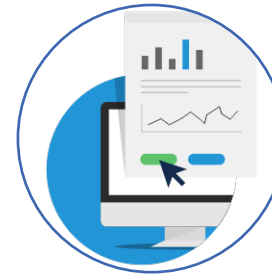 - Chat tools
  - Role plays
  - Podcast
  - Spotify challenge

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INTERNATIONAL RESEARCH SYMPOSIUM
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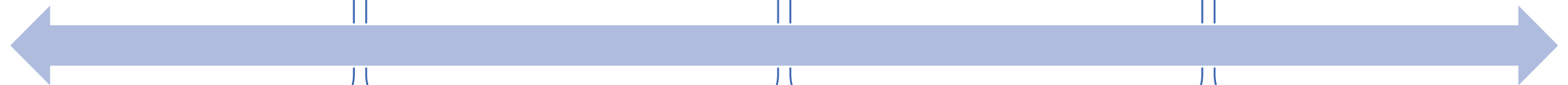# Strategies used by the educators to keep the learners engaged

Q&As

Breakout sessions

Online votings

Padlets and quizlets

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Common challenges and limitations for DRR leaners and educators

Common challenges and limitations

Overall Conclusion

- One of the major traits in all the aforementioned challenges is that the students predominantly prefer and follow the learning strategy of live lectures which give away instant feedback.

- However, during the interviews, the educators raised their concern as to the lack of interaction that comes across in an online classroom.

- In order to promote online DRR education, the following should be considered:
    - Infrastructural facilities
    - Nature of the learners
    - Social contexts and vulnerabilities

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