

M4C Collaborative Doctoral Award (CDA)

PROJECT TITLE				
THRIVE – Creative AI for those facing disabling barriers to music engagement.				
LEAD INSTITUTION				
Name of HEI institution	University of Nottingham			
Lead regional city	Birmingham <input type="checkbox"/>	Coventry <input type="checkbox"/>	Leicester <input type="checkbox"/>	Nottingham <input checked="" type="checkbox"/>
PARTNER ORGANISATION				
Name of organisation	Sinfonia Viva & Orchestras Live			
URL for organisation website	https://www.sinfoniaviva.co.uk/ https://www.orchestraslive.org.uk/			
<p>THRIVE aims to investigate how AI can enhance the musical engagement of participants faced with persistent and disabling barriers. By working in partnership with Orchestras Live and Sinfonia Viva through workshops, this project will bring new insights into how AI can break down barriers and support accessible and inclusive music-making.</p> <p>Project</p> <p>There are persistent barriers to access in the music sector today, with a need for more creative contributions from a wider range of people, and that these contributions are respected and valued. One such barrier is that while non-disabled people can make music in many ways, this is less true for disabled musicians with complex needs (SEND) who require new accessible instruments, new creative processes, new hierarchies of “success” (www.drakemusic.org). We know that music-making in SEND leads to an enhancement in communication, motor skills and emotional expression (Frontiers (2020)), and that creative AI can have significant benefits to human expression (Frontiers (2021), Vear & Poltronieri (2022), Alves-Oliveira (2022)). So, we ask, <i>can the power of creative AI be used to enhance the musical engagement of participants faced with disabling barriers?</i></p> <p>The key research questions are:</p> <ul style="list-style-type: none"> - How can AI be used to enhance the creative engagement of SEND participants? What theoretical frames do we need to build to guide us? - What is the experience of SEND participants in this situation? In what ways can (do) they thrive? - How do we design and deploy creative AI that can bring life enhancing experiences through music-making? In what way does music facilitators practice change? - How can understanding AI through SEND engagement contribute to governmental policy around ethics of AI? <p>Process</p> <p>This will be a hands-on research project engaging with the project partners in conducting, designing, and leading on workshops in schools and care environments. It will be specifically focused on areas of physical disability, social, emotional, mental health and complex needs. This is often described as SEND (used hereafter); however, the project will be employing principles and language which is guided by the Social Model of Disability (https://www.drakemusic.org/about-us/our-vision-philosophy/). The methodology will be mixed mode involving elements of theoretical development, in-situ observation and practice-based research. The aim is to develop a theoretical framework that can a) provide a</p>				

robust conceptualisation of the pedagogic implications of such work, b) generate user case studies that articulate critical insights, c) provide novel technical designs, d) express the subjective experiences of the facilitator and e) discuss the findings in relation to governmental policy.

Place

Sinfonia Viva and Orchestras Live have a strong track record of working collaboratively with partners in the East Midlands and beyond. Their collaborative partnership has grown over at least 20 years, their work together centres around genuinely co-creating and co-composing with non-professional musicians. This often takes the form of creative music projects in a diverse range of schools, care homes and other community settings. Both organisations work closely together with a commitment to extending the reach and depth of engagement with orchestral experiences including access to music as audience, participant and artist. The student will join both partners for the workshop series and investigate how creative AI can be implemented to enhance the musical engagement of participants faced with disabling barriers. The role of the student will be workshop facilitator and assistant, and in the design of the research methods including questioning strategy, analytical frameworks, grounded theory, and other ways to assess the shifts in musical engagement. The AI tools will be created in collaboration with the lead supervisor.

Person

This project would suit a student who understands and cares for enhancing knowledge in how AI can be used for good. Additionally, they must be trained in music and understand how music-making can break down barriers for musicians with physical disability, social, emotional, mental health and complex needs. This research will be practice-based and will involve action research observations in-situ which requires a mature way-of-working when dealing with stakeholders and a systematic approach to messy qualitative data. Excellent writing and oral skills will be required to engage with stakeholders and partners. A solid understanding of qualitative research methods will be vital, further training will be given, also a willingness to continually develop skills in the Social Model of Disability and other training on aspects of disability. Coding skills would be helpful, and certainly a willingness to enhance such skills, however the lead supervisor and his Digital Score ERC-funded project can assist and lead on tool development in creative AI.

HOW TO FIND OUT MORE. Please email the lead university supervisor if you want to find out more about this CDA project.

Lead HEI Supervisor:	Professor Craig Vear
Lead HEI Supervisor Email:	<i>Craig.Vear@nottingham.ac.uk</i>