

# RESEARCH DIRECTIONS

## Interactive Technologies

Dr Garth Paine from the School of Communication Arts with Ms Margaret Medlin from Critical Path Incorporated, Associate Professor John Sutton from Macquarie University, Dr George Khut and Dr Lizzie Muller from University of Technology, Sydney, have been awarded a UWS Research Partnership grant to investigate how interactive technologies transform notions of embodiment, agency and audience engagement within the performing arts.

'Over the last few decades, considerable developments have occurred within the portability and functionality of sensing systems, which when coupled with advances in visualization and sonification techniques, provide powerful new tools for the arts,' says Dr Paine. 'It is hypothesized, that such dramatic changes in the nature or execution of performance have, in themselves, brought about critical changes in the performer's perception of agency and embodiment within the creative work, their quality of engagement with audiences, and an audience's perception of what constitutes a performance practice. These changes bring into sharp relief processes of creating/devising, as the form of such works is no longer fixed in the rehearsal period, but remains a balance between aesthetic and technical constraints and plasticity of content in performance.'

The project is structured as two creative development projects and a series of artistic laboratories. The artistic laboratories will facilitate an intense examination of a single subject through group discussions using dramaturgical approaches to examine movement analysis and the perceived relationships between sound and gesture, focusing on the subject's experience. The artistic laboratory will be documented in detail on video, including interviews with the participants individually and group discussions.



This project will have significant value for the wider arts community as an opportunity to reassess and critically examine the potential for new technologies in education and cultural practice. Key outcomes include the prototyping of a number of interactive art experiences that combine body-tracking artworks with guided awareness through movement exercises. Beyond their value as artworks, these interactions have exciting potential as pedagogical tools for application in the areas of human-movement rehabilitation, and therapist training.

**Project Title:** SEAM: Somatic Embodiment, Agency & Mediation in Digital Mediated Environments

**Funding has been set at:** \$21,150

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