State of the art

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Contents

1 Music

1.1 Learning

1.1.1 Collaborative learning

Collaborative Learning in Music Education: A Review of the Literature (Luce, 2001)

- collaborative learning is defined by three principles :
    1. "knowledge is socially constructed as a consensus among the members of a community of knowledgeable peers”
    2. "the authority of knowledge is shared among the members of the community"
    3. "interdependent personal relationships shape a community of knowledgeable peers"
- through collaborative learning, "students would thus become engaged in the exploration of the knowledge and processes involved in the evolution of a music that enlivens and motivates them to participate in music"
- in a collaborative learning environment, the responsibility of maintaining the integrity and vitality of music is shared between teachers and students as they form a "community of knowledgeable peer".

Collaborative learning in higher music education (Gaunt und Westerlund, 2016) - collection of research articles and reports on collaborative learning practices in higher music education. General observations drawn from the articles :

- collaborative learning appears to help the participants reflect on and express their fundamental values as artists and/or pedagogues;
- contrary to expectations, individual art forms are not muzzled when engaging in a collaborative learning practice, but rather deepened through its experience.

Collaborative Learning with Interactive Music Systems (Marquez-Borbon, 2020)

- four participants were given a newly designed DMI and put in a collaborative learning setup consisting of several workshops over the course of 6 months;
- the collaborative process allowed for the definition of learning goals by the team that both oriented and motivated practice;
- the group succeeded in developing common set of learning methods and techniques, thus acquiring a similar virtuosity on the instrument, as well as individual styles of playing, bringing complementary to each other styles.

1.1.2 Appropriation

The Problem of DMI Adoption and Longevity: Envisioning a NIME Performance Pedagogy (Marquez-Borbon und Martinez-Avila, 2018)

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Dimensionality and Appropriation in Digital Musical Instrument Design (Zappi und McPherson, 2014)

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1.1.3 instrumental constraint and creativity

Dimensionality and Appropriation in Digital MusicalInstrument Design (Zappi und McPherson, 2014)

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1.2 Transmission

1.3 Design

1.3.1 Adaptability

For learning
P(l)aying Attention: Multi-modal, multi-temporal music control (Gold u. a., 2020)

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For personalisation
Reflections on Eight Years of Instrument Creationwith Machine Learning (Fiebrink und Sonami, 2020)

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Motion-Sound Mapping through Interaction: An Approach to User-Centered Design of Auditory Feedback Using Machine Learning (Françoise und Bevilacqua, 2018)

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1.4 Goals and subjectivity

Ecological considerations for participatory design of DMIs (Fyans u. a., 2012)

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to be classified

SoundGuides:Adapting Continuous Auditory Feedback to Users (Françoise u. a., 2016)

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Exploring different movement sonification strategiesfor rehabilitation in clinical settings (Bevilacqua u. a., 2018)

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De-Mo: designing action-sound re-lationships with the mo interfaces (Bevilacqua u. a., 2013)

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Sensori-Motor Learning with Movement Sonification:Perspectives from Recent Interdisciplinary Studies (Bevilacqua u. a., 2016)

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Modular musical objects towards embodied control of digital music (Rasamimanana u. a., 2011)

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