exoskeleton for learning music
Piano Touch
Huang, Starner 2011
LED-Fret
FretLight Inc
Camera tracked violin bowing
Tanjo, Ando et al 2011
Orff Schulwerk

- Exploration
- Imitation
- Improvisation
- Composition

Orff Schulwerk
.Exploration
pick up any instrument, learn by exploration, make mistakes – make music

.Imitation
instant gratification by playing live music

.Improvisation
refer and cues, review

.Composition
share
.Exploration
suggest chords, rhythm beats over bone transduction

.Imitation
suggestive play

.Improvisation
audio cues

.Composition
review ,share
.Analogue
no digital alteration to the instrument, pure acoustic music

.Sensing
camera free, resistive –current/voltage sensing, take out in the open

.Dexterity
subtle force based actuations with exposed fingers, free motion

.EarFree
listen through body, no headphones, personal and true to music
.Exoskeleton
Actuation
Sensing
Ergonomics

.Music
Orff school

.Teach
Exploration
Different instruments
In the open
Process based
Le petit prince sur l'astéroïde B 612.