## \* constructed ladders:

Ladder one: fun tokens one token per sound, having a physical representation of each sound Ladder two: tokens no need to go to the computer, you can directly play the melody fun Ladder three: tokens surprise effect fun physical movements are perceived as more pleasurable Ladder four: tokens fun Ladder five: graphical application easy to switch between musical themes, efficient fun

Participant:

Gender: boy

School: de Mozaïek, Borgerhout

"We have played with two toys, the one with the computer and the one with the blocks, what is most fun, to Interview:

choose the music via the computer or with the blocks?" (facilitator)

"The blocks." (participant)

"And why do you like playing with the blocks more?" (facilitator)

"Because you can play with the car then." The participant makes a movement with his hands. (participant)

two points

"Ok because you can move the car directly over the blocks?" (facilitator)

"Yes." The participant nods his head. (participant)

This-or-That ranking: digital toy train with extra tokens two points

> digital toy train with graphical application one point

Motorized or manual: motorized Ladder: ladder two

Participant: 2 Gender: bov

School: de Mozaïek, Borgerhout

Interview: "I have a question for you. We have chosen the sounds via the computer or by using the blocks. Which is

most fun, to choose the sounds via the computer or with the blocks?" (facilitator)

"With the blocks." (participant)

digital toy train with extra tokens

"And why do you think that is more fun?" (facilitator)

No response. (participant)

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder:

Participant: 3 Gender: girl

This-or-That ranking:

School: de Mozaïek, Borgerhout

"I have a question for you. We have chosen the sounds via the computer or by using the blocks. Which was Interview:

most fun?" (facilitator)

"With the animal sounds." (participant)

"So the extra blocks with the animal sounds?" (facilitator)

"Yes." (participant) "And why?" (facilitator)

"Because it is a fun sound." (participant)

This-or-That ranking: digital toy train with extra tokens two points

> digital toy train with graphical application one point

Motorized or manual: manual

Ladder:

Participant: 4
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "If you choose the sounds, is it more fun to choose them via the computer or by using the blocks?"

(facilitator)

"With the blocks." (participant)

"And why are the blocks more fun?" (facilitator)

"Because..." (participant)
"Because they are?" (facilitator)

"Because they make music." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized Ladder: ladder three

Participant: 5
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "Why do you like the blocks more than the computer? Do you know why? Can you tell me?" (facilitator)

"Because they make music." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized Ladder: ladder three

Participant: 6

Gender: girl

School: de Mozaïek, Borgerhout

Interview: "I have a question for you. We have chosen the sounds via the computer of by using the blocks. Which is

most fun, to choose the sounds via the computer or with the blocks?" (facilitator)

"To choose them with the blocks." (participant)

The facilitator repeats the answer. "And why is it more fun to choose the sounds with the blocks?" (facilitator)

"Euuhm because there are animals on them." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: -

Participant: 7
Gender: girl

School: de Mozaïek, Borgerhout

Interview: "And what do you like more, the blocks or to choose the sounds via the computer?" (facilitator)

"Euuh.. the blocks." (participant)

The facilitator repeats the answer. "And why do you like the blocks more?" (facilitator)

"Because I don't like the animals." (participant)

"And then you can choose not to select the animals?" (facilitator)

"And why do you not like the blocks?" (facilitator)
"Because they are too loud." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Participant: 8
Gender: girl

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun, to choose the sounds with the blocks or to choose them via the computer?"

(facilitator)

"The animals." (participant)

"So the blocks with animals? And why do you like these more, because they have animal icons?" (facilitator)

"Because I like to play with the blocks." (participant)

digital toy train with graphical application

This-or-That ranking: digital toy train with extra tokens two points

one point

Motorized or manual: motorized Ladder: ladder four

Participant: 9
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun, to choose the sounds with the blocks or to choose them via the computer?"

(facilitator)

"But the blocks is fun and ..." (participant)
"The blocks are what?" (facilitator)

"Fun." (participant)

"So the blocks are more fun?" (facilitator)
The participant nods his head. (participant)

"And why?" (facilitator)

"Because you can put them away and then put them back."

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: manual Ladder: ladder four

Participant: 10 Gender: girl

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun, to choose the sounds with the blocks or to choose them via the computer?"

(facilitator)

"The computer." (participant)

The facilitator repeats the answer. "And why?" (facilitator)

"Because it makes music." (participant)
The facilitator repeats the answer. (facilitator)

This-or-That ranking: digital toy train with graphical application two points

digital toy train with extra tokens one point

Motorized or manual: manual Ladder: -

**Participant:** 11 Gender: boy

School: de Mozaïek, Borgerhout

Interview: "I also like these." Points to the animal tokens. (participant)

"Euhm the blocks and that one too." Points to the motorized vehicle. (participant)

"And why do you like choosing the sounds with the blocks and not with the computer?" (facilitator)

"This one and this one and this one." Points to the icons of the animals. (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized Ladder: ladder one

**Participant:** 12
Gender: girl

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun, to choose the sounds with the blocks or to choose them via the computer?"

(facilitator)

"The blocks." (participant)

"And why do you think that is more fun?" (facilitator)

"Just because." (participant)

"Why do you like the blocks more?" (facilitator)

No response. (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: -

Participant: 13
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun, to choose the sounds with the blocks, so these blocks - points to the tokens -

or to choose them via the computer?" Points to the computer. (facilitator)

"Computer." (participant)

The facilitator repeats the answer. "And why?" (facilitator)

The participant speaks very silently. (participant)

"Because with the computer you can choose?" (facilitator)

"Yes." (participant)

This-or-That ranking: digital toy train with graphical application two points

digital toy train with extra tokens one point

Motorized or manual: motorized Ladder: ladder five

Participant: 14
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun, to choose the sounds with the blocks or to choose them via the computer?"

Points to the computer. (facilitator)

"A pig." (participant)
"A what?" (facilitator)
"A pig." (participant)

"Do you think it is more fun to choose the sounds via the computer or do you think it is more fun to choose

the sounds with the blocks?" (facilitator)
"Pig." Points to the orange token. (participant)

"But not only for the pig, but if you had to choose the computer or the blocks for all the sounds, which one

would you choose?" (facilitator)
"The computer." (participant)

The facilitator repeats the answer. "And why?" (facilitator) "Because it is the sound of a ... sheep." (participant)

This-or-That ranking: digital toy train with graphical application two points

digital toy train with extra tokens one point

Motorized or manual: motorized

Participant: 15
Gender: boy

School: de Krokodil, Antwerp

Interview: "What do you think is most fun, to choose the sounds with the blocks or to choose them via the computer?"

(facilitator

The participant points to the computer. (participant)

"The computer? And why do you think that is more fun?" (facilitator)

The participant points to the computer. "Are there more sounds?" (participant)

"And you think it is more fun to choose the sounds via the computer. Why do you think that is more fun?"

(facilitator)

The participant starts to play with the train gain. (participant) digital toy train with graphical application two point

digital toy train with graphical application two points digital toy train with extra tokens one point

Motorized or manual: motorized

Ladder: -

This-or-That ranking:

Participant: 16 Gender: girl

School: de Krokodil, Antwerp

Interview: "And do you think is more fun to choose the sounds via the computer or with the blocks?" (facilitator)

"With the blocks." (participant)

The facilitator repeats the answer. "And why do you think that is more fun?" (facilitator)

"Because it is also easier." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: -

Participant: 17
Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds with the blocks or via the computer?" (facilitator)

"The blocks." (participant)

The facilitator repeats the answer. "And why do you think that is more fun?" (facilitator)

"I like these." The participant goes to the animal tokens. (participant)
"You like the ones that look like this with the animals on them?" (facilitator)

"Yes." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: -

Participant: 18
Gender: boy

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds with the blocks or to use the computer to choose the

sounds?" (facilitator)

"To choose with the blocks." (participant)

The facilitator repeats the answer. "And why do you think that is more fun?" (facilitator)

"Because ... I don't know." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Participant: 19 Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds with the computer or via the blocks?" (facilitator)

"Via the computer because I like the computer so much." (participant)

"Yep." (facilitator)

This-or-That ranking: digital toy train with graphical application

two points digital toy train with extra tokens one point

Motorized or manual: motorized

Ladder:

Participant: 20 Gender: bov

School: de Krokodil, Antwerp

Interview: "I want to play with the piano." (participant)

> "Yes these are the piano sounds." Points to the colored tokens. (facilitator) "Yes but I want this one here." The participant goes to the computer. (participant)

"Do you like the computer more than the blocks?" (facilitator)

The participant nods his head. (participant)

"Why do you think the computer is more fun?" (facilitator)

"Just because it is fun." (participant)

"And why do you like the computer more?" (facilitator) "Because I haven't played on a computer." (participant)

This-or-That ranking: digital toy train with graphical application two points

digital toy train with extra tokens one point

motorized Motorized or manual:

Ladder:

## Participant: 21 Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun, to choose the sounds with the computer here - points to the computer - or

with the blocks?" Points to the tokens. (facilitator)

"Blocks." (participant)

The facilitator repeats the answer. "And why do you think it is more fun to choose the sounds with the blocks

than with the computer?" (facilitator)

"Because I can here directly drive with the car." (participant)

The facilitator repeats the answer. (facilitator) The participant nods her head. (participant)

This-or-That ranking: digital toy train with extra tokens two points

> digital toy train with graphical application one point

Motorized or manual: motorized Ladder: ladder two

Participant: 22 Gender: bov

School: de Krokodil, Antwerp

"What do you think is most fun, to choose the sounds with the computer or with the blocks?" (facilitator) Interview:

"The computer." (participant)

"And why do you think that is more fun?" (facilitator)

"Everything is fun." (participant)

This-or-That ranking: digital toy train with graphical application two points

> digital toy train with extra tokens one point

Motorized or manual: motorized

Ladder:

**Participant:** 23
Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun, to choose the sounds like with the two types of blocks or with the

computer?" (facilitator)
"With the blocks." (participant)

The facilitator repeats the answer. "And why do you think that is more fun?" (facilitator)

"Because then you can choose for yourself which sound you want to hear, and with the computer you don't

know which sound you choose." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized ladder one

Participant: 24
Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun, to choose the sounds like with the computer - points to the computer - or to

choose with the two types of blocks?" Points to the tokens. (facilitator)

"With the blocks." (participant)

The facilitator repeats the answer. "And why do you think that is more fun than with the computer?"

(facilitator)

"Because every block has an animal on it." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized Ladder: ladder one

Participant: 25
Gender: boy

School: de Krokodil, Antwerp

Interview: "What do you think is most fun, to choose the sounds with the computer - facilitator points to the computer -

or to play with the two types of blocks?" (facilitator) "To play with the two types of blocks." (participant)

The facilitator repeats the answer. "And why do you think that is more fun?" (facilitator) "Euuh." (participant)

"So you liked the blocks more than the computer. And why do you like the blocks more?" (facilitator)

"Because they make beautiful sounds." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: manual Ladder: -

**Participant:** 26 Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun, to choose the sounds with the computer - points to the computer - or to

choose with the two blocks?" (facilitator)

"The two blocks." (participant)

The facilitator repeats the answer. "And why?" (facilitator)

"Euuh. Because they plays like sounds and euuhm to put blocks in it." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: ladder three and ladder four

Participant: 27
Gender: boy

School: de Krokodil, Antwerp

Interview: "And do you think it is more fun to choose the sounds with the blocks or to choose the sounds with the

computer?" (facilitator) No response. (participant)

"So the blocks with the animals on it or to choose the sounds with the computer?" (facilitator)

"Euhm the animals." (participant)

The facilitator repeats the answer. "And why do you like it more to choose the sounds like that and not with

the computer?" (facilitator)
"Euhm." (participant)

This-or-That ranking: digital toy train with extra tokens

two points

digital toy train with graphical application

one point

Motorized or manual: motorized

Ladder: -

Participant: 28
Gender: girl

School: de Mozaïek, Borgerhout

Interview: "And do you think it is more fun to choose the sounds with the computer or to have two types of blocks?"

(facilitator)

"Euuhm... the sounds." (participant)

The facilitator repeats the answer. "But do you like to choose the sounds with the computer or with separate blocks? So you either have to choose on the computer by clicking on the images, or you have to choose with

the blocks like you just did. What was most fun?" (facilitator)  $\,$ 

"I didn't like these." Points to the tokens. "Because you have to take them in and out every time." (participant)

"So you liked the computer more?" (facilitator)

"Yes." (participant)

This-or-That ranking: digital toy train with graphical application two points

digital toy train with extra tokens one point

Motorized or manual: motorized Ladder: ladder five

**Participant:** 29 Gender: boy

School: de Mozaïek, Borgerhout

Interview: "What do you like most to choose the sounds with the blocks or to use the computer to choose the sounds?"

(facilitator)

"The blocks." (participant)

The facilitator repeats the answer. "And why do you like the blocks more?" (facilitator)

"They make animal sounds." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Participant: 30
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "So you can choose the sounds now with the blocks - points to the tokens - but do you like it more to choose

two points

the sounds with the computer?" (facilitator)
The participant nods his head. (participant)

"Yes? And why do you think that is more fun?" (facilitator)

Unintelligible response. (participant) "What do you say?" (facilitator) "Animals." (participant)

This-or-That ranking: digital toy train with graphical application

digital toy train with extra tokens one point

Motorized or manual: manual

Ladder: -

Participant: 31
Gender: gir

School: de Mozaïek, Borgerhout

Interview: "And do you think it is more fun to choose the sounds with the computer or to have two types of blocks?"

(facilitator)

"To choose the sounds on the computer." (participant)
"Yes. And why do you think that is more fun?" (facilitator)

No response. (participant)

"... to select the sounds on the computer?" (facilitator)

No response. (participant)

"What do you like about choosing the sounds with the computer?" (facilitator)

"That it are beautiful sounds." (participant)

This-or-That ranking: digital toy train with graphical application two points

digital toy train with extra tokens one point

Motorized or manual: manual Ladder: -

**Participant:** 32
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "And what do you think is most fun to choose the sounds via the computer, and or to like play with two types

of blocks?" (facilitator)
"Blocks." (participant)

The facilitator repeats the answer. "And why do you think that is more fun?" (facilitator)

No response. (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: manual Ladder: -

**Participant:** 33
Gender: girl

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun to choose the sounds via the computer and click with the computer mouse or

to like play with two types of blocks?" (facilitator)

"Blocks." (participant)
"The blocks?" (facilitator)
"Yes." (participant)

"And why do you like these more?" (facilitator)

No response. (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: manual

**Participant:** 34
Gender: girl

School: de Mozaïek, Borgerhout

Interview: "What did you like most, choosing the sounds on the computer by clicking with the computer mouse or to

choose the sounds with the blocks?" (facilitator)

"Both." (participant)

...

"But if you have to choose, do you like to choose the sounds with the computer or is it more fun to have two

types of tokens?" (facilitator)
"I don't know." (participant)

This-or-That ranking:

Motorized or manual: motorized

Ladder: -

**Participant:** 35
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun to choose the sounds via the computer by clicking or do you prefer to work

with two types of blocks?" Points to the tokens. (facilitator) "These." The participant takes the animal tokens. (participant)

"Yes. And why do you like that more than with the computer?" (facilitator)

"Because that than other sound." (participant)
"Because it makes other sounds?" (facilitator)
"Yes and other animals." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: -

**Participant:** 36
Gender: boy

School: de Mozaïek, Borgerhout

Interview: "What do you think is most fun to choose the sounds via the computer by clicking with the computer mouse

or by working with two types of blocks?" Points to the tokens. (facilitator)

"Two types." Points to the tokens. (participant)

The facilitator repeats the answer. "And why do you like that more than the computer?" (facilitator) "Because otherwise you have to go to the computer every time and click on that." (participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: manual Ladder: ladder two

**Participant:** 37
Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds via the computer by clicking with the computer mouse

or to play with two types of blocks?" (facilitator)

"Both." (participant)

The facilitator repeats the answer. "But if you have to choose one, which one would you choose?" (facilitator)

"Eeeuhm." Points to the computer. (participant)

"The computer? Ok, and why do you think the computer is more fun?" (facilitator)

"Because I had to click." (participant)

This-or-That ranking: digital toy train with graphical application two points

digital toy train with extra tokens one point

Motorized or manual: motorized

**Participant:** 38
Gender: boy

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds via the computer by clicking with the computer mouse

or to play with two types of blocks?" (facilitator) "Eeuhm with the computer." (participant)

The facilitator repeats the answer. "And why do you think that is more fun?" (facilitator)

"Because the sounds are beautiful." (participant)

This-or-That ranking: digital toy train with graphical application

two points one point

Motorized or manual: motorized

Ladder: -

Participant: 39
Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds via the computer by clicking with the computer mouse

or to play with two types of blocks?" (facilitator)

"With the blocks." (participant)

digital toy train with extra tokens

"And why was it more fun with the two types of blocks?" (facilitator)
"Because it were lots of beautiful sounds in a row." (participant)
digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: -

This-or-That ranking:

Participant: 40 Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds via the computer by clicking with the computer mouse

or like this to play with two types of blocks?" (facilitator)
"This." The participant is playing with the tokens. (participant)

"Yes, why do you think that is more fun?" (facilitator)

"Because it is not with the computer, but you can just drive over it with the car and then it makes sounds."

(participant)

This-or-That ranking: digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: manual Ladder: ladder two

Participant: 41
Gender: boy

School: de Krokodil, Antwerp

Interview: "What do you think is most fun, to choose the sounds via the computer or with two types of blocks?"

(facilitator)

"This." The participant points with his foot to the tokens. (participant)

"The blocks? And, why do you like these?" (facilitator)

"Just because it are sounds of animals and stuff." (participant) digital toy train with extra tokens two points digital toy train with graphical application one point

Motorized or manual: motorized

Ladder: -

This-or-That ranking:

Participant: 42 Gender: girl

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds via the computer by clicking with the computer mouse

or with the blocks, to play with the two types of blocks?" (facilitator)

"The two blocks." (participant)

The facilitator repeats the answer. "And why did you like that?" (facilitator)

"Because it makes lots of sounds." (participant)

This-or-That ranking: digital toy train with extra tokens two points

> digital toy train with graphical application one point

Motorized or manual: motorized

Ladder:

Participant: 43 Gender: bov

School: de Krokodil, Antwerp

Interview: "What do you think is most fun to choose the sounds via the computer by clicking with the computer mouse

on an image or to choose the sounds with the two types of blocks?" (facilitator)

"Euh this one and this one." Points to the tokens. "And this is the piano." (participant)

"Yes these are the piano sounds and these are the animal sounds" Points to the two types of tokens. "And

why do you like that, like with two types of blocks?" (facilitator)

"Because they are different and then you hear the different sounds for both the animals and the piano"

(participant)

"Yes, good." (facilitator)

digital toy train with graphical application

This-or-That ranking: digital toy train with extra tokens

girl

two points one point

motorized Motorized or manual: Ladder: ladder one

Participant: 44

Gender:

School: de Krokodil, Antwerp

"What do you think is most fun to choose the sounds via the computer by clicking on the images or to Interview:

choose the sounds with the two types of blocks, so that you have the animals and the piano sounds?"

(facilitator)

"The animals." (participant) "With the blocks?" (facilitator)

The participant nods her head. (participant)

"And why do you like that more?" (facilitator)

"Because it is a different sound and a different block" (participant) digital toy train with extra tokens two points

digital toy train with graphical application one point

Motorized or manual: manual ladder one Ladder:

This-or-That ranking: