## Exploring the Potential of Children in Crowdsourcing

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## **ABSTRACT**

Recently, companies and academia have turned to crowdsourcing to stimulate creativity and innovation. Although children's creative nature has been well documented in the design process in co-creation for new products and/or services, this has not yet extended to

crowdsourcing. Their creative potential and learning needs could potentially benefit children as workers and as requesters alike.

With this paper, we investigate through crowdsourcing — the gap between children and crowdsourcing.

## **METHOD**

To gather a diverse sample of participants we used CrowdFlower, a crowdsourcing platform. In our process we adopted the work of Nickerson and Sakamoto. In this method, the crowd is approached first for idea generation and then for idea evaluation and synthesis

"Do you have kids?"

"On an engaging crowdsourcing platform, how would you involve children?"

We classified all the ideas into five categories of possible roles children could play in crowdsourcing.

of five specific ideas.

We asked participants to rate

each of the five ideas within

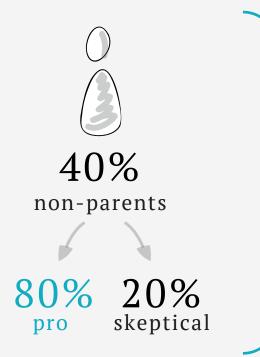
a category on a 1 to 5 scale.

(1-low preference, 5-high preference)

**GENERATE IDEAS** 

Ask crowd for ideas (100 participants - 12\$)

60% parents skeptical



100

ideas

Categories of ways in which children can potentially engage

I think children can be important source of new ideas and innovations for any kind of business you make. They're looking the life from others eyes,

their eyes, they 'live' in a different world. It could be that they are included in projects

involving the creation of new toys or comics and thus companies would have views of children worldwide.

I would ask them to draw anything their fantasy can

create things that we can't even imagine sometimes.

Each category contained a subset

**GROUP IDEAS** 

ideas

**Testing and tasks** 

Providing feedback for games, books or other digital products

Playfulness

in crowdsourcing and an example of a proposed idea within each category:

Using their creativity to solve a task in a playful way

**Collaboration** 

Collaborating

or other adults

with other

Adults benefit from children's children, parents perspective

Inspiration

Learning to improve intellectual skills

Learning

**EVALUATE IDEAS** 

Ask crowd to evaluate ideas (100 participants - 18\$)

ideas

4.15 Kids provide input for creation of books

Testing and tasks

4.5 Kids provide input for creation of comics and cartoons

4.25 Kids help companies by testing games

Preferable ideas chosen by participants for involving

Eight ideas with a mean value of at least 4.0 (on a scale of 1-5)

Playfulness

4.4 Kids learn and grow 4.45 Kids collaborating intellectually by using

4.15 Kids contributing to game creation

the platform

Collaboration

with their parents

**4.4** Kids collaborating

with other kids

Kids help companies in the creative process by sharing thoughts without embarrassment

"If there would be a platform for children to participate in a safe crowdsourcing community, what would you like to be the core values of this platform? Please check 3 options"

We brainstormed and envisioned possible concepts for crowdsourcing applications that would involve children, incorporating the highest voted core values

We asked participants to choose the one concept they liked the most and we also gave the opportunity to elaborate on their choice with an open-ended question.

## RANK IDEAS



12% Kids provide input for creation of books and comics

14% Kids help companies by testing games

children in crowdsourcing platforms: 15% Kids learn and grow intellectually by using

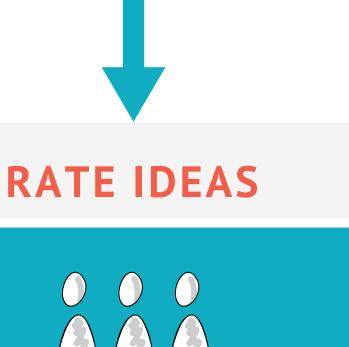
> 15% Kids contributing to game creation

the platform

16% Kids collaborating with other kids

8% Kids collaborating with their parents 11% Kids help companies in the creative process by sharing thoughts without embarrassment

**GENERATE CONCEPTS** 



Ask crowd

to rate ideas

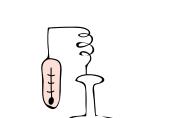
(50 participants - 12\$)

**RESULTS** 



Illustrations for Books, where children and parents

together help out publishing companies for drawing tasks 42%



**Unresolved Mysteries**, with children helping scientists brainstorm about unresolved mysteries on a digital platform

34%

**Future Professions**,

involving other professionals for children to learn about future work from a first person perspective 24%





