

## The design of children's technology

Allison Druin, editor

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When is the last time you read a book that you told all your friends to read? One that would change their lives; would encourage them; they'd enjoy it and they'd see the world in a new light?

Children today are beleaguered: they watch too much television and become passive; they play nasty computer games that inspire some of them to real crimes; health and safety concerns, to say nothing about worries of predators on the internet, force us to make their lives riskless and unexciting. How is this generation to grow up to become the world's next leaders? Despair, for the future is in their hands!

Adults today are beleaguered too. Even the local gym is full of PCs, making the workers sit awkwardly and hasten the handicapped days of repetitive strain injury.

The computer is our new slave master, and even researchers trying to find ways of making computers better are stuck in ruts, led by tenure track or research assessment exercises.

*The design of children's technology* says the sorts of things you'd expect it to say. If you are designing for children, sit on the floor and listen to them. Teachers are disempowered by educational material that makes them no more than IT technicians. It says things you didn't expect it to say. Designing with children removes our blinkers. Computer systems can be much more creative, persuasive, useful and enjoyable. The book is of course full of creative and engaging systems, from movie authoring systems, functional programming, robotics, virtual reality, and touches real issues like pollution, traffic jams and food cycles, and of course says a lot about the learning experience. As *The design of children's technology* is an edited book with 29 authors and 11 chapters, it covers a huge and very varied range of issues. It has stuff for interaction designers, and stuff for advanced programmers who, say, might want to know the difference between Turing Complete and Pac Man Complete. You will find something interesting in it, whatever your relation to technology or children.

But why stop at children? Why don't we think like this with all technology design? Why don't we sit down with **users** when we design new systems, rather than just impose our preconceptions? One reason is that we think we understand other people; and of course we don't — that is why a book about the design of children's technology is an eye opener: we *know* we don't understand children because we are not children, as we're often reminded when the things we make for them fail. It's uncontentious, then, that we must engage children effectively in the design process. If we do so, we will end up with better things, not just building more effective learning and discovery environments for children, but discovering ourselves: both how we were as children, and how we can be. In short, *The design of children's technology* tells how **people** can learn about the world, understand asthma, learn to program, learn Chinese music or build an electron microscope, learn mathematics or, which is what it is all about, become better designers and effective agents for change. *The design of children's technology* tells how we can create a better world for **people**, that pulls us all out the conventional mental slavery of consumer technology into active participation of understanding and creating a new world.

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technology. However, with children as users, it has been difficult to bring them into the design process. Children go to school for most of their days; there are existing power structures, biases, and assumptions. between adults and children to get beyond; and children, especially young ones have difficulty in verbalizing their thoughts. For all of these reasons, a child's role in the design of new technology has historically been minimized. Based upon a survey of the literature and my own research experiences with children, this paper defines a framework for understanding the various roles A designer baby is a baby whose genetic makeup has been selected or altered, often to include a particular gene or to remove genes associated with a disease. This process usually involves analysing a wide range of human embryos to identify genes associated with particular diseases and characteristics, and selecting embryos that have the desired genetic makeup; a process known as preimplantation genetic diagnosis. Other potential methods by which a baby's genetic information can be altered involve children technology. 22 commits. README.md. ChildrensTechnology. An interactive prototype for the course 'Design of Children's Technology'. <https://wiebkem.github.io/ChildrensTechnology/>. © 2019 GitHub, Inc.