Special Interview

的价值将进一步提高

存在方式,可以断言今后10年教育

但是,考虑到现代社会世界经济的

任何人都很难做出确切的预测。

对于今后10年中可能发生的事

样,

ldren, Media and Education

Takemochi Ishii, Honorary Director, Child Research Net; Professor Emeritus, The University of Tokyo Interviewer: Tomohiro Kawamura, Researcher, Child Research Net

(CRN顾问、东京大学名誉教授)

采访人: 河村智洋(CRN外聘研究员)

媒体如何改变孩子?媒体又给教育带来了什么样的影响?我们这 些大人尚未找到答案。本次专访将回顾 CRN 成立至今的 10 年 "儿童·媒体·教育" 的未来。

How do media change children? How can they be used in education? We adults have not found out the answers to these questions. By looking back the past ten years of CRN, I would like to think about the future of children, media and education.

的变化

成果。

整个社会可能已经发生了翻天覆地 技术革新的速度越来越快,10年后 的事情啊(笑)。置身于现代社会

中我们经历了各种各样的困难。 年被称为 都有很多企业和大学从全国各地到 仅是企业, 连一般的大学也都具备 我们学校来参观。可是现在, 不仅 超过了许多 了SFC那样的信息环境。 C的首届学生, 尖端的信息设备,系统之完善甚至 来到了庆应义塾大学湘南藤泽校园 (SFC)*。当时,SFC拥有最 尽管落后于美国和韩国, 在日本, 1991年,我离开东京大学. 「失去的10年」, 一流企业。 90年代中期以后的10 应该知道当时每天 你作为SF 那10年 宽带 可

如这样, 家庭, 出我们的想像 也终于在2005年走进了日本的 普及率甚至超过了美国。 10年后的发展状况总是超 正

教育。 石井 再请您谈谈今后应该推行什么样的 首先预测一下10年后的媒体, 河村 立之初就开始担任顾问的石井教授 今天, 预测未来可是一件十分困难 请从10年前CRN成 然后

区各新兴国家的受过高等教育的科 是廉价劳动力,而是来自亚洲等地 也就是说, 支撑着今日美国的并不 美国国内重振创新教育, 不过份依赖那些科技人员, 展停滯不前, 技人员人境, 点 技人员。报告得出结论, 认为要想 后, 美国限制以亚洲为主的各国科 是因为9·11恐怖事件发生之 该报告之所以提出这样的观 结果造成美国产业发 报告对此深感担忧。 以最平衡 必须在

发挥这一潜力, 的方式获取人才 键的就是培养人才。 本 经达到了世界一流水平。为了充分 的重要性。 日本也越来越意识到 正如美国提出 现在,日本的宽带基础设施已 我认为今后最为关 「创新美国」 基于这样的观 「创新日 那

而是他们努力推进以科技教育特别 崛起并不是因为拥有廉价劳动力, America) »[∞]* 是信息化为中心的创新立国战略的 小虎*3 们(新兴工业国)的迅速 育)。Palmisano 先生强调, 中最受重视的就是人才(创新教 撰写的报告《创新美国(Innovate 担任委员长的美国竞争力评议会 尔米萨诺、 Samuel J. Palmisano(塞缪尔帕 由美国IBM总裁 中文名:彭明盛) 先生 中提到, 全球化社会 CEO 新兴

*2

创新美国

Innovate 即指创新

行彻底改革的活动。该报 为对技术以及社会结构讲

告还提出,今后美国要想

在竞争中继续保持优势

*3

速崛起的新兴工业国 专指中国、

以亚洲为中心的各地区迅 新兴小虎 争力评议会委员长的名字 社会结构。该报告又以竞 冠名、被称为「Palmisanc 必须构筑最有利于革新的 印度、韩国等

大学的典范备受关注。

*1 园。建于1990年, 两个系最先在此起步。为 合政策系和环境信息系这 庆应义塾大学湘南藤泽校 - 下设施齐全,作为未来 人才,校内实现了智能化 了培养适应全球化时代的 综

4

必须重视创新教育的时代

学生已经能够熟练地上网了。

开始体验网络生活

Innovation Training Becomes Important

Kawamura: Professor Ishii, you have been Honorary Director and advisor at CRN since it was founded ten years ago. First, what is your vision of the media ten years from now, and what kind of education should we provide to prepare children for this future?

Ishii: It is quite difficult to foresee the future. I can't tell you exactly what will happen in the next ten years. However, looking at the current global economy, I can say that the value of education in the next ten years is going to be very high.

A report called "Innovate America" was issued in 2004 by the Council of Competitiveness' National Innovation Initiative in the U.S., co-chaired by Samuel Palmisano, CEO of IBM, which says that human resources, or innovation training, are the most important in a global society. Mr. Palmisano emphasizes that one reason that emerging economies in Asia are catching up is not their low wages but their national strategy and strong initiative to strengthen science and technology education, in particular, informationoriented innovation.

The terrorist attacks on September 11, 2001 led to a restriction on the influx of knowledge workers, mainly from Asia, which has made it difficult to keep U.S. industries going. The report was published amid this sense of crisis. It concludes that, in order to avoid becoming too dependent on knowledge workers from Asia, the U.S. must enhance innovation training and attain an optimum balance of human resources. Now that Japan has a world-class broadband infrastructure, in order to make use of it, we will need to give top priority to human resources development. In this respect, there has been an increasing awareness of "Innovate Japan" as a response to "Innovate America."

Taking Advantage of Lagging Behind

Kawamura: So, the business world has started to emphasize innovation training, but I am afraid that is hardly recognized in school education. I've been studying children and media for the past ten years at CRN. Up until about five years ago, children had their first experience with network communications on a mobile phone after entering junior or senior high school. Now, even elementary school children have broadbandinternet access on their computers and send e-mail. It's clear that these children don't expect anything from computer classes at school. They have given up on the idea. The gap between school and children is too wide to bridge

Ishii: If this is really the case, we should acknowledge the current situation: we are definitely lagging behind and we need to start from scratch. Actually, I am not that pessimistic about public education because up until now we had teachers with almost no computer experience and superficial knowledge, but from now on, we will have teachers who have been using computers since childhood. This means they will have a higher level of experience and knowledge. This is one way that public education adjusts itself to the times without any intervention.

Learning Backwards is Better

Kawamura: I think that there are more ways to make media a part of general education. The other day I read a comic book called "History of the Three Kingdoms." I suddenly started to love Chinese history, a subject that I had hated before. Then I started looking for something on ancient to modern history, and l ended up reading a school textbook. This made me think that order of learning in school education is backwards. First, we have to let children have interesting experiences, encourage them to explore, and then

媒体环境的剧烈变化, 未意识到创新的重要性 ,们多半是在进初中或高中以后才 我一直在CRN从事儿童与媒 但是日本的教育界好像尚 管世界各国都开始强调创 大约5年前, 这10年来随着 孩子们本身 孩 现了 应该怎样缩短公共教育领域和其它 息。 以通过博客传递自己想要传递的信 余地处理图像或音乐信息, 不仅会处理文字信息, 孩子们似乎对学校的电脑教育 一条难以填补的鸿沟。 学校和孩子之间出

也在不断

进步。

体的研究,

我觉得,

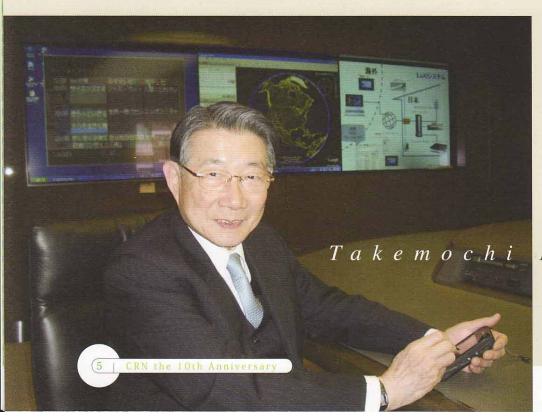
您认为 到悲观, 但是, 现实, 面已经走在前面 认识到孩子们在电脑学习方 我本人对于公共教育并不感 因为以前的老师自己都从 不适合孩子的电脑教育。 不要再进行没有

而现在很多小 还能游刃有 甚至可 他们 校不要再做表面文章, 领域之间的这种差距呢? 头做起也不失为一种方法。希望学 么承认落后的现状、 如果真是像你说的那样, 毫不犹豫地从 坦率地面对 那

实 处 伐 最近, 另外, 而使孩子们免受其害的原因也 电脑的危害已经得到证 可能落后也有落后的好

育自然而然地就会跟上时代的步

多好的创意。 到那个时候, 是今后的老师们都是从小就能熟练 应用电脑、 运用电脑的人, 未接触过电脑 提高教学效果方面有很 他们肯定会在灵活 只能现学现教。 公共教



Ishii

现在看来,孩子们没有在学校沉溺 汉字的写法。如果真是那样的话: 近NHK「聚焦现代」节目中也提 于电脑的世界倒是一件好事了。 孩子们将很难记住汉字,也记不住 的思考能力产生了极大的影响。最 社会既有光明的一面, 许正是在于电脑教育的落后。网络 面, 研究证明电脑本身对孩子们 ,总是敲打键盘却不用手写的话, 也有阴暗的

学习顺序的颠倒

应该慎重行事,但是在素质教育方 我认为可以更多地发挥媒体的 毫无疑问, 在巩固基础方面

新探讨历史、地理等学科的学习方 这样一个宽带时代,我希望能够重 程的问题受到了全社会的关注,在 高考擅自废除历史、 前不久, 一部分高中为了应付 地理等副科课

背诵也是学习的一个重要因素,没 能过于偏重于某种方法 有必要刻意走弯路,但是我认为不 知识,学习也变得枯燥乏味。当然, 学生们被迫机械性地死记硬背各种 是现在的教育并没有这样做, 整理的信息传递给学生,激发他们 透彻。所谓学习,原本应该将未经 该知识产生的背景, 触过别人编好的内容。由于不了解 在宽带诞生以前, 让他们自己整理归纳。但 所以很难理解 我们只接

国出差, 全不同的印象 因为传送的图像不同而给人造成完 里好像什么事都没有发生过一样。 的图像差别甚大。看到电视画面上 由此可见,同样的军事政变,可以 的图像看上去十分平静,机场大厅 大事。但是,秘书从当地机场发回 满街都是坦克,我以为一定是出了 传回日本,那些图像和电视新闻里 用 Type U* 将政变发生时的图像 前些日子, 我的秘书因公去泰 不巧碰上了军事政变。她

那样熟练地驾御媒体。 辑自己或朋友的体验, 体验无异于家常便饭, 可以说是网络孕育的全新的体验。 也不同于阅读教科书或其他书籍 的。它既不同于看报纸或看电视 自己的熟人第一时间将图像传 对孩子们来说, 这样的个人体验是令人难忘 他们可以编 这样的实时 像自己驾车

习也会有丰厚的成果的。 材料来学习的话,历史和地理的学 定会留在人们的记忆中。用这样的 以不可能马上成为知识, 日常体验因为没有系统化,所 但是它肯

河村 感性认识最终掌握知识。 他们体验知识是怎样产生的、 养孩子扎实的判断能力, 孩子们才会不知所措。如果想要培 成年人总是习惯先教结果,所以 卢梭在《爱弥尔》*5 中说 就该先让 通过

另外, 指要返朴归真、回到教育的原点。 从这个意义上讲, 即使是成年人, 也很难仅 可能就是

情中才可能学到知识。 仅通过文字这种记号来真正理解知 人类只有在身边发生的各种事

孩子们不需要说明书

程中一眨眼就掌握了机器的特征和 说明书, 在和小伙伴一起玩耍的讨 用方法的速度之快。他们不需要看 使用方法。真是不可思议。 我吃惊的是孩子们掌握媒体机器使 在与孩子们的接触中, 最令

的时间越短。 轻适应性越强,掌握新机器所需要 这一点。以我的经验来看,越是年 样的能力,只是大人们没有意识到 石井 其实孩子们本身就具备了那

河村 书这一概念,他们总是直接开始操 孩子们脑子里根本没有说明

的速度也比孩子们慢。 调的那样,大人们往往先看介绍机 很复杂、很难掌握,记住使用方法 大致的了解,所以会觉得媒体机器 喜欢在开始体验之前对机器有一个 器特征和使用方法的说明书。他们 石井 类似卢梭在《爱弥尔》中强

到解释。 使用的。 用为快,或者在一旁看别人是怎么 讲时,大人们总是马上要求我讲解 解释就能明白的,抠原理还不如先 机器的原理。机器的原理并不是一 每次我带着新的媒体机器去演 但是, 大人们还是希望听

媒体教育中最重要的就是无意

好奇心促使人发生转变。

人们

说明书的愿望并不符合这种感觉 间想要伸手摆弄机器的感觉。学习 手段反而成了目的。 所以一提起电脑教育就强调操作 一件好事,应该先培养操作的欲望 过份拘泥于工具本身就不是 正是由于过份拘泥于工具

通过媒体培养孩子们的潜在意识

因此意识到了学校的传统教育的价 为信息的奴隶, 但是我觉得我反而 有人说过份热衷于媒体会成

限制无法实现, 现在我们可能只是 事物。有些事情过去因为技术上的 想到新事物,其实人类想干的事 石井 一提起媒体,大人们就会联 在实现过去就有过的梦想。 想知道的事情并不一定都是新

想自古有之,媒体时代只不过是重 绝不是过去从未有过的感觉,古时 至可以站在宇宙范围确认自己所在 的GPS功能。有了这一功能, 新认识人类的时代。 有过这样的感觉。 总之, 的位置。这是一种新的感觉,但又 候遥望星空的游牧民族和船夫都曾 现在拥有儿童手机的孩子越来 儿童手机还搭载了确保安全 人类的梦 甚

体培养孩子们的潜在意识 意为发挥、培养。如果能够通过媒 对教育产生积极的影响 教育在德语中叫 erziehen,原 一定会

Type U

重量最轻的 Windows 电 脑、是全世界尺寸最小、 Video Skype°) 先安装的IP电话软件 费打可视电话。 麦克风,所以还可以免 脑。内部装载了摄像机和 索尼开发的袖珍型移动电 (利用事



《爱弥尔》

影响、让孩子在自然状态 下成长才是教育应当承担 保护孩子免受社会的不良 撰写的教育改革论。主张 卢梭于18世纪以故事形式 last, go to a textbook for a summary of knowledge. This makes the learning experience very exciting. In the classroom today, children have to study very hard without any background knowledge; they simply have to remember everything. They don't attain a deep understanding because they lack background knowledge. As a result, they forget almost everything by the time they are supposed to use what they've learned. I find that really useless.

Ishii: Before broadband became available, we only had access to information edited by others. But this organized information wasn't very helpful without a good understanding of the background. Learning is all about giving children unorganized information, stimulating their curiosity and then letting them organize the information. But that is not the way it is done and rote learning is forced upon them. While my secretary was on a business trip in Thailand, a military coup took place, and she sent me images from her mobile personal computer. A real-time image sent by someone you know is a powerful and unforgettable personal experience. This is not like reading a newspaper or watching TV, or reading books or textbooks. It is new type of experience generated by networks. Children in the future will take such a real-time experience for granted and they will self-edit their own experiences or their friends' experiences and use media as if they were driving a car.

Not being organized, such day-to-day experiences may not become knowledge right away, but they will certainly be stored as memory. With resources like this as a basis, history and geography will become more meaningful subjects.

Kawamura: According to Henri Rousseau in "Emile," adults always try to teach from the end result and that is why children don't understand. If we want our children to make good judgments, we have to feel and experience many things that will become the basis for knowledge. Knowledge should come at the very end.

Ishii: In that respect we may have to get back to the starting point of education.

Drawing out the Potential of Children

Kawamura: What is surprising for me when I associate with children is the speed with which they master the use of media equipment. In no time, they learn the features of the equipment and how to operate it while playing and without even reading a manual. Ishii: Children have that natural ability, but adults misunderstand it. Grown-ups start with a manual of organized knowledge. They try to understand the whole thing as knowledge before having the experience. That is why they find media equipment cumbersome or very

What is really important in media education is to have the feeling that you want to pick it up and play around with it. Studying a manual is not the same as feeling. Furthermore, it is strange to be so obsessed with a tool. The desire comes first, not the tool. Focusing too much on the tool turns computer education into a matter of learning how to operate the equipment so the method becomes the objective. Kawamura: It is said that getting too absorbed in media leads to being controlled by the endless flow of information, but it makes me appreciate the value of studying the conventional way at school.

Ishii: Adults may think that media are always something new, but human beings don't necessarily want to do or know something new. Something may have been infeasible because of technological constraints and maybe what people are doing now is what they have wanted to do for a long time. In this respect, the media age enables us to rediscover what it means to be human.

The German word for "education" is erziehen, which comes from the word "to draw out." Education will benefit if media can draw out children's potential and their latent thoughts. People change when they become curious. When you are shown something interesting, you want to try it and learn how to do it. That's why we need to make sure that children have a lot of memorable experiences. Kawamura: Children will make use of media to find out what they want to know regardless of the curriculum or the tool. Children will need to approach things with this kind of open attitude in the world of the future. Thank you very much for today.

(Edited by Makoto Kinoshita)

石井威望 Takemochi Ishii

专攻系统工学、多媒体等。1930年出生。毕业于东京大学医学系和工学系后曾供职 通产省,后任东京大学教授,现为东京大学名誉教授。同时担任过庆应义塾大学教授,现 为该大学客座教授、东京海上研究所研究顾问、NTT Docomo 移动通信社会研究所所长。 并曾历任国土审议会会长和其他政府专门委员会委员。现在还是IT推进本部信息安全专门 调查会的负责人。撰写过《移动通信革命》、《I生物技术的启示》(均由PHP研究所出版)

Professor Emeritus, The University of Tokyo. Currently, Visiting Professor, Keio University. Chairman/CEO, Tokio Marine Research Institute, and Managing Director, Mobile Society Research Institute of NTT DoCoMo, Inc. Specializes in system engineering, multimedia, and related fields. Born in 1930. Graduated from the Faculty of Medicine and Faculty of Engineering, The University of Tokyo. Served in the Ministry of International Trade and Industry before entering academia.

河村智洋 Tomohiro Kawamura

庆应义塾大学研究生院政策•媒体专业研究员。1971年出生。毕业于庆应义塾大学研 究生院政策·媒体专业并取得硕士学位。作为CRN 外聘研究员,负责"儿童与媒体研究室" 的工作。参加了利用已被关闭的学校开展教育活动的"新的学习场所的实验",还参加了"媒 体时装"的研究工作,从时装和生活模式的观点思考可穿戴电脑。另外,还参与创建了名 为"原宿BOX"的原宿地区信息网站。

CRN researcher in charge of CRN Research on Children and the Media. Researcher, Keio University Graduate School of Media and Governance. Born in 1971. M.A., Media and Governance, Keio University.

正在思 我们的采访 们不再受课程和工具的束缚 关儿童与媒体的研究。 应该自然地去了解自己想知道的和 他们应该拥有这样的自由的 CRN今后仍将继续进行有 考的事情, (撰稿、 并为此灵活运用 谢谢您接受

接触到 的关键在于让他们拥有更多印象深 社会的发展要求今后的孩子 因此, 事物 时 我认为培养孩子 定也想尝试

