

## With Help from Robots, Nursery Teachers Have More Time to Focus on Children

ICT (Information and Communication Technology), including robots, are starting to be utilized in the childcare industry. Increasingly, advanced technology is becoming available that supports various needs, such as providing fun for children and minimizing office work for childcare staff.

We visited Ai-Ai Nursery School Higashi Ikebukuro, an authorized private day care facility that has introduced ICT into their program.

### VEVO the Robot Plays a Human Role

“Hello Fuuka-chan. What are we going to play with today?”

“Aika-chan, it’s very cold today”

The childcare robot that greeted the 2 sisters is VEVO. The approximately 70 cm tall robot is able to recognize the children’s faces, allowing it to change greetings according to the child to whom it speaks. The sisters returned their greetings to VEVO, and entered the facility while nursery school staff waited nearby. Their father, Shingo Mano, 43, a member of Japan’s Self Defense Force, explained his first encounter with VEVO, saying he was “surprised to seeing robots have infiltrated the world of children”.

VEVO is part of the “Child Care System” (CCS) that supports childcare operations. It was co-developed by Gunma University and Global Bridge Holdings, an affiliated company in the field of childcare and nursing enterprises that specializes in ICT businesses.

During nap times, a separate sensor attached to the children’s clothing will allow VEVO to monitor their breathing and movements as they sleep. An alarm is triggered if something unusual is detected. Before VEVO, nursery staff needed to check up on the children every 5 minutes and record their napping conditions on paper.

As a “member” of the nursery staff, VEVO supports childcare facilities and the families of the children. Sometimes, when nursery staff with an early shift finish their day, they leave a message with VEVO to give to the parents. When guardians pick up the children, they are briefed on their child’s day. Parents have commented: “After I was informed of the day’s lunch menu, our dinner plans were changed” or “My child only napped for a short time, so we went to bed early”.

### Using VEVO to Help Reduce Administrative Burdens

VEVO also plays a huge role in alleviating the burden on nursery school teachers. The robot is able to automatically calculate extension fees and the length of time a child spends at daycare by recording the time the child arrives and leaves the facility. By analyzing the pattern of the children’s time at daycare, the staff’s work shifts can also be more efficiently managed.

Kyoko Takayama, 40, head of the Ai-Ai Nursery School, said that by reducing manual labor on administrative tasks, staff are better able to concentrate on the duties of actual childcare. In addition, she reported that they were able to save around ¥ 3.5 million JPY in annual labor costs.

Global Bridge Holdings CEO Joe Sadamatsu, 37, explains: “Whatever tasks machines can take on, they should cover. The aim is to increase the time nursery teachers spend with the children ‘as people.’”

He pointed out that the robots’ AI (artificial intelligence) judgments are based on the value judgments of the nursery school teachers, adding: “We hope to set up an environment that lets ambitious teachers achieve their goals. In the future, we want to nurture personnel that are able to accumulate and analyze data concerning developments.”

### Local Governments Using AI for Admissions

The number of local governments using AI for decisions concerning daycare enrollments is increasing. In Tokyo’s Minato Ward, the selection process used to take about 500 hours of manual labor by 15 employees working over 3 to 4 days. Now, with the assistance of AI, it can be handled in about five minutes.

According to the Minato Ward’s child care division, an experiment demonstrating the technology was conducted using data from last spring for 2,600 children. The first experiment resulted in an 85% work accuracy by the AI robot compared to the work done by employees. However, by the fifth experiment the robot had learned, and the accuracy level reached 100%.

Accommodations were made for special conditions among the applicants, such as those who stated that if their sibling children are assigned to different facilities they don’t want to be admitted, or, that they want to return to their jobs even if their child needs to be assigned to a different facility. Also, careful consideration was given to children with special needs and disabilities.

Minato Ward allows each family to choose up to 20 preferred facilities to list in their application forms in the enrollment process. Nursery school index points are calculated according to the guardian/parents’ working situation. In situations where families have the same number of index points, they will be placed in order of priority according to 15 other criteria. Ultimately, the applicants will be allocated to over 90 different facilities.

Manager Tsuneyoshi Yamakoshi, 48, added: “Children with disabilities receive a priority adjustment. In order to economize manpower, IT is necessary.”

According to Fujitsu, the AI system developer, Takamatsu City, Onomichi City in Hiroshima Prefecture and Kusatsu City in Shiga Prefecture have already installed the system, and around 50 local governments are currently trying them out.

Source: **With Help from Robots, Nursery Teachers Have More Time to Focus on Children**  
<http://japan-forward.com/with-help-from-robots-nursery-teachers-have-more-time-to-focus-on-children/>

## 保育士を助けるロボット 子供と向き合う時間増やす

保育業界で、ロボットをはじめとするICT（情報通信技術）の活用が始まっている。子供に楽しみを提供し、保育士の事務作業を減らすなど、さまざまな場面を支える先進技術だ。導入が進む私立認可保育所「あい・あい保育園東池袋園」（東京都豊島区）をたずねてみた。（牛田久美、戸谷真美）

「オハヨウ、ふうかちゃん。今日八何シテ遊ブノ？」「あいかちゃん、今日ハトテモ寒イネ」

姉妹を迎えるのは保育ロボット「VEVO」（ビーボ、身長約70センチ）。声かけの内容は子供によって変わる。姉妹はビーボにあいさつして、そばで待つ保育士と奥へ。父親の自衛隊員、真野信悟さん（43）は初めて会ったときの印象を「子供の世界までロボットが広がっていて驚いた」と語った。

ビーボは保育業務を支援する「チャイルドケアシステム」の一部だ。保育、介護のICT事業を柱とする「グローバルブリッチホールディングス」傘下の企業が群馬大と共同開発した。

昼寝中は園児の衣類に付けたセンサーが寝返りや呼吸を常時計測し、ビーボに送信する。異常時は警報音で知らせる。導入前は保育士が5分おきに様子を確認し、紙に記録していた。

帰宅時はビーボが保護者に日中の様子を伝える。親からは「昼の献立を聞いて夕飯を変更した」「昼寝が短かったようだから一緒に早く寝た」という声も。早番で帰る保育士が保護者への伝言をビーボに託すことも。保育スタッフの“一員”として保育園と家庭を支える。



保育士の負担軽減にも一役買っている。ビーボが計測した登降園時刻を元に、園児ごとに在園時間と延長保育料を自動で算出。園児の在園状況から最適な保育士のシフト管理もできる。高山京子施設長（40）は「手作業の事務を削減できて保育に専念できる」。年間約350万円の人件費を節減したという。

グローバルブリッチの貞松成（じょう）社長（37）は「機械にできることは機械に任せ、保育士が人として子供に向き合う時間を増やしたい。AI（人工知能）の判断も、人間としての保育士の価値判断が土台だ。志の高い保育士が活躍できる環境を整え、将来は発達に関するデータも蓄積して解析できる人材を育てたい」と語る。



### ■入所選考など自治体もAI

保育所の入所選考業務にAIを導入する自治体が増えている。東京都港区では、職員15人が手作業で3～4日間かけた約500時間の業務を、AIは約5分間で終えた。

同区保育課によると、昨春のデータ約2600人分で実証実験。初回は職員の作業と比べて85%の精度だったが、5回目に100%に達した。「兄弟と別施設なら入所しない」「別施設でも復職したい」などのばらつきに対応し、障害児への配慮を慎重に検討した。

同区の選考は、各家庭が第2希望まで申請し、就労の度合いなどから指数を算出。同点で競合時はさらに15項目の優先順位で90余の施設へ割り当てる。山越恒慶課長（48）は「障害のあるお子さんを先に内定調整している。省力化へIT（情報技術）は必要」と語る。開発元の富士通によると高松市、広島県尾道市、滋賀県草津市なども導入し、約50自治体の実験中という。

出典:保育士を助けるロボット 子供と向き合う時間増やす

<https://www.sankei.com/life/news/190329/lif1903290018-n1.html>