Helping students teach English to children with IT

Mariko Miyao
Tsukuba Gakuin University

This paper outlines a workshop for elementary school children to learn English with the help of college students' English and IT knowledge. In the workshop children were taught to make simple English quizzes with the Study Note software that is available at many elementary schools. Sample quizzes were first created by the college students and uploaded to the database section of the software for the children to browse before creating their own quizzes. The typical format is a question like, "What is it?" with a picture and possible answers, each jumping to a different page when clicked. The results so far have been quite positive. Almost all children created their own quizzes using their imagination, English, and drawing skills. The benefits of this experience are multifold. The teacher can motivate students to learn English and IT and observe children's learning behavior, thus serving their community.

　この論文では、大学生の英語力とコンピュータ技術を生かして、小学生に英語を教えるワークショップについて述べる。ワークショップでは、多くの小学校に導入されているスタディーノートというソフトを使い簡単な英語のクイズを小学生自身が作るよう指導した。まず最初にサンプルクイズを大学生が作り、ソフトのデータベースにアップロードし、小学生が自分のクイズを作る前に閲覧できるようにした。典型的な質問のタイプとしては、"What is it?"と質問し、その答えになる絵を描き、いくつかの可能性を書き、答えの可能性をクリックするとそれぞれ別ページへジャンプする。ワークショップの結果は、これまでのところ、かなりの成果がみられた。ほとんどの児童が、想像を働かせ、自分の知っている英語と絵心を発揮させて、それぞれの独自のクイズを完成させることができた。この経験を通して、教員は、大学生にもっと英語やITへの勉強意欲を持たせることができると同時に、小学生の学習行動を観察、研究することができる。また、地域への貢献にもつながる。

This paper outlines a workshop, entitled "Let's make quizzes in English using Study Note," for elementary school children to learn English with the help of college students' English and IT (Information Technology) knowledge. Study Note is educational software available at many elementary schools in the community where our college is located.

A two-hour workshop was first offered in the summer of 2005 as part of a city-wide program called *Chibikko Hakase* (well-informed, intelligent kids). The workshop was offered again in August 2006. The experience of these two workshops, spanning two summers, will be examined in this paper.

Some reasons for holding this type of workshop are as follows:

1. College teachers are now expected to give community service by holding public seminars or workshops in their fields for the community where the college is located.

2. Many colleagues of mine in our department (*jouhou-media gakka* or Informatics and Media Studies) offer a variety of public seminars and workshops in computer-related subjects. As a way of publicizing our college, even though it is not as direct as open campus activities targeted to high school students, English-related workshops using computers can encourage participants to study both computer and English skills as tools for communicating with people.

3. Study Note has been developed by some of my colleagues and ex-colleagues and is widely used in many elementary schools in and around the city. Children in our community are introduced to the software at school so we can therefore spend more time on the content of the workshop, with focus on making quizzes in and about English.

4. Junior college students in a graduation project course were accustomed to creating children's picture books in English using Study Note, with such features as jump buttons, sound buttons, and drawing/painting tools (Miyao, 2001; Miyao, 2003). For several years until 2005 these computerized children's picture books were shown to visitors at our college festival in the fall.

5. When we were asked to help organize a workshop for the *Chibikko-Hakase* program, the idea of teaching children by helping them make quizzes in English using the software, combined with college students' computer skills and English knowledge came to mind. It is a great opportunity for our students to use their IT knowledge. At the same time the teacher can encourage them to become independent language learners through such learner-centered activities (Beller-Kenner, 1999, p. 369). University students, by helping and teaching younger learners, learn to act independently and spontaneously.

What is *Chibikko Hakase*?

Chibikko Hakase is a city-wide program for elementary school and junior high school children in Tsukuba Science City. There are many national and private research institutes, laboratories, and universities in the city. In this program, children can visit designated institutions by using their *Chibikko-Hakase* passports during the period from mid-July to mid-October. For each visit their passports are stamped.

After visiting three or more institutions, they are eligible for the *Chibikko-Hakase* certificate. In addition, they can compete for higher *Chibikko-Hakase* categories by writing essays on science.

Many institutions opening their doors to children are science laboratories and colleges where children can browse the facilities through guided tours. Some institutions offer workshops instead of (or in addition to) giving guided tours.

For the last two years our college has offered two workshops during the summer vacation: one English-related workshop using computers and another math-related workshop. Information about the *Chibikko-Hakase* program is available at <www.city.tsukuba.ibaraki.jp>.

Study Note

Study Note is a kind of educational software with many easy-to-use features; it is used in many elementary schools and junior high schools in the community and many other areas in Japan. It can be used as groupware that enables children and their teachers to create and share documents with others in the software network system. Microsoft Computer Dictionary states "groupware may provide services for communication (such as e-mail), collaborative document development, scheduling and tracking. Documents may include text, images, or other forms of information" (Bahn, 1999, p. 209).

For these services, Study Note has four sections: Note (to create document pages), E-Mail (to exchange text messages created in the Note with other users), Bulletin Board (to post notes), and Database (to show what has been created, such as reports, quizzes, and questions for others to browse).

The software can be used as authoring software in which we can create, for example, computerized picture books or quizzes. This function is the main reason for my students and I to use Study Note. According to Wachman (1999), authoring software is "expressly designed for the development of one's own educational materials" and can "assist teachers and learners in constructing autonomous

modes of language learning" (p. 403). To make the story or quiz interesting for children, we can use jump buttons (jumping to designated pages by clicking buttons), sound buttons (narrating the story or giving background music), and automatic page turners (giving the effect of a moving picture by turning several pages automatically). By saving our student work in the database section, other users of Study Note can browse what we have created.

Study Note has a special converter program to change a piece of data into webpages, thus users can display their work on a website and reach a larger audience. Regarding the approaches and methods of actual projects using Study Note, there are some books (Yoden, 2001; Yoden, Yamanoi, et al., 2003) available in Japanese. Information on Study Note is available in Japanese at: <study.tsukuba-g.ac.jp/eco/wiki.cgi>.

Preparation for the workshop

Three different types of materials were prepared for the workshop.

Sample quizzes

Sample quizzes were created by junior college students using Study Note and uploaded to the database section for the workshop participants to browse before making their own quizzes. The typical format is a question like "What is it?" with a picture of an object and three or four possible answers, with each answer jumping to a different page when clicked. Various other questions are possible: What is hiding?; What color is my T-shirt (hat or cat)?; What is he

doing?; What do you want for your birthday?; and What is 5 in English? Students are usually very good at drawing and painting pictures, and the sample quizzes turned out to be quite interesting (See Appendix 1). Students who are not very comfortable drawing pictures can find appropriate pictures and illustrations through other software or on the Internet. (You can browse the sample quizzes entitled *eigono quiz (sample quiz)* in the Database section of the Study Note network.)

Instructions for logging on to the computer and using the software

For elementary school children, an easy to understand instruction manual was created: how to log onto the computer, how to start Study Note software, how to look for the quiz samples on the database, how to start writing quizzes and drawing pictures, and how to use certain features such as sound buttons and jump buttons.

Instructions for writing quizzes

Another set of instructions entitled "Let's make quizzes in English (Study Note)" was created. Here a flow chart of a sample quiz using jump buttons explained how quizzes can be created. Several other examples showing how to ask questions were added on the last page.

Training college students for the workshop

In a graduation project course for junior college students, the students created children's picture books using Study Note for several years until 2005.

In 2005, students were asked to make some sample quizzes for the *Chibikko Hakase* workshop. Some students were also recruited to help teach children on the day of the workshop.

In 2006, six students were recruited for the workshop. Since sample quizzes and instruction materials from the previous summer were available and both college students and elementary school children were comfortable using computers, the workshop went smoothly.

Procedure for the workshop

For 2005 and 2006, there were about 25 participants in each workshop. The length of the workshop was two hours. The basic procedure was as follows.

1. About 30 minutes before the starting time, turn on the computers and arrange handouts and participant name list.

2. With the help of college students, have each child start the computer.

3. Have child participants start using the Study Note software. Before the workshop, the names of participants should be registered in the software. In our case, the workshop was by reservation only but some came without reservations. We let them participate using extra IDs prepared by the software developer beforehand.

4. Briefly explain how to use the software and create quizzes using materials prepared for the workshop. Ask children to browse the sample quizzes. After this they should start creating their own quizzes. In our case, we had no knowledge of how children would react to this type of workshop. It turned out that most started making quizzes

quickly and many were quite good at using the software and creating quizzes. The college students enjoyed helping them and were impressed by the children's enthusiasm and ability to tackle the activity.

After the workshop participant quizzes were uploaded to the database section so that they could show their quizzes to their friends through their schools' networked computers. The quizzes were also converted to webpages for a larger number of "electronic" and "authentic audiences" (Johnson, 1999, p. 62). The quizzes are available at <www.tsukuba-g.ac.jp/t/miyao/studynote-qz.html>. Appendix 2 contains an example of a quiz created by an elementary school student.

Participant comments on the workshop

At the end of the workshop (in 2005 and 2006), we asked the participants to give us feedback about the workshop to help us understand their experience better and improve the content of the workshop accordingly.

The total number of the feedback papers collected was 43 (24 for 2005 and 19 for 2006; 23 boys, 17 girls, and 3 unknown). The data below are the combined results of the 2005 and 2006 feedback. Detailed feedback is in Japanese; only a summary of the feedback is shown here. The questionnaire form in Japanese is included in Appendix 3.

Age distribution of participants

Grade	1st	2nd	3rd	4th	5th	6th	7th
	3	4	7	11	10	6	1

We had children from all grades (1st to 7th), but almost half were in the 4th and 5th grades.

Participant experience with Study Note

Answer	Yes	No	No response
	37	5	1

Most participants had used the software at their schools. This was a great advantage because teaching how to use the computer and software takes a lot of time, and we had only two hours for the workshop.

Experience using the Note function of Study Note

Answer	Yes	No	No response
	28	14	1

One-third of participants had not written in the Note section. But most of them had used Study Note to browse the database or answer questions created by their teachers.

Nature of previous experience using the note function

- To record or summarize *sougou-gakushuu* (comprehensive learning) and other class activities (7 participants)
- To draw/paint pictures/cartoons, and/or send them to others (4)
- Math questions (1)
- Self-introduction (1)
- Writing essays/diaries (2)
- To summarize what we have learned (6)
- To exchange opinions (1)
- To post photos taken on an outing (1)

- No response (5)

Through these responses we can understand that many participants have experience in writing or drawing in the software.

Participant experience of studying English at school

Answer	Yes	No	No response
	35	7	1

The majority of children learn English at school, but some don't.

Nature of previous English learning experience

- Learning from visiting AETs (11) (A few times a year, sometimes, 3 times a year, songs and games, card games, etc.)
- Greetings (4)
- Speaking, conversation, pronunciation (6)
- Games (4)
- Songs (3)
- Listening (1)
- Mail (1)
- Names of things (1)
- International (Probably meaning an international exchange class.) (1)
- No response (5)

Many students learn English from AETs through songs and games.

Participant experience of studying English outside school

Answer	Yes	No	No response
	30	12	1

Almost three-fourths of participants take part in some kind of English learning outside school.

Nature of English study outside school

- English conversation (9)
- At home (5)
- At a community center (*kouminkan*) (2)
- At a private preparatory school (*juku*) (vocabulary, conversation, dictation, etc.) (2)
- Others (2)
- At Kumon (the name of a popular independent-study course) (1)
- Using the radio (1)
- At my brother's friend's house (1)
- Once a week at *eigo-kyoushitsu* (small private English classes conducted by individuals) (2)

Many attend conversation schools, *juku*, or *eigo-kyoushitsu*.

Ability to make quizzes well during workshop

Answer	Yes	No	No response
	34	8	1

The majority thought that they had made the quizzes well. We expected the answer to be "no" from younger children. However, the negative answers came mostly from older children. The reasons some said "no" follow.

- Two 5th-graders wrote, "My drawings were bad but I enjoyed the workshop." and "(The procedure) was fast but I would like to attend such a workshop again."

- A 3rd-grader and a 2nd-grader wrote, "It was difficult, but I enjoyed it."

- A 6th-grader wrote, "I couldn't come up with (good ideas), but I enjoyed it and I would like to try more."

- Another wrote, "I couldn't draw well and I don't understand English." But she also wrote, "It was fun," with a smiley.

- One more 6th grader wrote, "It was fun" in two places.

- The mother of a 2nd-grader wrote: "She cannot spell English words and doesn't understand English grammar, but the female student-assistants kindly helped her."

As you can see, these opinions are not totally negative. Although the quizzes some participants had created were not as good as they had wanted, basically they seemed to have enjoyed the workshop.

Participant responses regarding what they did well and what they couldn't do well

- I could use nice letter fonts.

- I could draw/paint pictures well. (3)

- I could make a good question.

- I could make a button well.

- I could draw a flag to make the question interesting.

- Everything went very well. (4)

- I like what I made a lot.

- I could draw and use nice colors.

These are positive opinions. Three thought they had drawn good pictures and illustrations. Four thought that everything went very well. These comments illustrate their sense of accomplishment.

The following are some negative opinions.

- The pictures I drew were terrible; I could not draw pictures well (3)

- I don't understand English.

- I didn't know how to spell.

- I made some mistakes but I also enjoyed the activity.

- It was difficult.

- I couldn't come up with good ideas.

There are only two opinions directly related to English. Others are mostly about how well they can draw pictures. The last opinion is about the importance of creativity, how to create an interesting question, and illustrates their dilemma.

Opinions regarding the workshop

Answer	Too fast	Too slow	Fun/enjoyable	Boring	Others	No response
	8	4	35	0	4	1

35 out of 43 children (81%) wrote they had enjoyed the workshop. Those who thought the workshop had been too fast also marked "fun" and/or their intention of participating in a similar workshop again. Some circled more than one answer and one participant circled three places: too fast, too slow, and fun.

Additional opinions

- It was a good speed.
- (At the end) I was tired.
- It was fun.
- The female student-assistants helped me very kindly.

Willingness to participate in the workshop again

Answer	Yes	No	No response
	40	2	1

Most participants were not afraid to use computers and enjoyed the workshop.

Open comments

- I understood English.
- Practice makes perfect. My child has learned how to use the software (Mother of a first grader.)
- It was fun; we could do a lot of activities (9)
- I would like to participate next year, too (again). (2)
- I wish we had more time. (2)
- I wish I had brought some sample pictures with me. Thank you for the workshop.
- I'm glad that everything went smoothly.
- It was difficult but fun.
- It would be nice if we could include listening and speaking.
- I completed fewer quizzes (compared with others).
- In the beginning I didn't understand, but it was fun.
- I enjoyed making English quizzes.
- I'm glad that I could create my quiz neatly (beautifully).
- I'm glad that I could use the computer well.
- It was fun because I had never made an English quiz before. I would like to come here to do it again.
- I would like to do it at home and at my school, too.
- I would like to do it again; I was having fun and the time passed so fast (2)

- I thought it was great to study English by having a lot of fun.

These comments show that the children enjoyed creating their own quizzes and studying English. This is partly because many were already familiar with the software. Another reason is that children are more comfortable using computers and IT nowadays. Even those who had not used the software did not feel it was too difficult.

Concluding remarks

The benefits of our experience with the workshop were multifold. The college students were motivated to learn English and IT more actively because they realized both skills are important through their experience of the workshop. The workshop also offered an opportunity to observe children's learning behavior; it was a great opportunity to come up with different ways to teach young adults and younger learners. Also, teaching children in the community through combining IT skills and English knowledge is a great way to serve the community and society at large. For both teachers and students it is exciting and often eye-opening to work with young learners who are adventurous and not afraid of tackling new activities. We can learn a lot from them.

However, there is room for improvement. This was a one-time workshop for two hours during summer vacation. The two hour session was too short for some children. To have two sessions of two hours each would be one way to solve this problem. Another problem is age differences (1st to 7th grades). It would be easier if we had two separate classes, one for younger and another for older children.

As one child mentioned in the questionnaire, "It was great to study English by having a lot of fun," many participants had fun creating their own quizzes appropriate for their level of English. This type of workshop can give both college students and elementary school children a good opportunity to explore their potential abilities to learn English and IT more actively and independently.

Mariko Miyao has been teaching computer-related English courses at Tsukuba Gakuin University. Her current interests include CALL, TESOL, and business English.

References

Bahn, C. (Acq. Ed.). (1999). *Microsoft computer dictionary* (4th ed.). Redmond, Washington: Microsoft Press.

Beller-Kenner, S. (1999). CALL issues: Introducing students to computers. In J. Egbert & E. Hanson-Smith (Eds.), *CALL environments: Research, practice, and critical issues* (pp. 362-387). Alexandria, VA: TESOL.

Johnson, B. (1999). Theory and research: Audience, language use, and language learning. In J. Egbert & E. Hanson-Smith (Eds.), *CALL environments: Research, practice, and critical issues* (pp. 55-64). Alexandria, VA: TESOL.

Miyao, M. (2001). Computerized story writing projects for student-centered language learning. *Bulletin of Tokyo Kasei Gakuin Tsukuba Women's University, Vol.5*, 161-167.

Miyao, M. (2003). Project-based writing activities using students' computer skills. In P. Lewis (Ed.), *The proceedings of JALTCALL2002* (pp. 69-74). Nagoya: JALT CALL-SIG.

Wachman, R. (1999). Classroom practice: Autonomy through authoring software. In J. Egbert & E. Hanson-Smith (Eds.), *CALL environments: Research, practice, and critical issues* (pp. 403-426). Alexandria, VA: TESOL.

Yoden, Y. (Ed.). (2001). *Ikiru chikara wo sodateru digital portfolio gakushuu to hyouka*. [Learning and evaluation of digital portfolio to raise abilities to enhance one's life.] (written in Japanese). Tokyo: Koryosha Shoten.

Yoden, Y., Yamanoi, K., & Tsukuba City Board of Education. (Eds). (2003). *Network de hagukumu "tashikana gakuryoku": tsukuba-shi kyoudou gakushuu project eno chousen*. [Raising solid basic academic ability through networks: Challenges for Tsukuba joint learning projects.] (written in Japanese). Tsukuba: Nijuichi-seiki Kyouiku Kenkyujo
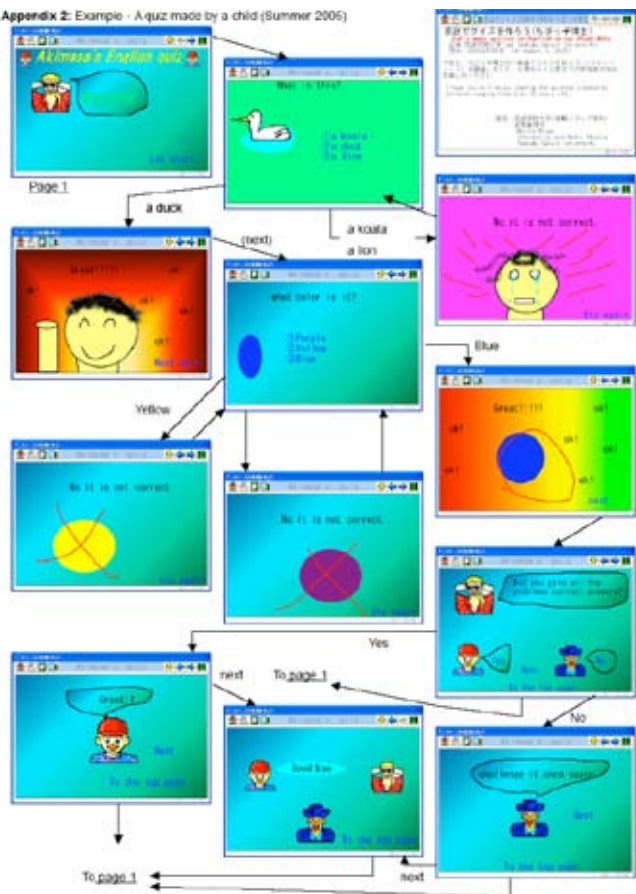
References in Japanese

余田義彦（編著）(2001).『生きる力を育てるデジタルポートフォリオ学習と評価』 東京：高陵社書店.

余田義彦・山野井一夫・つくば市教育委員会（編著）(2003).『ネットワークで育む「確かな学力」：つくば市共同学習プロジェクトへの挑戦』 つくば：二十一世紀教育研究所.

Appendix 1: A sample quiz created by a college student - "Let's make quizzes in English using Study Note"
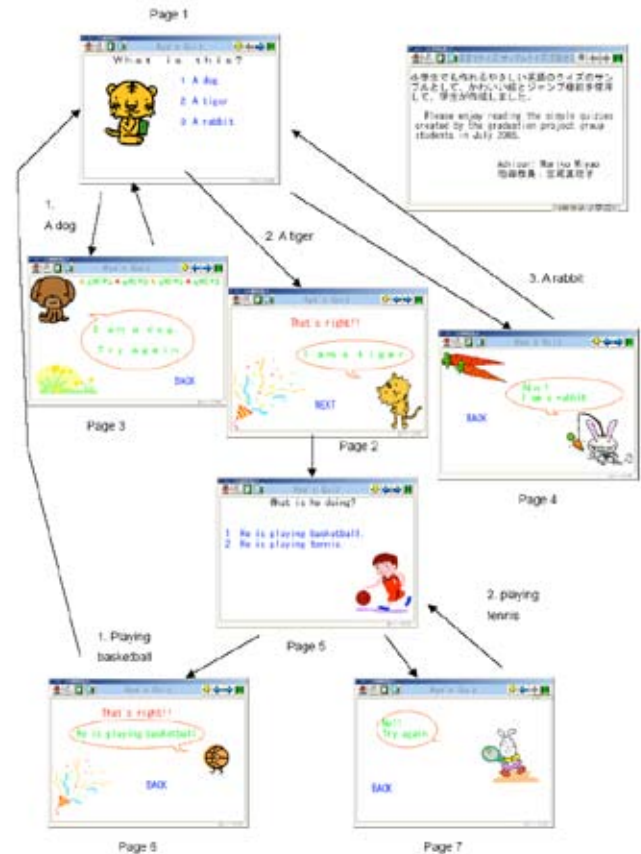
Appendix 2: Example - A quiz made by a child (Summer 2006)

Appendix 3: Questionnaire form in Japanese

「英語でクイズを作ろう（スタディーノート）」アンケート
（２００６年ちびっ子博士） 08/08/2006

きょうの「ちびっ子博士」はいかがでしたか。皆さんの思ったことを書いてください。

（１）何年生ですか。　　男子　　　女子
　　　　　中学校＿＿年、小学校＿＿年　　幼稚園　　＿＿さい

（２）スタディーノートは今までにも使ったことがありますか。
　　　はい＿＿＿＿＿　　いいえ＿＿＿＿＿

（３）これまでに、スタディーノートの「ノート」を使い自分で何か書いたり、メールのやりとりをしたことがありますか。
　　　はい＿＿＿＿＿　　いいえ＿＿＿＿＿
　　　はいのばあい、どんなことをしてきましたか。
　　　（　　　　　　　　　　　　　　　　　　　　　　　）

（４）学校で、えいごのべんきょうをしていますか。
　　　はい＿＿＿＿＿　　いいえ＿＿＿＿＿
　　　　はいのばあい、どんなことをしていますか。
　　　（　　　　　　　　　　　　　　　　　　　　　　　）

（５）学校以外で、えいごのべんきょうをしていますか。
　　　はいのばあい、（どこで）どんなことをしていますか。
　　　（　　　　　　　　　　　　　　　　　　　　　　　）

（６）自分で英語のクイズをつくるのはうまくできましたか。
　　　はい＿＿＿＿＿　　いいえ＿＿＿＿＿
（７）どこがうまくいったのか、うまくいかなかったのかじゆうにかいてください。

（８）今日の会の進め方はどうでしたか。（丸をつけてください。）
　　　はやかった　　　おそすぎた　　　　　　たのしかった
　　　つまらなかった　　その他（　　　　　　　　　　　　　　）

（９）またこのような会があれば参加したいですか。　はい＿＿＿　いいえ＿＿＿

（１０）かんそうや思っていることをなんでも書いてください。

Thank you for coming today.　Hope you enjoyed today's workshop!
今日はたのしかったでしょうか。ありがとうございました。