

Creating a Networked Community for the Training of Teachers: A Case of Public Presentation Caravan in Japan

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Abstract

There were misgivings that the teachers in charge might not have enough understanding of the true purpose of teaching “Information”. To learn about the general attitude of those teachers, the research group of private schools in Osaka began a project, ‘The Public Presentation Caravan’, in which teachers who had already started using information tools opened their class to teachers from other schools and exchanged ideas. It may be deduced that the combination of the two forums for exchanging opinions, one is held on the internet and the other face to face, is important. Teachers' community exists on the point where these two environments meet. Through this project, we might suggest creating a new mode of teachers' community using a network will be indispensable for the new teachers training.

Keywords : information tools, teacher training, Public Presentation Caravan

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I . Introduction

Teachers in Japan's secondary education have been at a loss ever since the start of 'integrated study' in from elementary school to high school, which is set in a totally different educational framework, and the introduction of the new subject 'Information' into the regular curriculum of high schools all over Japan. The traditional mass education system, which is quite effective for the purpose of acquiring knowledge, won't be enough to accomplish the aim of this new education set in a new framework. A great number of teachers have been forced to change their long-held, unquestioned views toward 'teaching'. It is also significant to recognize that the concept of learning has been gradually changing in this highly information and communication society in Japan.

For this reason, the issue of teachers training has surfaced as a matter of grave concern and importance. While public schools can rely upon the government for support to put this kind of project into practice, private schools have to come up with their own ways to approach the problem. The fact that the number of children has been on the decrease means that the revitalization of the school directly leads to its survival.

The subject 'Information', which is going to be discussed mainly in this study, has a history where the teacher's license to teach this subject has been given only to the incumbent teachers of math, science, and home economics who have finished an intensive 15-day course. The program was held for three years, producing about 3000 new information teachers in every single year. The purpose of establishing 'Information' in the regular curriculum is to deepen the knowledge of the fundamental structure of a world communications network and to improve the practical skills in utilizing information for the coming more highly information and communication society. There is still, however, a myth that the aim of this new subject is to teach the students how to operate the computer and its software, and

the use of the internet as well. Teachers in other subjects who don't teach 'Information' do believe that they don't have to use computer in their class since computer learning is supposed to be covered in the subject 'Information', and that is also the case for the students and their parents.

Furthermore, even among those who teach 'Information', there are some who misunderstand that the main and sole aim of the introduction of this subject is to teach something called computer literacy. One of the reasons for this stems from the fact that the teachers who have been assigned to 'Information' have been allocated from the incumbent faculty. Generally speaking, teachers become teachers because they come to love their subject in their childhood and have a strong desire to teach it to the children at school. They must have studied their chosen subject very hard when in college. But, how can we expect those information teachers, who didn't have a personal computer in their students' lives, who never knew how to use them in their college days, to acquire the necessary skills to utilize information by using the computers and the internet in their everyday life after a brief 15-day course? The subject 'Information' started against this background in April, 2003, in high schools throughout Japan.

To repeat myself, the main purpose of the subject 'Information' is to help students improve themselves in utilizing information in this complicated information society. There is also a problem that quite a few teachers do not really know, though they are well aware of the above mentioned purpose as a knowledge, what they should do to help their students learn 'Information'. If you put the focus on the skills and techniques alone, you can not expect to improve the practical ability. The improvements of communication abilities of the students, which are prerequisite for good presentations, are absolutely ignored.

There is another big problem. Recently evaluation of students by other students as well as by teachers has been very popular and considered to be

newly important. More and more teachers have introduced an evaluation system which asks the students to judge the works their peers make on the computer and adopts the results as part of the students' academic records. Under the traditional evaluation system, where the grades are given according to the amount and correctness of their memory and the speed and tactfulness of the application of the formulae they learn from their textbooks, evaluation is easy because there is only one right answer. On the other hand, evaluating an individual student accurately in the whole process in which a group of students work together to solve a problem by conducting research, organizing information, and making presentations, is quite a hard task to do. This is why 'evaluation' has been one of the most popular themes in a large number of training sessions for teachers these days. But the real problem is that the teachers' concern has already moved on to 'evaluation' before they haven't really got a concrete image of what they are supposed to teach in class to improve their students' practical skills. With the introduction of those new subjects, teachers are bewildered because they can not keep up with the shift of the educational viewpoint from the traditional knowledge intensive style to the problem solving project style.

II. The Public Presentation Caravan

In this time of great educational change, private schools were forced to face the problem of survival individually since they were not provided with such teachers' training courses as the ones offered to public schools sponsored by the prefectural board of education. There is a limit to what a single private school can offer to its faculty. If a given school could provide its teachers with proper and enough training on some regular basis, that school would not have to worry about its survival. Taking such circumstances into consideration, (Osaka Sigaku-net, which is a study group to facilitate the educational informatization in schools of Osaka Area.) started working on the project in September 2001 where teachers from different schools can make a

network beyond their boundaries of workplace and can share the knowledge and experience they have accumulated in their class, and can move forward together to new projects.

The Public Presentation Caravan for 'Information'-related Classes is an embodiment of this ideal. Teachers can share the issues arising from the introduction of information into education through a series of 'exhibition lessons' using information technology. The participating schools have been taking turns in hosting the exhibition class. This project is specially geared for the formal introduction of the subject 'Information'. The forum is open to every teacher teaching any subject as long as he/she is interested in using some information tools in teaching.

What makes each exhibition class different from a common class is as follows; 1) Before each session the instructor puts his teaching plan on the Web site and the participants send their opinions or advice about it on the newly developed electronic Bulletin Board called VBB (Virtual Brainstorming Board), which motivates an attendee to join the session as an active participant, not just as a spectator. 2) Immediately after the presentation class, an open forum is held, where the instructor and the participants can exchange their opinions about the class, which helps them to understand the pros and cons of the presentation in a better perspective. At this time, handout of the message of the VBB board on the Web is printed out and distributed to every participant, which helps them to clarify some problems to be solved in information class.

We have already visited 30 schools so far, one public school included, and many teachers have let teachers from other schools into their class and observe their lessons. The exhibition classes were conducted mostly by some of the core members from our study group in the beginnings of this project. A little while ago, some managerial posts of private schools would have hesitated to open their classes to public for their own interests. But

Table 1. The List of the Schools (2001.9~2005.1)P* Number of Participants

No	Date	High School.Name	Peri	G	subject	title	P*
2001. 9 ~							
1	9/25	Shijonawate Gakuen	6	2	Inf.A	Making report on Experience in the UK	40
2	10/26	Kunei Jogakuin	5・6	3	Inf.A	Multimedia Study with free software	32
3	11/9	Hishoukan	4	3	Data Processing	Simulation of fall movement	19
4	11/22	Poole Gakuen	5	3	Optional English	individual Study by intranet	25
2002 ~							
5	1/17	Seibo-Hishouten J.	5・6	3	Home Economics	Group Study ~Let's make a lunch box~	22
6	2/22	Seikyo Gakuen J.	5・6	3	Home Economics	Collaboration quiz	28
7	5/1	Shin-Ai Jogakuin	5・6	3	Optional Inf.	Let's make a Personal History!	25
8	6/28	Seikyo Gakuen J.	6	1	Home Economics	Let's think over the food!	29
9	7/12	Seikyo Gakuen	5~7	1	Optional Inf.	Communication with the media	20
10	9/12	Hagoromo Gakuen	5・6	2	Optional Inf.	Let's make your presentation!	23
11	10/19	Poole Gakuen	5・6	1・2	special	My personal history!	42
			5・6	1・2	special	About copyright	79
12	10/28	Seika	7	3	Optional Inf.	Making Greeting Cards with 3-D	23
13	11/11	Kunijima	6	1	Inf.	Let's make you Homepage!	21
14	12/29	Hagoromo Gakuen	6	3	English	English Comprehension!	22

Table 1. continued

No	Date	High School.Name	Peri	G	subject	title	P*
2003 ~							
15	1/19	Poole Gakuen J.	6	2	Integrated subject	Let's make an anklen! Let's enjoy debate! Let's be an anchorperson!	34
16	2/19	Shijonaware Gakuen	5・6	2	Comp.A	Let's introduce our shops!	24
17	5/6	Osaka Int. Owada	5・6	1	Inf.A	The annual teaching plan	27
18	6/27	Kouyoudai	5・6	1	Inf.A	Let's introduce your favorite HP!	27
19	7/4	Uenomiya Gakuen	5・6	1	Inf.A	A hint to a good presentation!	26
20	10/17	Kyoto Joshi	5・6	1	Inf.A	Let's make a homepage!	26
21	1/24	Tezukayama Izumi	5	1	Inf.A	Simulation with computer	32
22	10/29	Toukaidai Gyosei	7	1	Integrated subject	Knowledge Assets	28
23	11/14	Osaka Dentu	5・6	1	Inf.A	Improving Self-expression ability	18
2004 ~							
24	1/16		5	1	Inf.B	Personal information, privacy	41
25	6/2		6	1	Inf.A	Basic DTP	29
26	6/25		6	3	Inf.B	Evaluation by Rubric-chart	25
27	7/2		6	JH3	English	Translation with VBB	29
28	10/28		5・6・7	2	Inf.A	Presentation by PTT	25
29	12/3		5・6	3	Com. Desi ^①	Amimation with Flash	21
2005 ~							
30	1/28		6・7	1/2	Inf.A	E-mail, Presentation	18

fortunately we got off to a good start without any problem as we had anticipated. Starting with four sessions in four different schools in the first year, this project has become a success and some of the teachers, after watching a class and a forum, even voluntarily asked us to give them an opportunity to host in a next year's session. It was clear that they recognized the aspect as an instructor in caravan project could get more straight and useful advice from the participants than as just being the spectators.

The basic idea of this project is to open 'an information-related class' to teachers from other schools. The number of participants has averaged about 30, varying between 20 and 40 depending on the contents of the lessons and its schedule. There are a large number of repeaters among them, which has a very significant meaning toward creating teachers' community. The title "information-related" was effective in increasing the participants because it covers a wide range of subjects besides 'Information'. That has led to the participation of teachers of other subjects than 'Information' and also some school office clerks called ICT coordinators who are in charge of the network and the computer system at school joined us.

The phrase "information related" has opened this 'caravan project' to a wider range of teachers of various subjects with different backgrounds. "The simulation of fall movement", "Debate on the Net", "Let's make a greeting card using 3-D graphics" are some of the examples that use the characteristics of each subject.

One of the main merits of this project is that participants can exchange their opinions and share a great variety of knowledge regardless of their subjects. On the other hand, it holds a possibility that the forum will become a mere chat session of people with different interests and values. We have accumulated some knowledge about such issues as 'how to build a constructive discussion and to share the benefit of it' or 'how to coordinate

그림 1은 원본에 있습니다.

Figure 1. The Flow of CARAVA

a forum where the participants can earn the greatest benefit.’

Figure 1 shows the flow of the whole project, viewed from three different perspectives, ‘the instructor’, ‘the participants’ and ‘the management of the caravan’ project. The exhibition class is to put into practice by the above mentioned three factors through the combined use of the internet communication and a series of face-to-face meeting. What is required of the

instructor is the ability to utilize information technology, which means the ability to communicate through the computer-networking and share the information beyond the boundaries of schools. After all, it can be said that to join this project and work as a staff member has a significant role for the K-12 teachers to develop their own information utilization abilities.

III. The Virtual Brainstorming Board and A Portfolio on the Web

Virtual Brainstorming Board (henceforth, VBB) is a tool based on the Web, which allows anyone with ID to write in an opinion per cell and displays their opinions without their names. This system now can be used not only on PCs but also on cellular phones as well. Anyone can read the others' opinions on their computer monitor immediately. Since the names of the writers are not displayed, their anonymity is maintained. The writer can check the others' opinions immediately after he writes in.

A teaching plan is opened on a website during the preparatory stage about five to ten days before the session. The participants write their opinions and advice through VBB, looking at the teaching plan. An effective exchange of opinions was achieved by taking advantage of its anonymity.

The instructor can set up several columns according to the contents of his class. For example, on the screen of Figure 2, since the main contents were the oral presentations with the presentation software by several groups of students, four categories were set up, 1) how to decide the theme of each group 2) time allotment 3) how to make students groups 4) how to evaluate group presentation. This system enables the instructor to show the points he wants to emphasize in his class, and at the same time to learn which parts of his lesson attract the interests of the participants. Furthermore, this screenshot of VBB is printed out and distributed at an opinion exchange meeting in the session, which makes it possible to have a debate focused on

Virtual Brainstorming		一 羽衣学園(津田) [前] 一	
B 課題はどうか	C 授業時間は	D グループ分け	E 評価
1 設定した10のテーマの適切さについてでしょうか？	1 単元プランの時間配分のことですか？	1 好きなもの？出席番号？教員が考えてグループを指名？どれがいいのでしょうか？	1 グループとしての評価とそのメンバー個人の評価との切り分けが難しいでしょうね？！
2 今まで「私たちは、盲導犬をテーマに選びました！」というように言って、その後、いきなり盲導犬の説明に入っていくケースがよくみられます。どうしてそのことに興味を持ったのか、他のテーマで良かったのか？という辺りについて聞きたいとおもっていますね。	2 今、考えたと最初の技術的な面での学習や、サンプル作成・提示などのプレゼンテーションのイメージ作りには無駄が多く適切でなかった、時間の浪費であったと感じるところがありました。(津田)	2 私は、生徒の希望は、間かずにグループを作ります。その方が、結局、生徒に新しい友達関係を作ることになるような気がします。	2 生徒にグループ内で、自分の与えられた仕事が多分にできたかどうかを尋ねてみる必要もあるのでは？
3 課題を生徒に選ぼすときには、その「思い」を確かめてやるのが時々必要だと感じます。それがうまくいく班の発表は、面白い！	3 プレゼンの時間配分は難しいですね？ 拘りに組まれたこと？	3 各自の取り組みも重視して、まあ、個人がさまならないようにしながらグループで発表するようにもっています。班のテーマは同じで最後に全員の作品を結合してまとめる方式でグループ発表しました。	3 発表した課題が、どれほどまでに自分の問題意識に関連しているかが問題ではないでしょうか？でもグループですらね。個人の差はどうすればよいのでしょうか？
4 生徒が自由に課題を作り出すぐらいの、高いレベルの興味・関心を抱くような物事があるとか、強い問題意識を色々な現象に対して持っているとか、たといですか？！と、りあえず、実験的「安全」プロジェクトの課題を提示し、生徒に選択させました。もちろん自由な課題も可ということで。(津田)	4 1つでも完成まで行かなくてもまとまったものをプロジェクターで見せると刺激されるようです(津田)	4 これは苦勞しました。ほかの教科でもそうでしょうか。とりあえず機械的に座席の近い生徒をくっつけるようにしました。1グループ4人が限度でしょう。(津田)	4 団体優勝と個人優勝を決める感じですか？
5 生徒が意識を持っていない課題でもそれに取り組ませることもありますよね？	5 関西大学のICTのワークショップでやった。「1分間プレゼン」は、導入の方法として面白いし、効果的だと感じました。	5 生徒の中でも、グループ活動を通して、お互いにそれぞれの得意、不得意を、なんとなく感じるはずですが。最初は機械的なグループ分けでも、後々はお互いのキャラを見極めて、自由にグループを組ませることも面白いと思います。「ある課題に対して、どのようなメンバーを組織してその解決にあたるのか」これそのものが情報学習内容にも発展しそう...	5 評価結果が早くフィードバックされると盛り上がりそうですね。
6 サッカーとかディズニーとかを極力避けるように指導しました。実際、ただ貼り付けるようなのは著作権上も問題あり、おもしろくない	6 多少サボる生徒がいてもゆとり時間をかけてやる材料を探しています。質問がたくさん出るのもいいと思います。バラバラ漫画制作も参考になりました。(津田)	6 グループ分けは、教師の気を使うポイントでもありま	6 評価シート更新しました。当日、先生方に評価に参加して頂こうと思いましたがご協力をお願いしました。(津田)
7 1分間プレゼンで何ですか(津田)	7 1分間で自己(他者)紹介などをしますが、そういったテーマを与えられてから準備はたったの3分!とかいうプレッシャーの中で工夫をするわけですね。		7 今でも悩んでいます。どうすればよいのか。なぜ、数値化しなければならぬのか。(津田)
8 1分間で自己(他者)紹介などをしますが、そういったテーマを与えられてから準備はたったの3分!とかいうプレッシャーの中で工夫をするわけですね。	8 遊園地で、「フリーフォール」があったわけとか、津		8 今回の授業で生徒に何を学び取って欲しいのでしょうか？それがはっきりすれば評価の観点もはっきりしますし、項目の並びを説明することもできるのでは？
9 遊園地で、「フリーフォール」があったわけとか、津			9 評価2というの、どんな状態なのか。評価2と1は？評価1と2は？それは事前

Figure 2. Virtual Brainstorming

important points in teaching using the information technology.

All the contents of the exhibition sessions are loaded on the Web site (<http://www.osaka-sigaku.net>) of the Osaka private schools network. It includes a lot of photos, teaching plans, works of the students and comments on the class by the instructor and the students. It also includes a summary of the opinion exchange session. These records of the series of sessions have been stored on the Web site as a 'digital portfolio'. The regular members who happen to skip a certain session can keep up with the latest session through the Web site. And it also gives a better idea to newcomers as to our past programs.

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公開授業キャラバンはじめての中学校。教科は技術・家庭科の選択です。「手作り弁当を作ろう！」がテーマ。「どんなお弁当をつくるか?」「誰にたべてもらうのか?」といったコンセプトをグループごとに決め、冬休みの間に必要な条件(食材、調理器具など)、役割分担などを相談してきたそうです。



本時はいよいよ調理実習!「ちびっこ大好きだよ弁当」「火星ラブラブ愛妻弁当」など、アイデアあふれるお弁当作りの開始です。と、同時に、後でプレゼンテーションの時間が設定されています。生徒たちは調理しながら「写真とらなきゃ!」とデジカメで記録していきます。グループごとに作る料理はちがいますし、時間配分も大切です。

その一方で、パソコン室では、プレゼンテーション担当の生徒が、パワーポイントを使った作品の仕上げにかかっています。家庭科室とパソコン室は美術室をはさんですぐ隣。生徒たちはデジカメで撮った調理の様子をパソコン室にもっていったとどんどん、プレゼンテーションに取り込んでいきます。



Figure 3. A portfolio on the web

IV. Conclusions

In any subject it is supposed that self-directed study is important and meaningful. But when it comes to the subject 'Information' we have a little different condition. The intention of establishing this subject was mainly focused on the training students to have skills to utilize information. Therefore it is natural that teachers who are in charge of this subject should be strongly required the very ability to utilize information. But it has come to light that most of teachers are just in the stage of groping their way how to train their students with that purpose. We already had 'the Public Presentation Caravan' 30 times so far and exchanged ideas among participants. One of the topics which came out each time was how to treat

“computer literacy” itself in the class. Not a few teachers who are in charge of ‘Information’ seem to believe that the purpose of this subject is to teach students how to use computers and computer software. Teachers not in charge of that subject, having almost no idea about it, might naturally have the same misunderstanding. The spread of that kind of misunderstanding has been working as a minus factor, which causes a difficulty for teachers in charge. In that sense, we need a teacher training program for all the teachers of any subjects.

The explanation can be acceptable to some extent that we can't train the students' skills to utilize information without teaching computer literacy in class. But if we stop here, our attempt can't move on to the stage at which we can discuss how to develop our students' skills to utilize information. That's probably because we have not been able to have a clear definition of ability to utilize information and so we can't give standards to evaluate this ability. This fact obviously shows that Japanese education system which has taken the mass education system has not treated ‘practical skills’ which can directly be related to ‘zest for living’.

If we succeed the same teaching style as before, in which teachers give lessons and students passively learn them, we can also succeed the way of teachers training system as well. But utilization of information is mutual interaction, so we need companions to experience practical interaction. That is quite natural whether communication media exist between us or not. We should learn the essence of information and how to deal with it through the pluralistic interaction, and what we acquire in it is what we call ‘skills to utilize information’. Consequently even while it is ‘self-directed study’, we can't have truly practical training until we share information with each other. And we need a new community in which we can perform that ‘self-directed study’ with a mutual interaction using internet.

We now know it is desirable for this community to have wider range of

members who can accept different type of people. That means we can get more various and flexible ideas on using ICT. 'The Public Presentation Caravan' has indeed made up that kind of community now mentioned, using internet. We actually intended the community should have the variety of people, but that was only at the first stage. After started, the new style of community was admired and promoted by the participants themselves who were interested in characteristic that they hear different views of each other. To manage the community, it is necessary that we develop the environment in which the members are given opportunities to speak out his or her own views without any refusal from others basically. Variety or pluralism of community works effectively only when each member realizes the merit of those properties.

The VBB has important features in the screen design. Contents are reader-friendly and easy to grasp. Anonymity and erasing after thinking twice make it also writer-friendly. The above mentioned technological environment and managing it are complementary to each other. A perfect technological environment alone cannot nurture a community in an expected direction. Spurring the participants to write in their opinions freely is necessary for the utilization of the technology, which is obvious from the fact that you cannot expect many write-ins without a certain amount of initial write-ins. We have found a tendency that the number of write-ins increases sharply when it exceeds a certain level and the participants find the discussion interesting.

Consequently creating a new mode of community through the use of a network will be indispensable for teachers training in this era.

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