

Information Literacy Education Aimed at Fostering ‘*Tsutaeru Chikara* (Skills of Finding Your Voice)’ at Hiroshima Jogakuin University

Rieko NISHIGUCHI*

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伝える力, Assignment 授業課題, Curiosity and Inquisitive Mind 好奇心・探究心

1. Introduction

Hiroshima Jogakuin University has three diploma policies. One of them is ‘*bure-nai ko*’, which means students will be persons of principle. In April 2021, our university launched a program in which we lay out a basic policy to cultivate a capacity for ‘*tsutaeru chikara*’, which means ‘finding your voice’, through education. The campaign is indicated in public as well as on campus. In other words, ‘*tsutaeru chikara*’ has been announced as a means of embodying the concept of ‘*bure-nai ko*’ with a view of making it more accessible to students. This policy, which includes thinking with others’ minds and utilizing acquired skills and knowledge, aims to do more than simply improve the level of talking. Therefore, we need to educate students to foster skills for ‘finding your voice’.

The author instructs Computer Literacy, which is a required subject provided to first-year students. In this subject, students learn the basics of word processing, spreadsheet and presentation skills, and information ethics. On the basis of the policy, the author addresses the task of fostering students’ skills for ‘finding your voice’ in Computer Literacy lessons.

Sekiguchi and Miyazawa¹⁾ reported that seven skills and eight attitudes/values were extracted through a questionnaire survey on cultivable competencies at elementary schools answered by university instructors in charge of teaching subjects. In their report, they regarded ‘*tsutaeru chikara*’ as communication. In addition,

Ougihara, Oshio, and Kishi²⁾ reported that the correlation coefficients were 0.62, 0.55, 0.54, and 0.49 between ‘*tsutaeru chikara*’ and ‘problem-solving skills’, ‘*tsutaeru chikara*’ and ‘critical thinking skills’, ‘*tsutaeru chikara*’ and ‘collaboration’, and ‘*tsutaeru chikara*’ and ‘curiosity and inquisitive mind’, respectively.

Referring to the results of a factor analysis of a questionnaire survey conducted on junior high school students by Sekiguchi³⁾, ‘creativity and forethought’, ‘communication (“*tsutaeru chikara*”)’, ‘critical thinking’, and ‘collaboration’ were extracted as the first, second, third, and fourth common factors, respectively, in regard to skills, while ‘willingness to cooperate’, ‘contribution to others and companies’, ‘justice and generosity’, and ‘curiosity and inquisitive mind’ were extracted as the first, second, third, and fourth common factors, respectively, in regard to attitudes/values. The correlation coefficient between ‘*tsutaeru chikara*’ and ‘curiosity and inquisitive mind’ was 0.59.

Based on these previous studies, the author believes that assignments that stimulate students’ curiosity and inquisitive minds and allow them to perceive other’s feelings to tackle issues are practical in Computer Literacy lessons for the purpose of fostering ‘*tsutaeru chikara*’. In the present study, the author developed assignments aiming to stimulate a feeling of curiosity and inquisitive minds and conducted a questionnaire survey on students regarding assignments to discuss the effects of fostering ‘*tsutaeru chikara*’.

* 広島女学院大学共通教育部門教授

2. Computer Literacy Assignments

An assignment aimed at cultivating '*tsutaeru*', with no use of the word '*tsutaeru*', was previously given to students. The results revealed that awareness of '*tsutaeru chikara*' was lower in the assignment that did not use the word '*tsutaeru*' than in the one that did. The author therefore decided to describe an assignment using the word '*tsutaeru*' verbally and in writing. The points to be kept in mind when giving students an assignment are as follows:

1. Show students the minimum information required to complete an assignment
2. Do not show any samples
3. Use the word '*tsutaeru*' (find your voice) in the assignment

2-1. Opening Announcement of Flower Shop Assignment

In April, students start to learn computer-based word processing, spreadsheet, presentation, and video-assisted information ethics skills in Computer Literacy. They learn computer skills in-line with a textbook. In July, when students have mastered basic computer skills, they are given an assignment involving the opening of a flower shop (Appendix A). Many people decorate rooms with flowers and have flowerbeds in their garden, so flowers are familiar to people. Notably, the school emblem of Hiroshima Jogakuin University is an iris. The outline of the assignment is as follows:

You are opening a flower shop. Now, let's make an opening announcement leaflet.

Shop name: Flower Shop Kadan

Opening day: 10 AM on Saturday, 31 July 2021

Shop holiday: the third Monday of each month

Phone number: 0123-000-000

Opening hours: 10 AM to 8 PM

Address: Sakuya Ano Hana Bldg. 1F, Hanazono-cho, Yumeno-ku, Hiroshima, 777-7777

Shop manager: Moegi Wakatake

e-mail: kadan777@mail.mial.mail

Please explain the benefits for customers who shop at the store.

Convey ('*tsutaeru*') your feelings about the shop to

make people want to visit.

2-2. Hana Pay Assignment

Students continue to learn advanced skills for Computer Literacy II in the second semester starting from September. They study information ethics on an e-learning system and on video. An assignment called Hana Pay is given in November as a sequel to the flower shop assignment, and is related to a video skit^{f1)} in which sales copies are printed on a receipt as an advertisement based on purchase history. This assignment is aimed at making students think about personal data and member registration (Appendix B).

The outline of the Hana Pay assignment is as follows:

You have gradually established a solid customer base.

You decide to introduce of a cashless payment system called Hana Pay to increase profits.

Pick one of the following patterns and '*tsutaeru*' (make) a message with the customer in mind.

1. Receipt slip
2. Coupon
3. Smartphone screen

Messages can have illustrations or not.

Consider what you should '*tsutaeru*' (send) and to whom.

2-3. Phishing Scam Assignment

The phishing scam assignment is related to a smart speaker, which is referred to in a video skit^{f2)}. A leaflet^{f3)} about a phishing scam issued by the Hiroshima Prefectural Police Cyber Crimes Control Division is attached for reference (Appendix C). Moreover, the author prepares a topic related to the new distribution of 500 yen coins. The outline of the phishing scam assignment is as follows:

Part 1. Smart speaker (Appendix D)

Your have been notified by SMS (short message service) that your smart speaker uses your ID and password to access a website. Your smart speaker then asks you to enter your ID and password. You can confirm the message on your computer and smartphone. How do you reply?

Part 2. Phishing scam (Appendix D)

f1) DATA PACIFIC (JAPAN) LTD., The Information Ethics Digital Video Collection 7, #14.

f2) DATA PACIFIC (JAPAN) LTD., The Information Ethics Digital Video Collection 7, #15.

f3) <https://www.pref.hiroshima.lg.jp/uploaded/attachment/456102.pdf> (accessed Oct. 30, 2021).

New 500 yen coins have been minted and distributed since 1 November, 2021.

Someone likely started a phishing scam in this transition stage.

You launch a crime-prevention campaign to help protect older adults from the phishing scam.

Please write an example sentence to warn potential victims about the malicious website.

3. Results and Discussion

A six-item questionnaire survey regarding the given assignments was submitted to the students in Google Form. The students were required to answer the items on a five-point scale and asked to give any additional comments as free responses. The results are shown in Tables 1–4. The mean level of difficulty for all four assignments ranged from 3.4 to 3.7, indicating that they were neither too tough nor too easy.

3-1. Opening Announcement of Flower Shop Assignment

The average levels of curiosity (4.11) and interest (4.14) about the flower shop assignment were the highest among the four assignments. Some students wrote in the free responses that they especially enjoyed the flower shop assignment. These high levels of curiosity and interest also seemingly led to the highest levels of both enthusiasm (4.18) and inquisitive mind (4.14) among the four assignments.

As the author did not set an example of the flower shop assignment, the students could not do what they were used, i.e., they could not simply follow the example. This suggests that challenging situations contribute to a high average level of inquisitive mind. The average level of '*tsutaeru chikara*' was the highest among the four assignments (3.89), and 71.4% of the student rated the assignment as levels 4 and 5 for '*tsutaeru chikara*', which implies that they believed they had achieved '*tsutaeru chikara*'.

3-2. Hana Pay Assignment

This assignment was a sequel to the flower shop assignment for topic continuity. Some students remarked that the topic of the flower shop itself was difficult. Looking

at their submitted assignments, many students could not produce a suitable customer message for the receipt slip, coupon, or smartphone screen.

The author considers that by giving the students some keywords (e.g., Mother's Day, flower shop terminology, types of flower arrangements), students' thoughts of others could be facilitated. Furthermore, students were able to improve their '*tsutaeru chikara*' skills. This was thought to be due to the fact that although flowers are familiar to students, flower-purchasing behavior is not. The combined rate of levels 4 and 5 for inquisitive mind was the highest among the four assignments (82.8%).

3-3. Phishing Scam Assignment

Smart speakers are not yet in widespread use (the current penetration rate is 17.6%^{f4}). This may have led to some difficulty among the students (average level was the highest), and as a result, increased their inquisitive mind score (average level was 4.14). The average level of '*tsutaeru chikara*' was 3.83 and the combined rate of levels 4 and 5 for '*tsutaeru chikara*' was the highest (72.4%), which suggests that most students felt that they had improved their '*tsutaeru chikara*'.

The 500 yen coin assignment was given to the students as a current topic. The average level of curiosity and interest was the second highest, while those of difficulty and enthusiasm were low. The average level of '*tsutaeru chikara*' was 3.74, and the combined rate of levels 4 and 5 for '*tsutaeru chikara*' was 65%. Looking at their submitted assignments, although a few students mentioned the need for warnings about the phishing website, most students could reflect their intention to write a sentence to invite older adults to the website. One student remarked that it was a new experience to look at the issue from the perspective of a scammer. Therefore, novelty may be useful to generate students' curiosity and interest, even if the topic is an everyday item such as a 500 yen coin.

4. Summary

The author gave students four assignments according to the following three policies and verified the effects on skills for '*tsutaeru chikara*' (finding your voice):

- (1) Give students an assignment to inspire a feeling of

f4) The value is created by editing based on p. 61 of https://www.soumu.go.jp/main_content/000765258.pdf (accessed on Nov. 21, 2021).

Table 1. Comparison between the four assignments (a) to (d). Assignment (a) regarding a flower shop was given to students in the Computer Literacy I course in the first semester, and the number of students was 30. The others (b–d) were given to students in the Computer Literacy II course in the second semester, and the number of students was 41.

(a) Flower shop							(b) Hana Pay						
Curiosity							Curiosity						
Level	1	2	3	4	5	Total	Level	1	2	3	4	5	Total
Number of students	0	1	4	14	9	28	Number of students	0	2	10	10	7	29
Rate (%)	0.00%	3.57%	14.29%	50.00%	32.14%	100%	Rate (%)	0.00%	6.90%	34.48%	34.48%	24.14%	100%
Rate of 4 + 5 (%)				82.14%		Total	Rate of 4 + 5 (%)				58.62%		
Average	4.11						Average	3.76					
Interest							Interest						
Level	1	2	3	4	5	Total	Level	1	2	3	4	5	Total
Number of students	0	1	4	13	10	28	Number of students	0	2	10	11	6	29
Rate (%)	0.00%	3.57%	14.29%	46.43%	35.71%	100%	Rate (%)	0.00%	6.90%	34.48%	37.93%	20.69%	100%
Rate of 4 + 5 (%)				82.14%			Rate of 4 + 5 (%)				58.62%		
Average	4.14						Average	3.72					
Difficulty							Difficulty						
Level	1	2	3	4	5	Total	Level	1	2	3	4	5	Total
Number of students	2	3	6	14	3	28	Number of students	1	3	8	11	6	29
Rate (%)	7.14%	10.71%	21.43%	50.00%	10.71%	100%	Rate (%)	3.45%	10.34%	27.59%	37.93%	20.69%	100%
Rate of 4 + 5 (%)				60.71%		合計	Rate of 4 + 5 (%)				58.62%		
Average	3.46						Average	3.62					
Enthusiasm							Enthusiasm						
Level	1	2	3	4	5	Total	Level	1	2	3	4	5	Total
Number of students	0	1	2	16	9	28	Number of students	0	2	4	18	5	29
Rate (%)	0.00%	3.57%	7.14%	57.14%	32.14%	100%	Rate (%)	0.00%	6.90%	13.79%	62.07%	17.24%	100%
Rate of 4 + 5 (%)				89.29%			Rate of 4 + 5 (%)				79.31%		
Average	4.18						Average	3.90					
Inquisitive mind							Inquisitive mind						
Level	1	2	3	4	5	Total	Level	1	2	3	4	5	Total
Number of students	0	2	5	8	13	28	Number of students	0	1	4	15	9	29
Rate (%)	0.00%	7.14%	17.86%	28.57%	46.43%	100%	Rate (%)	0.00%	3.45%	13.79%	51.72%	31.03%	100%
Rate of 4 + 5 (%)				75.00%			Rate of 4 + 5 (%)				82.76%		
Average	4.14						Average	4.10					
<i>Tsutaeru chikara</i>							<i>Tsutaeru chikara</i>						
Level	1	2	3	4	5	Total	Level	1	2	3	4	5	Total
Number of students	0	2	6	13	7	28	Number of students	0	1	11	13	4	29
Rate (%)	0.00%	7.14%	21.43%	46.43%	25.00%	100%	Rate (%)	0.00%	3.45%	37.93%	44.83%	13.79%	100%
Rate of 4 + 5 (%)				71.43%			Rate of 4 + 5 (%)				58.62%		
Average	3.89						Average	3.690					

(c) Smart speaker

Curiosity

Level	1	2	3	4	5	Total
Number of students	0	0	15	11	3	29
Rate (%)	0.00%	0.00%	51.72%	37.93%	10.34%	100%
Rate of 4 + 5 (%)				48.28%		
Average	3.59					

Interest

Level	1	2	3	4	5	Total
Number of students	0	0	13	11	5	29
Rate (%)	0.00%	0.00%	44.83%	37.93%	17.24%	100%
Rate of 4 + 5 (%)				55.17%		
Average	3.72					

Difficulty

Level	1	2	3	4	5	Total
Number of students	0	2	8	16	3	29
Rate (%)	0.00%	6.90%	27.59%	55.17%	10.34%	100%
Rate of 4 + 5 (%)				65.52%		
Average	3.69					

Enthusiasm

Level	1	2	3	4	5	Total
Number of students	0	3	9	13	4	29
Rate (%)	0.00%	10.34%	31.03%	44.83%	13.79%	100%
Rate of 4 + 5 (%)				58.62%		
Average	3.62					

Inquisitive mind

Level	1	2	3	4	5	Total
Number of students	0	0	5	15	9	29
Rate (%)	0.00%	0.00%	17.24%	51.72%	31.03%	100%
Rate of 4 + 5 (%)				82.76%		
Average	4.14					

Tsutaeru chikara

Level	1	2	3	4	5	Total
Number of students	0	0	8	18	3	29
Rate (%)	0.00%	0.00%	27.59%	62.07%	10.34%	100%
Rate of 4 + 5 (%)				72.41%		
Average	3.83					

(d) 500 yen coins

Curiosity

Level	1	2	3	4	5	Total
Number of students	0	1	10	13	7	31
Rate (%)	0.00%	3.23%	32.26%	41.94%	22.58%	100%
Rate of 4 + 5 (%)				64.52%		
Average	3.84					

Interest

Level	1	2	3	4	5	Total
Number of students	0	0	7	19	5	31
Rate (%)	0.00%	0.00%	22.58%	61.29%	16.13%	100%
Rate of 4 + 5 (%)				77.42%		
Average	3.94					

Difficulty

Level	1	2	3	4	5	Total
Number of students	0	4	9	16	2	31
Rate (%)	0.00%	12.90%	29.03%	51.61%	6.45%	100%
Rate of 4 + 5 (%)				58.06%		
Average	3.52					

Enthusiasm

Level	1	2	3	4	5	Total
Number of students	0	1	12	15	3	31
Rate (%)	0.00%	3.23%	38.71%	48.39%	9.68%	100%
Rate of 4 + 5 (%)				58.06%		
Average	3.65					

Inquisitive mind

Level	1	2	3	4	5	Total
Number of students	0	1	8	15	7	31
Rate (%)	0.00%	3.23%	25.81%	48.39%	22.58%	100%
Rate of 4 + 5 (%)				70.97%		
Average	3.90					

Tsutaeru chikara

Level	1	2	3	4	5	Total
Number of students	0	1	10	16	4	31
Rate (%)	0.00%	3.23%	32.26%	51.61%	12.90%	100%
Rate of 4 + 5 (%)				64.52%		
Average	3.74					

curiosity

- (2) Make students explore an issue by giving only minimal information
- (3) Improve student awareness of others by explaining assignments with '*hito ni tsutaeru*' (finding your voice)

These findings suggest that the assignments in the present study based on the above policies may have had the helpful effect of fostering '*tsutaeru chikara*' among students because approximately 60%–70% perceived improvement in their '*tsutaeru chikara*' skills.

Assignments in relation to '*tsutaeru chikara*' using spreadsheets have not yet been given to the students in the present study. The author plans to develop such

assignments in the future using more data on flowers (e.g., transitional changes in production and shipping volumes).

References

- 1) Takahiro Sekiguchi, Yoshimitsu Miyazawa, *Ikusei kanou na sisitsu nouryoku ni kansuru chousa* (in Japanese), <http://www.u-gakugei.ac.jp/~jisedai/contents/H27report.pdf>, pp. 16–26, 2016 (accessed Oct. 27, 2021).
- 2) Takashi Ougihara, Keigo Oshio, Manabu Kishi, Factor structure of the competency scale for high school students. The Proceedings of the Annual Convention of the Japanese Psychological Association, Vol. 83, p. 961, 2019.
- 3) Takahiro Sekiguchi, Relationship of competencies that can be fostered in learning of each subject in Japanese education, Vol. 69, pp. 179–189, 2018.

Appendix A: Opening Announcement of Flower Shop Assignment (花屋のチラシ)

あなたは花屋をオープンすることになったとします。オープン告知のためのチラシを作成しましょう。花屋の情報は次の通りです。

店名：フラワーショップ Kadan

オープン日：2021 年 7 月 31 日（土曜日）10 時

定休日：第 3 月曜日

営業時間：10 時～20 時

電話番号：0123-000-000

住所：〒777-7777 広島市夢の区花園町咲くやあの花ビル 1 階

店長：若竹 萌黄（わかたけ もえぎ）

メール：kadan777@mail.mail.mail

イラストは「いらすとや」から適切なものをダウンロードして入れましょう。

さらに、セールスポイントやオープン日に来てくれる人への特典などを自分なりに考えてたくさんの人に来てもらえるように自分の店のことを伝えましょう。

見本は特に示しませんので、検索等によってどんなチラシがあるか調べてみましょう。著作権侵害にならないように気を付けましょう。

クラスルーム内でみんなの作品を見て感想をコメントで記入します。

Appendix B: Hana Pay Assignment (Hana Pay の課題)

花屋を開業したあなた、そろそろ固定客もついてきました。そこで、スマートフォンを利用したキャッシュレス決済サービス HanaPay を採用して利益アップを狙います。HanaPay 利用については、個人情報、広告、宣伝、マーケティングのために利用させていただくことにしました。

利益アップにつなげるためにどのような方法があるでしょうか。具体的に考えて書きましょう。

たとえば、紙媒体で発行するレシートやクーポン券にどのようなメッセージでお勧めしたい商品を伝えたらいいか考えてみましょう。デジタル媒体のスマートフォンの画面を利用したメッセージでもいいです。

あくまでも、花屋です。また、メッセージを出すタイミングも重要です。メッセージの形式は自由です。メッセージ（文字）は必ず作成しますが、イラストなどはなくても構いません。

赤い花を必ず買われる A さん、家庭菜園が趣味の B さんいろいろな人が買いに来ます。イベント情報はどうでしょうか。

メッセージだけでなく、なぜそのメッセージにしたのか、理由も書いて説明してください。後日、クラス内で公開して意見交換してみましょう。



Appendix C: A leaflet about a phishing scam issued by the Hiroshima Prefectural Police Cyber Crimes Control Division (広島県警察本部生活安全部サイバー犯罪対策課発行リーフレット)

R3.9.24

フィッシングに注意！

キャリア決済 を不正利用 されるトラブルが発生中！

通信事業者を装った身に覚えのないSMSが届き、本文に記載されているURLにアクセスすると、本物と見分けのつかない偽サイトに誘導され、IDやパスワードの入力を求められます。

IDやパスワードを入力してしまうと、キャリア決済などに不正利用されます。

※キャリア決済とは・・・

各携帯電話会社のID、パスワードを入力して携帯電話料金と合算して代金を支払うことができる決済サービスです。

URLにアクセスすると・・・

お客様センターです。ご利用料金のお支払い確認が取れておりません。ご確認が必要です。

<https://bit.ly/...>

～フィッシングSMS本文例～

お客様がご利用の電話料金が大変高額となっております。下記のURLでご確認が必要です。

対策

- ☒ 記載されたURLに安易にアクセスしない。
- ☒ 正しいサイトやアプリで正確な情報を確認する。
- ☒ ID・パスワード等の使い回しをしない。

本物と見分けがつかない偽サイトへ

本件ログインの検索を助ぐ
今すぐできるセキュリティ対策はこちら

ログイン IDを忘れた方

アカウントのID

☒ 次回ログインからIDの入力を省略

次へ

アカウントを発行する

アカウントとは？
ご利用上の注意

ご注意

サイバー犯罪に関する相談や情報は、
 電話（サイバー１１０番） ０８２－２１２－３１１０
 （受付 平日 ８：３０～１７：００）
 URL <https://www.pref.hiroshima.lg.jp/site/police3/cyber-jyoho-soudan.html>
 で受け付けています。

広島県警察 サイバー犯罪対策課

Appendix D: Phishing Scam Assignment (Part1, Part2) (スマートスピーカーと500円硬貨の課題)

あなたの使っているスマートスピーカーが「SMSが届いたので、サイトにアクセスしてログインしますがいいですか」と喋ったとします。あなたならどうしますか。なお、この SMS はスマートフォンやパソコンでも確認することができる とします。

SMS とは何かを説明したうえで、456102.pdf（広島県警察サイバー犯罪対策課の特集サイトより）を参考にしてどうするとよいか理由も含めて自分の考えを書いてください。書き終えたら、正しく自分の考えが伝わるか読み返して確認 しましょう。

また、お年寄りの方が詐欺にあうかもしれないフィッシングの文例を考えて、 注意喚起するための広報活動をするとしたら、そのような文例がいいですか。な お、今年 11 月 1 日に 500 円硬貨が 21 年ぶりに素材などが新しくなり、今年度 は 2 億枚発行予定です。この情報を基に考えてみましょう。



〔研究ノート〕

「伝える力」の育成を目指した広島女学院大学の情報基礎教育

西 口 理恵子*

要 旨

本学のディプロマポリシーの中には「ぶれない個」の形成がある。2021年より「ぶれない個」を具現化させるものとして「伝える力」という言葉を学生に提示している。この「伝える力」をどのように情報リテラシー教育では育成するのかが課題となる。本研究では、著者は好奇心と探求心の感情を刺激することを狙った課題を作成し、その課題に関する学生へのアンケート調査を行い、伝える力の育成への効果を議論した。本研究では次の3点の方針に従って学生に4つの課題を出しその効果を検証した(課題は日本語版をAppendixに掲載)。

- (1) 学生らに好奇心を生じさせる課題を提供する
- (2) 学生らに最小限の情報によって問題への探究することを駆り立てる
- (3) 「人に伝える」という言葉を使って課題を説明することで学生らの他者への意識に磨きをかける

今回の研究での課題は約60%～70%程度の学生が伝える力のスキルアップを実感していることから「伝える力」を育成するのにある程度役立つ効果を持っていると考えられる。