

## <資料>

# Development of an Assessment System Toward Qualitative Improvement of Childcare Internship<sup>1</sup>

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保育実習の質向上を目指したアセスメント・システムの開発

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## Abstract

The importance of the improvement of the quality of childcare has been receiving an ever increasing interest worldwide. This concern must not only be dealt in the arena of childcare but also should be integrated during the formative stage of the caregiver. The authors have been focusing on the formation of the caregiver through the evaluation of the internship and its guidance, especially by creating and managing a rubric designed to facilitate the learning process of her internship. However, the data from the internship had been collected only after the internship period, from the students and the educational supervising internship teacher. Thus, the internship guidance teacher was incapable to provide the student with a prompt feedback. Aiming to synchronize the evaluation with the guidance, the authors proceeded to integrate the ICT (information and communication technologies), with which the concerned actors shared collectively the pertinent data derived during the internship, and thus ameliorated the pedagogical environment. It was through this process that we were able to develop the assessment system toward the betterment of the childcare internship. This paper aims to describe our assessment system, which came to be established through the cumulation of our experience. Our system enables the integration of the data from widespread areas fetched through the web. The data from the various internships can simultaneously be shared not only by the internship guidance teacher but by the entire teaching body. This system is utilized to improve the quality of the guidance, the instruction and the research. We believe this system could contribute to the improvement of not only the experience of the internship but also of the quality of the childcare in general. We also believe that the same system could be applied toward the improvement of the extra-campus internship experience and the in the field of service learning in general.

## 要旨

近年、保育の質向上への関心が国際的に高まっている。保育の質向上は、保育現場だけでなく、その養成段階から一体となって取り組む必要がある。筆者らは、保育者養成の課題となっている「実習の評価と指導のあり方」に対して、保育実習用ルーブリックを開発し改善に取り組んできた。しかし、実習情報は実習後しばらく経ってから学生と巡回訪問教員から知られるため、実習指導教員が即時対応できない状態が続いていた。そこで、「指導と評価の一体化」の促進を目的に、ICTを活用して実習情報をデータ化し迅速に組織で共有する教育改善を行った。その結果、保育実習のためのアセスメント・システムを開発することができた。本稿では、これまでの研究成果の蓄積により開発できたアセスメント・システムについて報告した。このシステムは、遠隔地から実習情報をWeb入力して一括管理できるため、データとして収集された実習情報は実習指導教員だけでなく教員組織内で全教員が共有し、実習指導・教育・研究に活用することができる。また、実践の促進、学習の促進、省察の促進を行うことができるため、今後、実習段階だけでなく現場での保育の質向上に寄与するものと期待される。さらに、この仕組みは保育実習分野だけでなく各種の実習にも汎用性が高く、学外教育活動という点に着目すると、インターンシップやサービ斯拉ーニングなどにも適用可能である。

## 1 Introduction

In the context of lifelong learning environment, the importance of childcare and the necessity to invest upon early childcare are attracting ever increasing interest worldwide, nowadays. The incentive to create a system toward the improvement of childcare quality is thus heightened. Compared to the situation of the school aged children, the question of childcare for the preschoolers has the following particularities:

- 1 It has been managed mostly by private sectors;
- 2 The content of the curriculum and the evaluation are harder to capture;
- 3 The individual variation of the abilities is greater;
- 4 One needs to take in to consideration the background circumstances of the parents as well as the context of their educational and welfare needs (Akita, et al. 2011, p. 217) .

Due to these particularities, the analysis of the quality of the preschoolers' childcare tends to be more difficult to assess. Presently, various qualitative research projects are being undertaken (Akita, et al. 2007, pp. 289-305, Akita, et al. 2011, pp. 217-234). Akita et al. (2007, pp 297-298) reviewed these qualitative researches of childcare in Japan. They concluded that even though the chosen measurements and the methodologies vary, in both the theoretical and the practical domains, the researchers have been focusing upon "the fundamental attitude of the caregivers toward the children's activities" and hence "the necessary transformation in the perspective of the caregivers" relative to the specificity of "the particular characteristics held by the caregivers". They conclude that the quality of childcare cannot be understood in a one-dimensional manner. Instead, it should be construed as an amalgam comprised by "the particular characteristics held by the caregivers", based on their human quality, their particular expertise and the technical knowledge, and by the various contextual setting such as the material condition, the workplace environment, and the human relationship of the individual situation.

The idea of "the improvement of the quality of childcare" does not merely apply to the day to day activities of the caregivers. This idea should be applied constantly during the entire process of the training program of childcare. It is thus important that the training process and the career path choice process of the caregivers integrate this idea. During the training program, due to the reform of the childcare guidelines in nursery schools and the amendment of the curriculum for the training schools for nursery schoolteachers, the self-reflective analysis and the self-assessment of the childcare practice by the caregivers themselves are considered to be more and more important. This trend is all the more prevalent because of the increasing importance of the understanding of "the particular characteristics held by the caregivers". In 2005, the National Nursery School Teachers Training Council, which organizes the nursery teachers' schools and also manages the nursery schoolteacher's certification, published "The Minimum Standard for the Practical Training in Childcare". Many nursery teachers' schools and nursery schools are following this guideline during their internship program. Masuda et al. (2011, p. 8) highly regards the realization of "The Minimum Standard for the Practical Training in Childcare", which was the outcome of the cumulation of the practical application of the internship research data. They consider that this remarkable publication has established a shared standard which could be applied to the childcare education and research in general.

Among the higher learning institutions which offer the childcare provider training programs, the question of the internship, the evaluation, and the teaching process in relation to the actual day to day childcare scenes is the center of the interest. The improvement of the quality of the former is vital to the betterment of the quality of the latter. From this perspective, "The Minimum Standard for the Practical Training in Childcare" has solved the problem of the disparity of the content of the curriculum and the methodology of the childcare facilities and the training programs

by indicating a certain uniformity in the general direction to take. However, in practice, the problem of the disparity in the evaluation system during the internship remained. Namely, the problem of the disconnection between the internship evaluation and the right guidance prevailed. Ozaki et al. (2017, pp. 31-41) have been precisely attempting to resolve this problem. They have developed a rubric\*2 that unified the evaluation and the guidance. They have applied this rubric in the field of the childcare internship in order to ameliorate the content of the internship evaluation. This attempt to create and apply a childcare internship rubric through a cooperative process with the practitioners working in the field is new. It has little been reported in Japan. We have noticed that the use of this rubric helped the evaluation process and the accompanying guidance during the internship. Moreover, the usage of the rubric promoted the amelioration of the practice and learning, even after the completion of the internship (Ozaki, 2019a, pp.13-21, 2019c, pp. 29-38).

However, there had been 2 major time-consuming obstacles, which prevented the fruitful linkage between the developed rubric auto-evaluations and the corresponding guidance. One barrier was that it used to take almost 2 months for the rubric evaluations that the students produced to self-evaluate their performances during the internship to reach the advisers. The other barrier was the educational supervising internship evaluation reports, which had been produced by the internship teacher, and contained the progress report of the student in the individual internship settings, usually took long time to reach the guidance adviser. Consequently, the delay of the reception of the pertinent information about the students' activities prevented the internship guidance teacher providing immediate feedback.

In the present paper, we will present the creation of a new system, developed through our cumulative research processes precisely to remedy these problems. We will hereby succinctly report the procedure of application of this new system in Japan.

## 2 Methodology

### 2.1.Action research toward the system development

In order to develop a rubric and a system which utilizes it, we have undertaken an action research: “The term was coined by social psychologist Kurt Lewin(1890-1947) in the 1940s to describe a particular kind of research that united the experimental approach of social science with programs of social action to address social problems (Schwandt, 2007, p.3) ”.

According to Carr and Kemmis, “all action research has the aims of improvement and involvement (Carr, and Kemmis, 1986, cited in Schwandt, 2007, p.4)”. Through the field participation of the researchers and their cooperative endeavor with the concerned actors for the improvement of the given problematics, the researchers acquire a hands-on knowledge of the studied arena. Thus, this method is appropriate in the development of the field-oriented study program. The merits of choosing the action research method for our study are two folds:

- 1 Through the cooperation of the actual childcare workers and the students, the participants with diverse backgrounds can all produce coherent models fitting to the situation;
- 2 While the actors employ the created rubric during their activities, they can give their feedback through interviews in real time about the efficacy of the tool, aiming to adjust its usage according to necessity.

### 2.2.Procedure

During phase 1 of our research, we have concentrated in the creation of the rubric. We interviewed focus groups for the preliminary research. The nursery school principal, the teacher and the student proceeded to organize workshops for the creation of the rubric. In phase 2 the objective of the research was to test the rubric in order to finetune the applicability of this tool. We employed the rubric during the internship, then organized semi-structured

interviews in order to ascertain the applicability of the rubric. During the coursework after the internship, the actors who employed the rubric described and auto-evaluated the pertinence of the tool through the sharing and mutual commenting of their internship. They also cross evaluated their mutual experiences. Moreover, we proceeded to data analyze these case

studies derived from the post internship sessions and the text mining procedure. We employed ICT and attempted to systemize the rubric method in phase 3.

We hereby summarize the flow of the research in table 1.

[Table 1] Methodological Steps

| Phase     | Year | Steps   |
|-----------|------|---|
| Study I   | 2016 | Study I: Creating an Internship Assessment Rubric<br>a) A pilot study by the focus group interview  |
|           | 2017 | b) Workshops held 5 times to create an Internship Assessment Rubric by Childcare Center Directors, University teachers, and University students<br>c) Exchanging opinions with participants in Symposium about the Internship Assessment Rubric<br>d) Developing an Internship Assessment Rubric as a working product |
| Study II  | 2018 | Study II: Making use of an Internship Assessment Rubric<br>e) Interviews regarding the usage of an Internship Assessment Rubric in the mid-term evaluation<br>f) A case study on the assessment and learning activities after internship  |
| Study III | 2019 | Study III: Development of the assessment system for the childcare internship<br>g) Analysis of the assessment data by Text Mining<br>h) Development of an internship assessment system through the usage of information and communication technologies (ICTs)   |

### 2.3. The Outline of the observed internship and the programs

We have focused upon the programs given by Tokyo Kasei University’s junior college. From the first-year curriculum followed by 116 students (3 classes), the Daycare Practicum 1 (internship, 4 units) and the Directed Practicum in Daycare 1 (seminar, 2 units) were chosen. In Japanese program of childcare certification system, the childcare certification is a State license. The candidate will receive the certificate at the point of graduation, if he or she completes the State required course works and internship (the internship counts for approximately 270 hours and 6 units). During the Daycare Practicum 1, there are two periods of the extra-campus internship, each 2 weeks (approximately 90 hours), including pre and post study hours. The Directed Practicum in Daycare 1 consists of the pre and post internship guidance study, during which one is to prepare oneself for the first-

time internships scheduled in the Daycare Practicum 1. The role that was assumed by the author of the present paper was the role of the team-leader of the internship management teachers.

## 3 Toward the utilization of the ICT

### 3.1. The pedagogical function of the rubric during the internship

Ozaki (2019b, pp. 5-11) actively employed the rubric. He applied it in an experimental way in view of creating a system linking the midterm evaluation of the internship and the educational supervising internship guidance. He conducted semi-structured interviews to study the outcome of this application. The interviews were given to the 12 participating intern students, who had done their internship in the 5 nursery schools that cooperated in the development of the rubric. The interviews were given through two periods, during the months of 2-3 and during the

months of 8-9.

As a result, it was shown that the internship rubric was useful in enhancing the following 3 pedagogical functions.; 1-navigation; 2- establishing goals; 3-feedback. By using the rubric, the intern students could monitor their own internship experiences. They could utilize the acquired knowledge toward their next activities. Moreover, it is well known that for the intern students it is hard to establish by themselves their own objectives and goals to be achieved while doing the internship. This hardship was usually difficult to remedy, but by utilizing the rubric, this problem was solved. The rubric was especially useful for the first-time intern students, who had been usually at a loss to know their goals and objectives. During the mid-term reflective sessions, the intern students could exchange their mutual experiences and evaluations using the rubric. Through the rubric, the internship students and the internship coordinator could compare their evaluations and thus the latter could provide useful feedbacks and advises to the intern students.

The pedagogical enhancement function of the rubric is understood to be effective in clarifying the problematics based upon the self-evaluation and in establishing the learning objectives necessary for the subsequent study planning. Ando (2014, pp. 1-25) introduces ‘the formative assessment (FA)’ and the ‘the assessment for learning (AfL)’ as the theoretical basis of the rubric. In doing so, the author mentions that the rubric has the function of “the effect upon generating the betterment of learning toward the next step of the learning process (Ando,2014,p.1)”. He also presents the importance to link the self-evaluation of the students with that of the evaluations from the others, in order to bring out the pedagogically enhancing functions. He introduces some applied models of the rubric which manifested the said beneficial functions. Takenaka et al. (2016, p. 232) mentioned that as the result of introducing the rubric in the nursing internship, “the students could reflect upon their self-learning process during the internship, and thus they understood more about the importance of the self-

evaluation (Takenaka et al. ,2016,p.232)”.The authors noted the effect of the rubric in the domain of the ability of self-assessment and the enhancement of the function in learning.

These facts suggest that, if by using the rubric one can recognize the specific next goals, one will be autonomously capable to envisage the future actions to partake, and thus will be able to clarify the concrete action plans to pursue. In short, the benefit of the usage of the rubric during the internship period is clearly noted especially in the arena of the enhancement of both application and in learning.

### 3.2.The obstacles and the proposed solution

One needs to understand that there had been 2 major time-consuming obstacles, which prevented the fruitful linkage between the developed rubric auto-evaluations and the corresponding guidance. One was that it used to take almost 2 months for the rubric evaluations that the students produced to self-evaluate their performances during the internship to reach the internship guidance teacher. The other barrier was the educational supervising internship evaluation reports, which was produced by the educational supervising internship teacher, and contained the progress report of the student in the individual internship settings, usually took long time to reach the internship guidance teacher.

The delay of the reception of the pertinent information about the students’ activities prevented the internship guidance teacher to provide immediate feedback. Hence, it was difficult for the internship guidance teacher to get a grasp of the learning during the internship.

### 3.3.Attempting the application of the ICT

Aiming to resolve this problem, we have proceeded to integrate the ICT (information and communication technologies), which shared collectively the pertinent data derived during the internship, and thus

ameliorated the pedagogical environment.

Thus, the Intern student would upload the online-formatted data of the self-evaluation using the internship rubric, accompanied with the episodic descriptions. Also, while in the mid-term of the internship, the educational supervising internship teacher was required to visit the intern site, to assess the situation, and then to exchange insights with the student the internship coordinator. Formerly, the educational supervising internship teacher had been using the paper medium to produce the educational supervising internship report which contained the assessment of the progress of the student and the appropriate suggestions. The educational supervising internship teacher could upload online the data right after the meetings, and hence the internship guidance teacher was able to receive the situation of the intern student and the given suggestions without delay, which enabled him or her to better support the student.

## 4. Results and Discussion

### 4.1. Results of the application of the ICT

We could improve this process by transforming the paper-based data collecting system of the childcare internship rubric and the educational supervising internship evaluation reports into the online data uploading system. As a result, the usage of ICT availed to be the ideal solution for this impediment.

The internship guidance teacher has been able to access the uploaded data through LMS\*3 and thus able to provide immediate feedback to the intern student. The intern student could combine her own self-evaluation and episodes with the evaluation of the internship coordinator, through conversations with the latter. The intern student could accordingly face in a timely manner the emerging issues using these feedbacks, and thus he or she was able to ameliorate the quality of their remaining internship.

It was clear that this system made it possible for the student to receive simultaneously both the academic extra-campus internship guidance and the suggestions

from the educational supervising internship teacher.

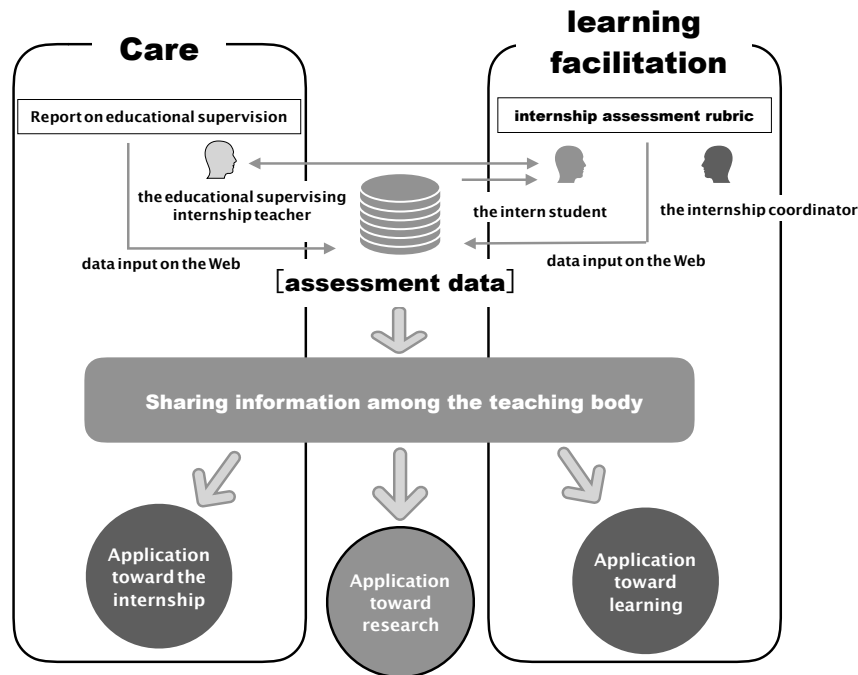
### 4.2. The internship assessment system as a model

Ozaki (2020, pp. 105-111) has developed an internship assessment system, which is shown in figure 1. This system integrates intricate processes of the internship into blocks of episodes following the evaluative measurements of the rubric. The actuality of the internship activities is transformed as assessment data and collected, stocked, analyzed, and explored from distant. This system enables a total unified multi-purpose management system of the internship information.

It also facilitates the collection and the stockage of the multiple internship data. The access to these internship data hitherto was only available to the internship guidance teacher. By using this system, all of the teaching body can share and utilize the cumulative internship data.

During the post-internship studies, the participants are to exploit LMS, and to comment mutually upon the episodes extracted by using the rubric evaluative methods.

Moreover, this system facilitates the student to envision the eventual unforeseeable situations and activities which are hard to manage during any given internship\*4 by receiving the internship rubric to be used during the internship and by learning the past episodic case-studies, also called the backward designing.



[Figure 1] The assessment system for the childcare internship

#### 4.3. The visualization of the process of learning through the system

While the internship guidance teacher could provide the student with a prompt feedback, it had been unclear what the students could comprehend through the students' experiences and situations during the internship.

Ozaki (2019c, pp. 29-38) employed the cases from the 116 first year students of the department of childcare of the junior college. They were all enrolled in the afore mentioned course program named 'the Directed Practicum in Daycare 1'. We have analyzed the web uploaded text data using the text-mining method.

The analysis demonstrated the specificities of learning during the internship. Through the post internship reflection, the following aspect was noted. Usually, the students were to self-reflect upon the most pertinent occurrences during one's internship and also self-reflect upon the individual goal achievements. By using the internship rubric, the students were also enabled to conduct collectively and systematically the combined reflection following a unified perspective.

By analyzing the episodic data organized through the specified evaluative angles, the participants could comprehend precisely what experiences and situations to be aware of, and thus to better interpret the hardships and problematics of the internship. Through this analysis, one could recalibrate the content of the pre-internship guidance, and thus could improve the entire framework of the internship guidance in general. One can thus claim that by the application of the data analysis, the web uploaded data of the internship enables the visualization of the learning. This visualization can be beneficial in the internship guidance as well as the pre-and post-internship studies.

#### 5. Conclusion

We have hereby presented the application of the formative evaluative instrument called the rubric in the domain of the internship learning. We have also shown the unified organized web data managing system in which the dispersed internship data are uploaded online.

This system enabled the sharing of the data by

not only the internship guidance teacher but by the whole of the teaching body. By utilizing the said system, it was possible to ameliorate the quality of the internship guidance, the learning, and the structuring of the pedagogic environment pertinent to researches. In terms of an application toward research, we also clarified what kind of learning could be possible through the visualization of learning during the internship. The visualization of the learning could be beneficial in the internship guidance as well as the pre-and post-internship studies. We thus conclude that its application toward the internship guidance, the learning, and the pedagogic researches is pertinent.

There are still numerous problematics pertaining to the feasibility of the usage of the system by the participating actors. However, especially now a days, we are constantly searching ways to improve the formation of the caregivers which brings the betterment of the quality of childcare as well as the betterment of the evaluation and the guidance of the future caregivers. In this context, we believe that the system will contribute to the overall development of the career path, especially during the formative training and the internship training. Assuming the eventual proficiency researches, one also can envision the future application of this system not only to the formative period but also to the post graduate education. One also expects that this system will be highly applicable not only in the field of childcare but also to other various internship processes and service learnings. By enlarging the arena of the possible fields, it will also be possible to conduct nationwide quantitative studies as well as longitudinal studies.

## Bibliography

- Akita, K., Minowa, J. and Takazakura, A. (2007) "Review of research on the issue of quality in early childhood education and care," *Bulletin of the Graduate School of Education, the University of Tokyo*, 47, pp.289-305.
- Akita, K. and Sagawa, S. (2011) "Review of longitudinal study on quality in early childhood education and care," *Bulletin of the Graduate School of Education, the University of Tokyo*, 51, pp.217-234.
- Ando, T. (2014) "Instructive rubric for learning," *Essays and Studies by Members of the Literary Faculty Kansai University*, 64, (3), pp.1-25.
- Carr, W. and Kemmis, S. (1986) *Becoming Critical*, London, Falmer Inc.
- Masuda, M., Shibazaki, M. and Obitsu, T. (2011) "Directed practicum in daycare and career development for nursery schoolteachers," *Annual Research Report, Child Future Foundation*.
- Ozaki, T. and Nakamura, N. (2017) "A development of an internship assessment rubric in cooperation with a childcare center(I)," *Bulletin of Tokyo Kasei University*, 57, (1), pp.31-41.
- Ozaki, T. 2019(a) "Development of an internship assessment rubric in cooperation with a nursery center(II)," *Bulletin of Tokyo Kasei University*, Vol.59, No.1, pp.13-21.
- Ozaki, T. 2019(b) "A case study of an internship assessment rubric," *Bulletin of the Center for Research and Educational Development, Tokyo Kasei University*, pp.5-11.
- Ozaki, T. 2019(c) "What are the students learning outcomes through the practical training at a childcare center? (I)," *Bulletin of Office for Teacher Education*, 8, pp.29-38.
- Ozaki, T. (2020) "Development of an internship assessment rubric in cooperation with a nursery center(III)," *Bulletin of Tokyo Kasei University*, 60, (1), pp.105-111.
- Schwandt, T. A. (2007) *The SAGE Dictionary of*



- Qualitative Inquiry, 3rd edition, SAGE Pub. Inc.
- Stevens, D. D. and Levi, A. J. (2013) Introduction to rubrics: An assessment tool to save grading time, Convey Effective Feedback, and Promote Student Learning, Sterling Stylus Publishing, 2nd edition.
- Takenaka, I., Kishi, S., Yamamoto, T., Ogawa, N., Sakamoto, Y., Shidooka, K., Sugita, K., Nagusa, M., and Kazumoto, Y. (2014) "Rubric as a nursing practicum evaluation tool," Nursing Education, Igaku-Shoin Ltd., 55, (3), pp.228-232.
- Van Manen, M. (1995) "On the epistemology of reflective practice," Teachers and Teaching: Theory and Practice, 1, (1), pp.33-50.
- Zenkoku hoikushi yosei kyogikai- the National Nursery Teachers Training Council, (2007) The minimum standard for the practical training in childcare, Kitaoji Shobo.
- Zenkoku hoikushi yosei kyogikai - the National Nursery Teachers Training Council, (2018) The minimum standard for the practical training in childcare ver.2, Chuo Hoki shuppan.
- cooperative learning through the data derived from rubric data of the internship.
4. According to Van Manen (1995, p. 34), Retrospective reflection of the past experiences differs importantly from anticipatory reflection of the future experiences.

## Notes

1. The internship students being all of feminine gender, we will employ the feminine pronouns when we refer to them in this article.
2. According to Stevens and Levi, "a rubric is a scoring tool that lays out the specific expectations for an assignment" (Stevens and Levi, 2013, p. 3). They also state that "In its simplest form, the rubric includes a task description (the assignment), a scale of some sort (Levels of achievement, possibly in the form of grades), the dimensions of the assignment (a breakdown of the skills/knowledge involved in the assignment), and descriptions of what constitutes each level of performance (specific feedback) all set out on a grid" (Stevens and Levi, 2013, pp. 5-6).
3. We had been using the Google Form function for the web input. Since 2020, however, we make use of 'manaba', the Learning Management System (LSM) created by the Asahi Net Co., in order to pursue our