Fostering Fundamental Competencies Among Prospective Healthcare Professionals Through Engaging in Study-Support for Children with Foreign Backgrounds

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Abstract

医療の専門職として必要な専門職連携の基盤を涵養するため、学部・学科間の垣根を越えて共通の目的に向かって主体的に活動するアセンブリ活動がある。ここでは、2学年の活動として実施されている「外国籍の児童・生徒への学習支援ボランティア」活動における教育効果について報告する。活動終了時に学生とNPOスタッフへのアンケートとインタビューを実施した結果、NPOスタッフの求めるレベル・内容と、学生が目指すレベル・内容にややギャップがあることで、両者の評価に開きがあり、それがNPOスタッフと学生との意思疎通不足に原因があることが分かった。解決策として、毎回の活動後に提出を課す活動報告をNPOスタッフ側だけでなく、すべてのチームのメンバーで共有し、適宜NPOスタッフ側からのコメントも共有するように修正した。その結果、学生側の活動報告の内容が豊かなものへ改善されたと共に、NPOスタッフ・学生間の意思疎通も豊富になり、結果として双方のこの活動に対する評価も向上した。

1. Introduction

Fujita Health University provides assembly training based on interprofessional education for students who are studying to become healthcare professionals majoring in different specializations. This environment enables students to learn about the importance of interdisciplinarity. A project introduced during this assembly education process, which is the focus of this study, is "Study-support for Children with Foreign Backgrounds," wherein medical students take part in a local non-profit organization's (NPO) activities.

1.1 Overview of assembly education

The assembly education program is based on the concept of interprofessional training. Patient health issues are the focus here, wherein students, who will become healthcare professionals with different specializations, can work together on a variety of case studies. They work together by engaging in a process of interdisciplinary learning, which transcends the boundaries of both schools and medical departments.

The purpose of this education program is to make students, and academic staff from different schools and departments, work collaboratively on health issues of various kinds of patients through "assembly education."

The goals of this process are as follows:

(1) Students learn to effectively communicate with others. Accordingly, they are trained to develop an interest in others, listen to them attentively, and ask questions.

(2) Students learn to understand the issues of a variety of patients (including local residents).

(3) Students learn to work together on patients' health issues (including local residents).

Through this learning activity, students can develop communication skills required throughout their career, understand a range of patient problems, and learn to work together with others from different medical departments.

1.2 Detailed overview of the assembly education program

The assembly education program progresses in stages, starting from Assembly I to IV in the first and fourth year, respectively. The skills acquired progressively by students in the program's stages are as follows:

Table 1. Programs, grades, and skills taught in Assembly I through IV

Program	Grade	Skills taught
Assembly I	1st year	Communication skills
Assembly II	2nd year	Group skills
Assembly III	3rd year	Understanding of "patient-centered" concepts
Assembly IV	4th year	Interprofessional skills

In Assembly I, students are taught to develop communication skills through classroom-based activities conducted in small groups. In Assembly II, students who completed the Assembly I education program are trained to acquire group skills. The activities included in this program are based on either hospitals to community visits. In Assembly III, 900 students participate in team-based learning (TBL) activities to develop an understanding of "patient-centered" concepts. In Assembly IV, students participate in interdisciplinary teams at a university hospital in order to learn about on-site interprofessional collaboration. Prior to this, students study the role of their own profession as well as other professions through a variety of selected courses, such as clinical and practical training. By combining the assembly education program with training across each department, and through the practice of interprofessional collaboration, students are trained to become "good healthcare professionals."

2. Targeted assembly Ⅱ

Assembly II, which was the focus of this study, is explained here. This program involves second-year students, and its purpose is to train them for basic skills required to work in society, as well as to be able to think, act, and work in a team. The activity is run in groups, which consist of five to eight students from a range of disciplines, thereby transcending the boundaries of schools and departments. Each team either plans and organizes events, or supports a given project from not only university hospitals or their schools but also those being run by organizations in their neighboring communities.

This study specifically focuses on the project titled "Study-support for Children with Foreign Backgrounds," wherein students participate in activities of an NPO, which helps them enjoy the learning process and become more actively involved in school. The NPO is located in T-city, near the university.

The authors of this paper regularly contacted the NPO staff to ensure that every activity would go well. For instance, they informed NPO staff about which students would participate, sent them student reports after each activity, and occasionally joined the activities to observe students' behavior with children.

2.1 Overview of the "Study-Support for Children with Foreign Backgrounds" activity

The participating university students are tasked with supporting elementary and junior high school level children who visit the NPO after school. The NPO holds activities twice a week, on Mondays and Thursdays. From 5:00 to 6:00 in the evening, elementary school children come to the NPO classroom and study; then, from 6:30 to 8:00, junior high school students come in. The university students participating in these activities are divided into two groups, visiting the NPO on alternate weeks, on either Mondays or Thursdays. These activities start in April and end in December of each year.

The university students are asked to assist with the children's studies during each session. For example, they often help elementary school children with mathematics, Japanese *kanji* drills, and their homework; and assist the junior high school students with mathematics, Japanese *kanji* drills, reading comprehension, social studies (by explaining key terms); and prepare them for their mid-term and final exams.

In addition, over the course of the year, they plan an event or a party in order to establish rapport with the children. During the summer vacation, university students can continue to participate in the activities on a voluntary basis. Over the years, 15, 18, 24, and 16 students participated in this project in 2016, 2017, 2018, and 2019, respectively.

2.2 Overview of the NPO's activity in T-city and its relationship with the university

In recent years, the number of foreign residents in T-city−especially Brazilians−has

been increasing. Moreover, an upward trend is observed in the frequency of children with foreign backgrounds. Due to their limited fluency in Japanese, these children require a safe space psychologically in addition to study assistance.

Therefore, children's daily activities were supported by the city administration, a certain group of citizens, educational institutions, community-based organizations, etc. One of these organizations was an NPO, which was located in a community near the participating university; it played an important role in helping these foreign children learn Japanese. They also helped children with their studies at school while ensuring their freedom and providing a safe space.

A representative of the NPO had previously asked the university to help with their children's studies and to have the university students help them develop their future careers. Then, in 2016, the university decided to join the activities of the NPO and help foreign children with their academic development through an assembly project. It also provided university students with insight into the international community, their culture, and how their children function in school.

3. Study background

Every year, after all the assembly activities were completed, a reflection sheet was submitted as a summary to highlight each student's experience. A questionnaire with 14 items, developed by the authors, was administered to both students and NPO staff. It asked the students to evaluate themselves and the NPO staff to evaluate the participating students. The items were rated on a 5-point Likert scale ranging from "were not trained at all" to "well trained." The questionnaire can be found in the appendix. After examining the responses, we found a slight discrepancy between the evaluations of the NPO staff and students regarding the educational effects of these activities on children.

3.1 Findings of the questionnaire

Questionnaires were administered to both participating students and NPO staff members to review the activities and utilize them next year. In 2017, we collected 10 responses from 18 students (response rate = 56%) and 2 responses from the NPO staff members (response rate = 100%).

We compared and analyzed the results from both student and NPO staff evaluations for each item (i.e., the average results of the student evaluations compared to those of the NPO staff were analyzed). We found that the average difference between all the items, in total, was 1.55. The largest difference was found to be 2.4 for item 9 ("Being able to think ahead so that the other party's condition improves"), with the smallest difference being 0.2 for item

5（"Ability to be considerate of another party"）. Table 2 presents these results; although the sample size was small.

Table 2. Average score for students and NPO staff (2017)

Question No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Student Average	4.1	4.2	4.1	3.8	4.2	3.6	3.7	3.9	3.4	3.9	3.7	3.6	3.7	3.3
Staff Average	3.5	3	2	2.5	4	2	1.5	2.5	1	2	1.5	2	1.5	2.5
Difference between student average and staff average	0.6	1.2	2.1	1.3	0.2	1.6	1.2	1.4	2.4	1.9	2.2	1.6	2.2	1.3

The findings elucidated the fact that the NPO staff had a tendency to assess the children more strictly than the university students. The difference was found to be small in the items concerning their attitudes toward education, with the largest discrepancies being found between the items concerning educational skills. We found that the NPO staff expected relatively high educational skills from their students. Incidentally, the same tendency was observed in 2016 wherein the results indicated an average difference of 1.52. From the comments of the NPO staff, it can be inferred that they expected more from their students and did not think that the students were doing enough.

Resolving this discrepancy in the evaluations conducted by the university students versus those of the NPO staff was one of the most important tasks in improving the educational efficacy of the activities. Considering the differences between students' reports and their actual behaviors during the activities, NPO staff's comments about them were sometimes critical to the extent that the student's actual abilities were often misunderstood. This attitude would then lead to dissatisfaction among both parties and compromise the effectiveness of the activities. Therefore, it was necessary to investigate this discrepancy and its antecedents to improve the educational efficacy of the activities.

4. Interview

One participating student and one NPO staff member were interviewed on July 30 and 31, 2018, respectively. These interviews were conducted individually for about 30 minutes. Table 3 presents the items used for the interview.

4. 1 Analysis of the cause of the discrepancy using the SCAT

By conducting interviews with a student and NPO staff member, and then qualitatively analyzing their responses using the SCAT (Steps for coding and Theorization) method[1, 2], the reasons for the discrepancy were identified.[3]

Table 3. Interview items for students and NPO staff

(1) What do you think about the teachers' evaluation being 1.5 points lower in average than students' evaluation for two consecutive years?
(2) Following are the top three items depicting a large discrepancy in order. What do you think about this?
　1. Thinking about and discovering how to motivate another party.
　2. Ability to observe how teachers and colleagues behave and provide appropriate responses.
　3. Being able to think ahead so that the other party's condition improves.
(3) Following are the top three items depicting a small discrepancy in order. What do you think about this?
　1. Understanding another party's feelings.
　2. Ability to be considerate of another party.
　3. Being able to educate without becoming arrogant.
(4) What is your impression about the state of student's activities?

An analysis of the storyline outlined in the interviews revealed the following reasons for the discrepancy in the educational evaluation between the university students and the NPO staff:[3] (1) The level and content demanded by the NPO staff were both greater in complexity than what the university students reportedly aimed for. (2) The factors that were recognized as important by the NPO staff were different from those of the university students. (3) The minimum degree of involvement deemed as necessary to be spent with the children during the activities was different between the university students and the NPO staff. (4) The degree of how closely the children should be observed and how comprehensively the overall situation should be examined was different between the two groups. (5) There was a lack of communication between the NPO staff and the university students. (6) Finally, as this assembly activity had been in operation for only a few years for both the NPO staff and the university students, both parties were still in the trial-and-error phase.

5. Improvements

5.1 Suggested improvements to resolve the identified discrepancy

The above-mentioned reasons for discrepancies between the perceptions of university student and NPO staff evaluations were primarily caused by a lack of communication between the two parties. The measures applied to improve this situation are discussed below.

First, the reports from every activity, as written by the students, were shared with both the university students and the NPO staff. After each activity, the university students submitted a report of what they did, whom they taught, and how things went during each class. To compensate for the discrepancy between the reports of the university students and those of the NPO staff, the reports were shared with both groups. Sharing these reports enabled the university students to understand the needs of the children better, thereby allowing them to improve preparations for their subsequent activities.

Second, feedback comments from the NPO staff for every report were shared with the university students. These comments were used to encourage the university students, answer their questions, and advise them on how to deal with difficult situations that arise during each class. For the students who were taking a class the following week, the feedback helped them better understand how the children were most likely to behave in class and what they should be careful of.

Third, students engaged in reflective meetings with the NPO staff after each class. Students managed to have these meetings with their team members during both mid-term and at the end of the year.

5.2 Improvement in the figures of the questionnaire items in 2018

After adopting these improvement measures prior to the 2018 questionnaire, the average difference between the university students and the NPO staff was found to have decreased, by a huge margin, to 0.63. The largest decrease was 1.7 for item 9 ("Being able to think ahead so that the other party's condition improves"), with the smallest being -1.2 for item 13 ("Experience the spirit of volunteering"). The discrepancies between the evaluations conducted by the students and those of the NPO staff were significantly improved upon the application of our proposed measures.

Questionnaires were administered to both participating students and NPO staff members. We collected 9 responses from 24 students (response rate = 38%) and 2 responses from NPO staff members (response rate = 100%). Table 4 presents the results, although the sample size is small.

Table 4. Average score of students and NPO staff (2018)

Question No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Student Average	4.2	4.3	3.9	4	4.3	3.7	4.3	4.2	3.7	4.4	4.1	3.9	3.3	4.3
Staff Average	4	3.5	3.5	3	4.5	2.5	3.5	4.5	2	3	2.5	3.5	4.5	3.5
Difference between student average and staff average	0.2	0.8	0.4	1	0.3	1.2	0.8	-0.3	1.7	1.4	1.6	10.4	-1.2	0.8

5.3 Improvement in activity in 2018

Several improvements were implemented for these activities including: (1) sharing the activity report, submitted by students after each activity, with the NPO staff and all other project members, (2) sharing NPO staff's comments with all project members, and (3) having regular reflective meetings between the NPO staff and the student volunteers.

6. Conclusion

In order to clarify the educational effects of these activities, the authors analyzed students' reports on every activity, overall reflection sheets on this activity, and questionnaires from students and NOP staff members.

The following important issues were found within a local NPO's educational activities for children with foreign backgrounds: (1) a discrepancy between university students and NPO staff regarding attitudes that needed to be worked upon, (2) a discrepancy between the level and content of work that was expected by the NPO staff versus those of the university students, and (3) a lack of communication between NPO staff and the volunteering university students.

After the application of the above-mentioned improvement measures, the following positive results were achieved:

(1) Each activity report became more detailed.

There is no specific analysis method for the report content, but the number of characters has increased, and the report has become more detailed. Sharing activity reports and the subsequent comments of NPO staff among all students enabled them to deepen their understanding of the children and observe them in class more closely. Awareness during the activity also increased. Such measures encouraged students to write more than before, and in cases where the students were unable to manage the children, they left questions for the NPO staff regarding their methods. They were able to get some feedback or hints later from NPO staff. This cycle helped students become more positive and careful about the children in the activity.

(2) The university students were able to deal with children better than before.

As activities continued and participating students became familiar with children, students were able to understand children well and shared a good relationship with them and the NPO staff. Accordingly, students were able to communicate and effectively deal with children.

(3) The communication between the volunteering students and the NPO staff became more frequent.

During the activity, students did not have enough time to ask some questions to NPO staff in dealing with children, but they communicated with the NPO staff through the activity reports every time and gradually developed a bond with them.

(4) Students became more actively involved in communicating with each other.

Students were able to learn from other students through mutual sharing of activity reports and NPO staff feedback. That means students were able to try various teaching methods by sharing some tips. In some cases, students switched the children they were in charge of with another student who had better expertise in the relevant subject. This atmosphere helped students feel comfortable and actively participate in

each activity.

These improvements were sought to ensure university students' career development as healthcare professionals, in terms of promoting their ability to communicate, to think about both patients and other impacted parties, and to make decisions addressed to patients' specific health issues.

Finally, further challenges will be addressed going forth, such as increasing university students' readiness and ability to improve the project quality and increasing their awareness about the project goals and purpose.

Notes: This research was approved by the Ethical Review Committee of Fujita Health University (HM18-526) and obtained informed consent from participants.

Acknowledgments:

References:

1) 大谷尚 (2011) SCAT: Steps for coding and Theorization—明示的手続きで着手しやすく小規模データに最適可能な質的データ分析手法—感性工学、10,(3),155-160

2) 大谷尚 (2008) 4ステップコーディングによる質的データ分析手法SCATの提案—着手しやすく小規模データにも適用可能な理論化の手続き—名古屋大学大学院教育発達科学研究科紀要（教育科学）54(2), 27-44

3) 鏡裕行、服部しのぶ、塩竈和也 (2021) 医療の専門職としての基礎力の育成のための外国籍の児童・生徒への学習支援活動における学生とスタッフの評価間の乖離の原因の質的研究、徳山大学総合研究所紀要　第43号，1-7

Appendix:

アンケート内容

【選択式質問項目】

１．この活動を通じて、以下に示す事柄を身につけることができたか。

　　（全く修得できなかった）１　２　３　４　５（よく修得できた）

（１）相手の気持ちを理解する。

（２）相手の立場（この活動の場合は子どもの立場）になって考える。

（３）言葉、一般的なやりとりが十分でない相手の状況を理解する。

（４）未成熟な相手への対応を身につける。

（5）相手に対する思いやりをもつ。

（6）専門的なこと（難しいこと）を分かりやすく教える技能を考える。

（7）相手の意欲を促す工夫、技能を考える。

（8）理解しない等の相手に根気よく教える態度を身につける。

（9）相手の状態が向上するよう、先を見据えて考えることができる。

（10）様々な相手とコミュニケーションをとる能力を身につける。

（11）先生、仲間の指導の様子を見て、自らの指導に取り入れることができる。

（12）相手（子どもたち）の姿から、学ぶことができる。

（13）ボランティアの精神を身につける。

（14）片時も自分におごることなく教育を行う。

【Questionnaire items】

1. Were you able to achieve the following outcomes through this activity? Choose an appropriate response from "1" (were not trained at all) to "5" (well trained) according to your experience:

(1) Understanding another person's feelings.

(2) Ability to understand another person's perspective (in this case, that of children).

(3) Understanding the situation of another party whose communication skills, especially in terms of language abilities, are limited.

(4) Being able to respond to an immature person.

(5) Ability to be considerate of another party.

(6) Being able to consider the skills needed to teach specialized/difficult topics in an easy-to-understand manner.

(7) Thinking about and discovering how to motivate another party.

(8) Acquiring an appropriate attitude to teach someone who does not initially understand a given topic.

(9) Being able to think ahead so that the other party's condition improves.

(10) Ability to communicate with various kinds of people.

(11) Ability to observe how teachers and colleagues behave and provide appropriate responses.

(12) Being able to surmise information from the appearance of another party (e.g. children).

(13) Experience the spirit of volunteering.

(14) Being able to educate without becoming arrogant.