#### **ORIGINAL ARTICLE**

The attempt of the practical application of International Classification of Functioning, Disability, and Health (ICF) as a tool for collaboration among various professionals: A perspective on its applicability to "individualized educational support plan"

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Abstract: This report describes attempt regarding to the practical application of the International Classification of Functioning, Disability, and Health (ICF) as a tool for collaboration among various professionals in the field of education for children with disabilities, while putting its application to individualized educational support plans into perspective. In concrete terms, with respect to five pupils attending a special school, their class teachers performed the following tasks: ① evaluation using a Japanese version of the ICF checklist, ② confirmation of the various professionals involved with the pupil based on the creation of a life map, ③ organization of the overall situation making a model figure based on the results described in ①; subsequently, on the basis of the results obtained, the class teachers held discussions with various professionals in and outside the schools regarding the present status of and issues concerning the pupil as well as the future policy. As a result, it was found that the discussion aimed at collaboration could be carried out efficiently and effectively through the series of tasks using ICF, indicating that ICF is a useful tool for collaboration among various professionals. The results also indicated that, for the practical application of ICF to an individualized educational support plan, further research on the relationship between ICF and the individualized teaching plan is required, and a manual on how to use ICF should be produced.

Key Words: ICF, Various professionals, Collaboration, Individualized educational support plan, Checklist

### I. Introduction

With respect to the education for children with disabilities, it has been strongly recognized that education cannot be completed within a school or with the involvement only of teachers, but that collaboration among various professionals is required, as indicated in, for example, the "Individualized educational support plan"8 found in the "Nature of special needs education in the future (final report)" (2003). According to statistics from special schools, with respect to Activities to Promote Independence, which is one of the major issues of the curriculum, there is collaboration with medical institutions and welfare organizations in 83.8% of all schools.2 Moreover, in the "5-year plan of the priority policy" in the basic plan for the disabled, which was published in December 2002, it is clearly stated that individualized support plans should be drawn up at special schools by fiscal year 2005, supporting the necessity of collaboration among various professionals.

Tokunaga investigated attempts at applying the International Classification of Functioning, Disability, and Health (ICF), one objective of which is its use as a common language between the individual in question and the various professionals involved, for the purpose of collaboration among various professionals. As a result, he reported that ICF is an effective means of collaboration among various professionals, and that the application of ICF can lead to practical effects in teaching. It has also been clarified that, among the issues to be resolved, the complexity of the ICF procedures should be reduced, and that ICF should be integrated into the school system, such as in individualized teaching plans, so that it can be used continuously.<sup>9, 13</sup>

This report describes an attempt at the practical application of ICF as a tool for collaboration among various professionals which will be increasingly required from

now on. In particular, to examine its degree of practicality as a tool to be widely applied in actual school situations, I carried out this investigation while putting the application of ICF to individualized educational support plans into perspective.

# II. Objectives and Methods of Study

### 1. Objectives

To examine the possibility of the practical application of ICF as a tool for collaboration among various professionals, this study is aimed at the clarification of the possibilities and problems of ICF through the examination of case studies.

#### 2. Methods

#### (1) Subjects

To examine the possibility of the practical application of ICF to various case studies, it was investigated the cases of five pupils attending a special school in Japan with the cooperation of class teachers and other school staff members, as well as of the pupils themselves, family members, and various professionals involved. The five cases and their major characteristics are as follows.

- A case wherein collaboration among various professionals within the school was attempted.
- A case of at-home education, in which there were multiple contacts between family members and various professionals on a routine basis.
- A case of a high school department wherein consideration is given to transition into after-graduation life.
- A case wherein differences in understanding among various professionals were exposed.
- A case of a facility-affiliated school where collaboration is carried out well among various professionals on a routine basis.

#### (2) Procedure

Tasks were performed using the following procedure in cooperation with teachers at the respective schools (hereafter referred to as research collaborators).

In the following steps 1) to 4), while there was discussion with the author whenever necessary, the actual tasks were carried out mainly by the respective research collaborator. In step 5), the information obtained in the previous steps 1) to 4) was integrated and the future direction was examined. Meanwhile, to promote the research collaborators' understanding of ICF itself, the author explained ICF in reference to publications such as "ICF: International Classification of Functioning, Disability, and Health ?Revised Version of International Classification of Impairments, Disabilities, and Handicaps-," edited by the Society for the Study of Welfare for People with Disabilities

(2002).

#### 1) Evaluation using ICF checklist

The author have translated the "ICF CHECKLIST version 2.1a Clinician Form" of the World Health Organization (hereafter abbreviated WHO). Then the modifications listed below were made to facilitate practical application in actual school situations, and each item was evaluated mainly by the class teachers.

- A space for remarks was added at the end of each category, so that specific points can be described.
- Regarding "Capacity" in "Activity and participation," evaluations were performed for both states with and without personal or physical support.

These two modifications were confirmed in all the cases. Furthermore, it was also confirmed that other modifications to facilitate the use of the checklist in each case could be made, and that evaluation was to be performed with reference to "ICF: International Classification of Functioning, Disability, and Health -Revised Version of International Classification of Impairments, Disabilities, and Handicaps-" when necessary.

# 2) Preparation of life map

With the aim of clarifying the presence of professionals as collaborators of the class teacher and visually confirming these professionals quickly, a life map was prepared in which people and organizations involved with the respective children were presented. Here, depending on the school, a similar figure had already been prepared in the individualized teaching plans; in such a case, that figure was used as the life map.

#### 3) Preparation of model figure

A model figure representing the relationship among items was prepared using the evaluation results of checklist (1), with the aim of visually confirming the overall situation of the case quickly. The model figure was drawn by the respective class teachers referring to the "figure showing

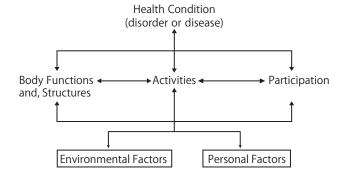


FIGURE 1 Interaction between the components of ICF

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interactions between the components of ICF" by WHO (Fig. 1), but also with their own modifications.

# 4) Discussion with the various professionals involved

Using the materials created as described in 1)-3) above, discussion with the various professionals involved was conducted regarding, for example, the confirmation of the actual condition of each case, the sharing of roles among professionals, and future direction, and the contents of the discussion were recorded.

# 5) Discussion and summation by research collaborators

The author and the research collaborators who had carried out steps 1)-4) discussed the achievements and issues of this examination and its future direction. On the basis of the contents of this discussion as well as various other materials, the author summarized the study on the practical application of ICF as a tool for collaboration among various professionals.

#### III. Evaluation of Each Case

With respect to each of the five cases, the processes and results of the evaluation using the checklist and the preparation of a life map and model figure are reported. At the same time, the usability of these examinations and problems are investigated, and some discussion is added.

# 1. A case of applying ICF to collaboration with dormitory coaches and other school staff

With the term "collaboration among various professionals," professionals outside the school may come to mind, but a school is essentially a collective of various professionals such as teachers, school nurses, clerical staff, and dieticians, among whom collaboration is naturally very important. Here, I investigated the collaboration between a class teacher and dormitory coaches whose work practices were different, although they both belonged to the same organization and worked in the same place.

#### (1) Outline of this case

Boy A is in the 6<sup>th</sup> grade of elementary school. Because of cerebral palsy, he has physical disabilities accompanied with mental retardation. He requires assistance in maintaining a sitting position and in moving around in a wheelchair. He shows interest in toys with sound and can grab the toy to play with it. He lives in a dormitory in a nearby city from Monday to Friday and returns home on weekends. Various professionals in addition to Boy A's class teacher are involved with him, including dormitory coaches, staff at a horseback-riding club, in which he participates on weekends, and physical therapists (hereafter,

abbreviated as PTs) from a self-training organization.

#### (2) Actual tasks

The class teacher held discussions with the parents as well as PTs, but collaboration with the dormitory coaches is mainly described here. In the following, the description is given in the order of the tasks actually performed, i.e., 1) evaluation using the checklist, 2) preparation of the life map, 3) preparation of the model figure, and 4) discussion. A similar procedure is applied in other cases.

# 1) Evaluation using checklist

The class teacher performed an evaluation while consulting with the parents regarding life-related issues, and with the PT who has been involved with Boy A for a long time regarding physical issues. According to the class teacher, while the overall situation of Boy A can be broadly evaluated using the checklist, which is a favorable point, the following issues needing improvement exist with respect to the practical application of ICF.

The first point is related to evaluation criteria. The class teacher indicated that since the evaluation criteria were not clear, the teacher was sometimes unsure about the evaluation. The teacher commented that the establishment of clear criteria, which are not swayed by the subjectivity of the evaluator, is desired. This indicates the necessity of creating an overall manual including such criteria.

The second point is related to the insufficient number of items listed in the checklist. In concrete terms, during the discussion with the PT, a necessity to include items "d415: Maintaining of Body Position" and "b445: Hand and Arm Use" in "Activity" for the evaluation of Boy A was indicated, and these items were added. Originally, the checklist items consisted only of major items in the ICF, so that the addition of necessary items for each case is allowed. However, to do this, it is necessary to know not only the items included in the checklist, but also all the items included in ICF. This suggests that evaluation using only the checklist is sometimes difficult at this stage.

## 2) Preparation of life map

A life map is not included in the individualized teaching plan of the special school which Boy A involved. However, I requested that Boy A's life map be prepared with the aim of clarifying the status of individuals involved with him (Fig. 2). The preparation of the life map is effective not only for understanding with whom one needs to collaborate, but also for confirming what daily situations are considered in the tasks taken up by the school. Consequently, the class teacher has indicated the necessity of the life map as material in the future individualized educational support plan.

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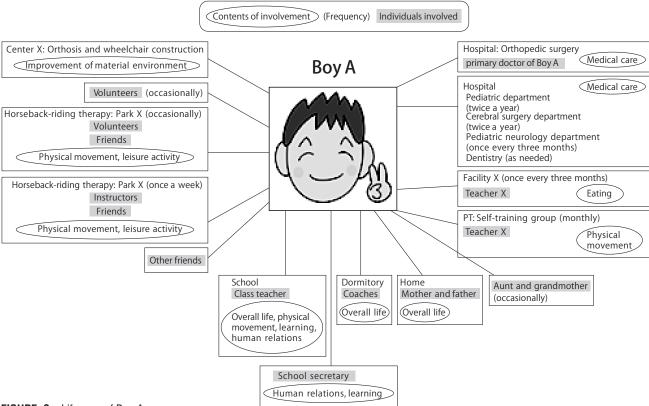


FIGURE 2 Life map of Boy A

### 3) Preparation of model figure

After the preparation of the model figure by the class teacher based on the evaluation using the checklist, I asked the dormitory coaches to mark the contents that they thought were their responsibility (Fig. 3). Here, after discussion with the dormitory coaches, class teacher also held discussions with the guardians and PTs and revised the model figure. However, the original figure used for the discussion with the dormitory coaches is shown here.

Symbols shown in the figure have the following meanings.

• The first (left) of two arrows (e.g., ↓↓) inside each item of "Activity" and "Participation" indicates actual performance in the present life, and the second arrow (right) indicates capacity without the support of another person or of equipment. The direction of these arrows indicates the score of the ICF evaluation criteria determined by WHO: ↑ for 0-2 points, and ↓ for 3 points or more. Similar representations are used for "Body functions" and "Body structures."

Score 0: No problem (none, absent, negligible...) 0-4%

Score 1: Mild problem (slight, low...) 5-24%

Score 2: Moderate problem (Medium, fair...) 25-49%

Score 3: Severe problem (high, extreme...) 50-95%

Score 4: Complete problem (total...) 96-100%

Score 8: Not specified

Score 9: Not applicable

The combinations of the arrows represent the following:

(Actual performance  $\uparrow$  / capacity without support  $\uparrow$  ); the child has an ability regarding this item.

(Actual performance  $\uparrow$  / capacity without support  $\downarrow$ ); item where support is appropriate.

(Actual performance  $\downarrow$  / capacity without support  $\downarrow$  ); item which is not carried out practically.

- Among the "environmental factors," "barriers" which negatively
  affect daily life by their presence are represented with "—", and
  "facilitators" which positively affect daily life are represented
  with "+".
- Other items related to each "environmental factor" are connected by lines with respective meanings noted in the figure.

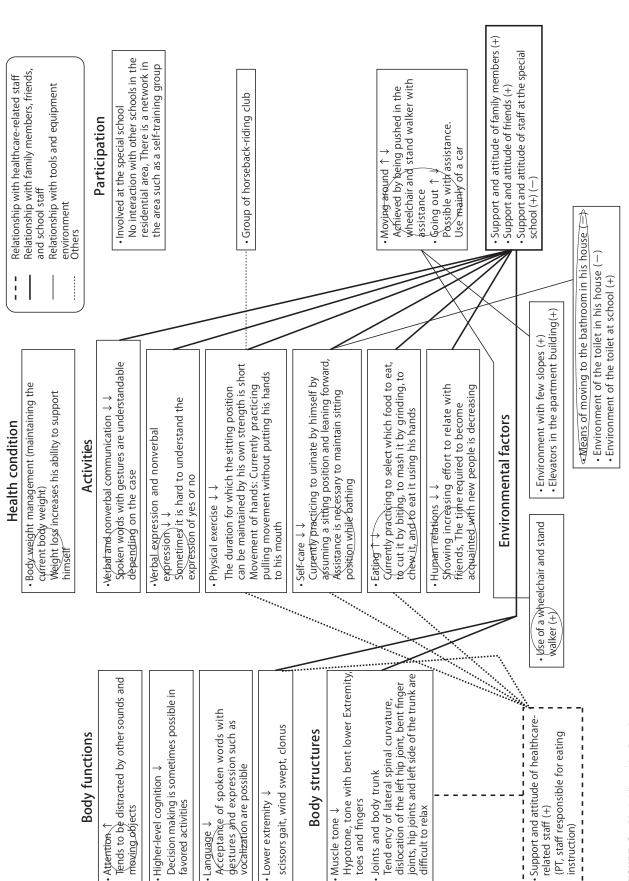


FIGURE 3 Model figure for Boy A

By preparing the model figure, the following was clarified.

#### 1) Contents to be included in the model figure

Items to be selected from the checklist are left to the choice of the person who prepares the figure. For example, the "barriers" added to the current model figure by the class teacher are those which may be taken up as tasks and which can be changed to (+) "facilitators" in the future. On the basis of the aims of the preparation of model figure s, and in terms of the practical wide-range application of ICF in the future, it is necessary to determine how to evaluate and cope with differences in the choice of contents to be added between creators.

#### 2 "Activities" and "participation"

With respect to "activities" and "participation" used in combination in the checklist, the class teacher indicated a difficulty in their differentiation in the figure. In concrete terms, according to "ICF: International Classification of Functioning, Disability, and Health ?Revised Version of International Classification of Impairments, Disabilities, and Handicaps-," there are four cases of differentiation. However, the class teacher indicated that it was still difficult to understand how to differentiate them.

#### (3) How to present easy-to-understand figures

Because family members, friends, dormitory coaches, and teachers are contained in a single frame within environmental factors, it is impossible to indicate their respective tasks by lines. In contrast, for the overall relationships, as the number of frames increases, the connecting lines become more complex, resulting in greater difficulty in looking at the entire picture. Therefore, it is difficult to show the details of the assignment of tasks in a one-page format. Accordingly, the class teacher indicated that it may be appropriate to make detailed figure s by selecting necessary items when requested in addition to the overall picture.

# 4) Discussion between class teacher and other professions

The outcomes obtained and issues to be resolved based on the comments by the class teacher after the discussion using the checklist and model figure are summarized below.

#### 1 Clarification of roles

As a result of the discussion, the class teacher's recognition regarding the roles of the dormitory coaches became clear. In concrete terms, the class teacher could clearly recognize that items such as body-weight management under "health condition" and involvement in eating and human relations under "activity" are significant tasks of the dormitory coaches.

#### 2 Promotion of efficiency in discussion

In the discussion, each role could be confirmed within a short time of approximately 10 minutes. As a reason for this, the class teacher indicated that information could be visually understood easily from the model figure used. Because it is usually not easy to secure sufficient time for discussion, the above finding reveals that the model figure is effective in promoting efficient discussion.

#### 3 Effects of sharing tasks

The class teacher indicated the following: in the discussion with the dormitory staff members, by asking the staff members to write down their responsibilities directly on the model figure, mutual understanding of respective roles was facilitated; in addition, in the discussion with PTs, by asking PTs to write down items that are their areas of specialty, such as body functions and body structures, directly on the model figure, the actual condition and task consciousness from the viewpoint of PTs became more easily understandable. In contrast, documents with too much detail appeared to be difficult for other members to correct or add information.

#### (3) Overall evaluation of current case

A series of attempts at utilizing ICF has led to smooth promotion of discussion with dormitory coaches inside the school, showing the efficacy of ICF as a collaboration tool. In addition, the possibility of applying ICF to collaboration among various professionals outside the school in the individualized educational support plan as well as to individualized teaching plans inside the school has been simultaneously suggested. By connecting these plans, the development of more effective guidance is also expected.

# 2. A case of at-home education with close contact between family members and various professionals on a routine basis

In cases of at-home education, class teachers are frequently in contact with family members and various related professionals; accordingly, tasks cannot be achieved smoothly without their collaboration. I investigated the relationship between the class teacher and two occupational therapists belonging to different organizations (hereafter, abbreviated as OTs; one OT belongs to a hospital, and the other OT visits the home for at-home rehabilitation).

#### (1) Outline of case

Girl B is in the 3rd grade of elementary department at special school. Because of lissencephaly, she has physical disabilities accompanied with mental retardation. She requires assistance in maintaining a sitting position and in moving around. She loves to be around people and is able to understand simple spoken messages. Because her home is located far from the special school, she is judged as unable to commute because of her low physical strength. Thus, she belongs to the at-home class of the special school. Lessons are carried out twice a week at her home, and she also attends school several times a year. She is involved

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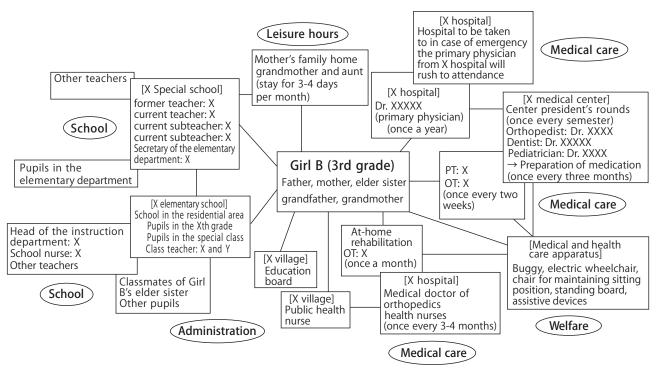


FIGURE 4 Life map for Girl B

with a number of professionals on a routine basis through hospital visits, at-home rehabilitation, and visits with public health nurses at the town office.

#### (2) Actual tasks

#### 1) Evaluation using checklist

The class teacher performed the evaluation. Because there were some unclear points regarding physical issues, the class teacher asked OTs about these issues and made additions.

# 2) Preparation of life map

The life map of Girl B prepared by the class teacher is shown in Fig. 4. Because the teacher routinely visits her home, we can see that the teacher is well acquainted with her life. The class teacher realized anew that Girl B interacts with various people, but at the same time felt that further promotion of collaboration was necessary.

On the other hand, Girl B regularly goes to a certain hospital located several tens of kilometers from her home, to which a one-day round trip is impossible; however, the physical distance and the sense of mental burden to Girl B as well as to her family members cannot be expressed on the map. To relate the life map to actual guidance, the status of daily life should be represented realistically in detail; this is a future issue to be resolved.

#### 3) Preparation of model figure

The class teacher prepared a model figure by selecting items which he/she felt to be important for the promotion of

educational activities on the basis of the evaluation scores in the checklist as well as points relating to Girl B written in the remarks space in the evaluation stage (Fig. 5). As concrete contents, the class teacher adopted those related to his/her hope that Girl B will develop greater communication skill because she is receiving at-home education.

This may suggest that the individualized teaching plan, which had already been produced with emphasis put on teaching to improve communication, affects the selection of the items in the model figure.

Symbols in Fig. 5 have the following meanings.

- Arrows connecting constitutive elements represent respective correlations.
- The arrows (e.g.,  $\uparrow,\downarrow$ ) inside each item have the same meanings as in case A (Fig. 3).
- While the above rule is essentially applied, these arrows also represent the class teacher's hope that "actual performance would change if more support by people or equipment could be provided." The details of this wish were communicated to related persons during the discussions.
- Because environmental factors are related to many items, it
  was judged that connecting them all would make the figure
  too complex; therefore, they were not directly connected.
   "Environmental factors" are recognized to be the foundation of
  the life of Girl B according to the class teacher.

The class teacher feels that there is a problem when considering the actual guidance for Girl B given that the connections among the related professionals are not

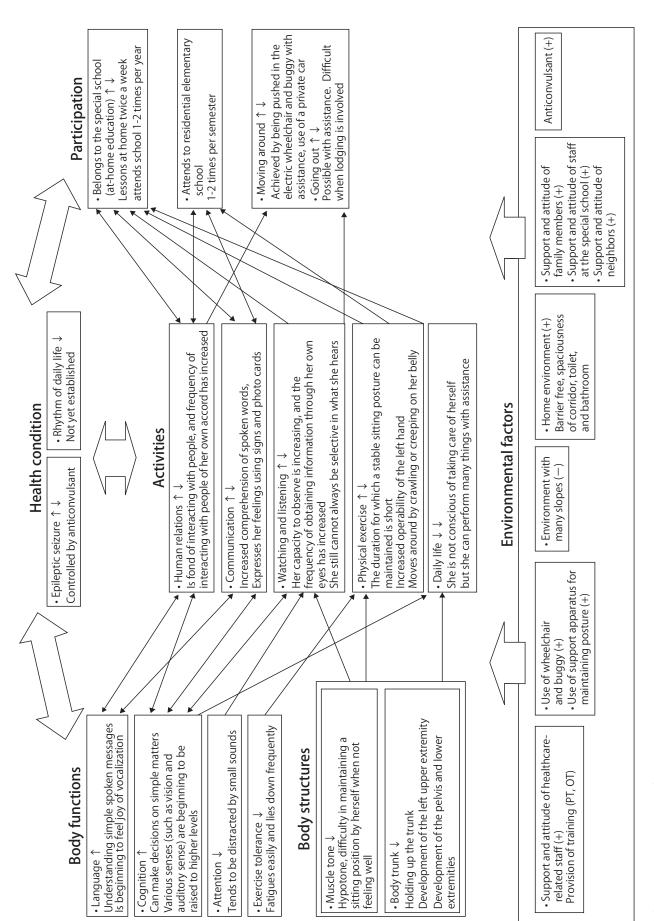


FIGURE 5 Model figure for Girl B

expressed in the model figure. Both the OT from the hospital (hereafter abbreviated as hospital OT) and the OT who visits Girl B's home for at-home rehabilitation (hereafter abbreviated as visiting OT) indicated a difficulty in expressing the actual condition of the child in a single model figure, as well as a concern about the difficulty of understanding a figure containing too much description. In concrete terms, their comments are as follows.

The hospital OT pointed out the relationship among items under "body functions" and "body structures;" however, if all related items are connected by arrows, the figure will become too complex and will be difficult to understand. In addition, the hospital OT indicated a limitation in the expression using \lambda arrows inside the items and also that "things that Girl B cannot do or cannot do well" and "things that Girl B can do or do well" were haphazard in the model figure, causing confusion. Consequently, the hospital OT pointed out the necessity of a technique of identifying tasks from the former weak points. In contrast, the class teacher expressed a desire to more highly value the things that Girl B was good at in order to develop her educational activity.

Meanwhile, only the visiting OT indicated the merit of representing a rough overall picture of Girl B in a single figure such that the overall picture of Girl B could be confirmed and the division of roles of the related professionals could be considered. The visiting OT said that the figure provided a better understanding of his/her responsibilities within the overall picture and of matters in which he/she should collaborate more with people in other fields. He/she also indicated that to compensate for issues that were not expressed in the figure, it may be desirable for each individual to consider measures for the clarification of the actual conditions and tasks in greater detail.

# 4) Discussion between class teacher and other professions

The class teacher prepared the model figure (Fig. 5) on the basis of the evaluation using the checklist and held separate discussions with the two OTs, referring to the model figure. The results obtained are summarized below.

## 1) Effects of the model figure

Both OTs expressed fundamental understanding of the technique of collaboration through discussion using the model figure; in particular, the visiting OT positively evaluated the ease of initiating collaboration between different fields using the model figure. Since the visiting OT actually performs occupational therapy at Girl B's home, he/she seemed to realize the importance of environmental factors. He/she also made in-depth comments on the use of the model figure, beyond the class teacher's expectations, so that the class teacher had a very good opportunity to re-

assess his/her own position within the overall picture.

#### 2 Division of roles

The class teacher asked the OTs to fill out the parts where they were involved, and confirmed that the roles of both OTs partly overlapped with the contents of teaching by the class teacher. How to evaluate and deal with these overlapped parts are future issues to be resolved, but gaining an awareness of such parts is the outcome of this study. As a future direction concerning the overlapped parts of guidance given by various professionals, those involved agreed that they would exchange information while continuing their own involvement with Girl B, and they recommended that, in the future, each health-related professional should continue to handle his/her specialization.

#### (3) Evaluation of overall current case

In the case of at-home education where a staff member has many opportunities to meet family members and other professionals, issues such as how and what kinds of professionals are associated with Girl B were confirmed, and discussion among various professionals was realized. As a result, a mutual understanding of each role was established. Thus, the applicability of ICF as a tool for collaboration was again indicated by this case.

# 3. A case of high school department where consideration is given to transition into life after graduation

In a high school department, it is important to instruct students while considering their plans after graduation. To cultivate the skills required for life after graduation, we investigated the collaboration with staff members of facilities that students are expected to frequent after graduation, as well as collaboration with many teachers of different subjects in the high school department.

# (1) Outline of case

Boy C is a student in the high-school department of the special school. He has been diagnosed as intellectual disabilities. He is able to have daily conversations without any problems, although slowly, and he can associate with friends. Similar to Boy A, Boy C lives in a dormitory 5 days a week. His parents wish him to have a natural and varied life in the local area, so they often take him horseback riding and swimming on holidays.

### (2) Actual tasks

# 1) Evaluation using checklist

The class teacher indicated the following as merits of the checklist. With the KJ method that is one of method to classify some information, which is frequently used in the preparation of individualized teaching plans, problems are clarified by the subjective judgment of the teacher who prepares the plan. In contrast, with the checklist, a wide range of issues concerning overall life are listed and prefixed; therefore, a more objective and systematic arrangement is possible. In the case of Boy C, the use of this checklist evaluation revealed the importance of the existence of individuals as "environmental factors," which had not been apparent before, according to the class teacher. In addition, the class teacher indicated that the recognition of many unknown issues (which can be identified by asking) and those which are difficult to understand (difficult to interpret) is significant in itself. It is also considered that contact with various professionals is generated from the feeling of "wanting to ask about issues because they are not known well."

Meanwhile, the following problems with the checklist that must be solved to enable its practical application were indicated.

- Evaluation criteria are not always clear, and therefore, when many individuals perform an evaluation, they may be confused.
- When the evaluation items in the second level alone are used, the range involved in this level may be too broad to enable appropriate evaluation. There are some items that should be evaluated on the third level; however, whether a mixture of items evaluated at different levels can be allowed is a difficult problem.
- For some items, "it is difficult to understand what is being asked."
- There are items that are considered to be important but which are not listed in the checklist. For example, "el30: Products and technology for education" is an essential item in the school.

To cope with points such as these, it is necessary to examine the creation of a manual regarding the use of checklist. Considering that the checklist is to be used in actual situations, the manual should have a certain degree of flexibility.

#### 2) Preparation of life map

In the individualized teaching plans of the school

where Boy C was involved, the life map has already been prepared. Figure 6 shows an extract from the life map in the teaching plan. Unlike the other cases, detailed descriptions of individuals and professionals are not given in the map; however, the figure characteristically depicts Boy C's current life and his life after graduation, which is considered to be useful for guidance related to his future.

#### 3) Preparation of model figure

To create a model figure that is easier to understand, the class teacher modified some usage of terms; instead of using 2nd-level terms listed in the official Japanese translation of the checklist (each item of the checklist), the teacher used expressions adopted in daily life which were easier to understand and put them in brackets [] for each item. In addition, specific conditions of Boy C were marked by the symbol  $\diamondsuit$  and listed below the parenthetical terms (Fig. 7).

Here, The following points are listed as other characteristics of Fig. 7.

- The arrows inside the boxes indicate the connection to more detailed lower-level items; below such arrows, details of the contents on the 3<sup>rd</sup> or lower levels are described.
- The thickness of the large arrows that connect each boxed item represents the strength of the relationship between the items.
- Environmental factors are considered to support the overall life of Boy C; accordingly, they are not directly connected with other items.
- "Sucking" and "nail biting," which were judged by the class teacher as important although they are not listed in the checklist, are described under "Health condition" after uncertainty on where to place them.
- In addition to representing the current condition, contents based on the assumption of the status after graduation are described under "Participation."

The class teacher gave the following explanation regarding the aims of preparing this model figure.

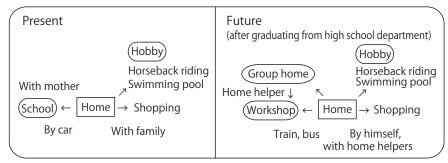


FIGURE 6 Life map for Boy C

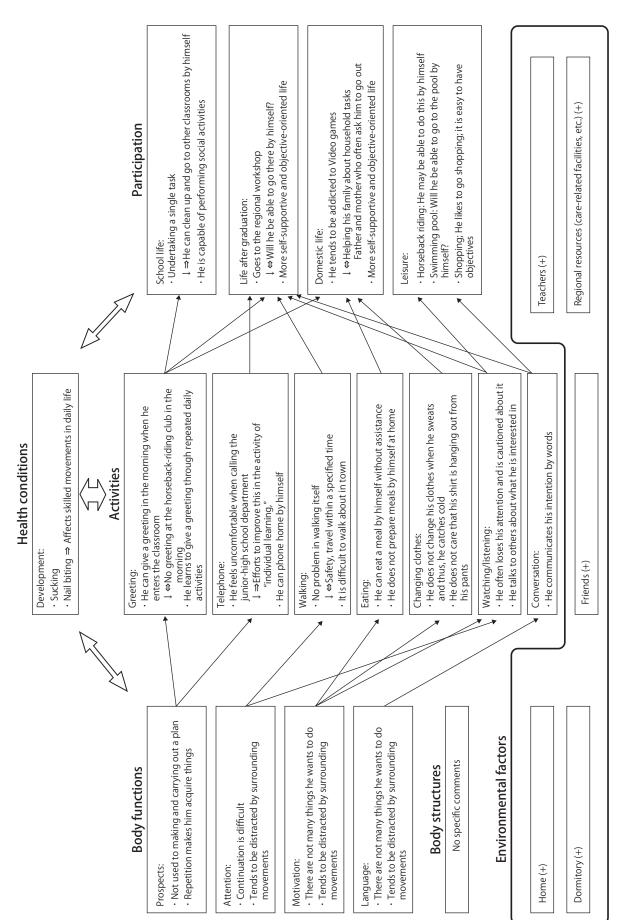


FIGURE 7 Model figure for Boy C

"I consider that the model figure is a collaboration tool; therefore, it is important that the figure be easy to read and understand visually. It was difficult to decide whether to make a single figure or multiple figure s for different situations, but I decided to make a single one. This is because, for collaboration among various professionals, the important thing is that by looking at the model figure, the actual conditions and problems in the overall life of the boy can be elucidated, so that we are able to know how the child's overall life is, and where we will be able to play a role. Therefore, I consider it better not to initially draw arrows connecting environmental factors; rather, the arrows should be inserted after discussion with related organizations. In this way, important issues that should not be omitted in the education of Boy C become clear."

With regard to the outcome of creating the model figure, the class teacher reported author the following.

"First, by preparing the model figure, skills that are considered to be connected to the social life (social participation) were clarified. Boy C has no physical-structural problems related to walking, but he is not allowed to walk about by himself in town because he is often distracted by things he sees (problem in maintaining his attention), or because he does not have a strong will to arrive at the destination within a certain time (motivation). After his graduation, he intends to enter the regional workshop; however, if this situation does not change, he needs to be accompanied by a parent to and from the workshop. As a result of creating the model figure, this problem has been structurally represented.

Next, I had a discussion with teachers using the ICF model, and we were able to provide special 3-hour learning sessions for Boy C. As a result, by repetition, he became able to walk to the bus stop, take a bus into town for shopping, and then return to school. To go to the workshop, Boy C is expected to take a train and a bus; he may progress to being able to take a train. In this activity, the task to be achieved by Boy C was obvious and the steps to be taken were apparent; therefore, cooperation among staff members was easily obtained."

Furthermore, the class teacher indicated that there are two styles in the preparation of a model figure. One is that subjects in education became clear during the preparation of the model figure. The other is that the model figure is created on the basis of clear intentions. The class teacher explained that he/she created the model figure from the viewpoint of its use in the individualized teaching plan and indicated the importance of the viewpoint in selecting items from the checklist for the preparation of the model figure. That is, the class teacher selected the latter style.

As the reason behind his/her selection, he/she indicated the following: this research was initiated in the middle of the fiscal year, thus it was conducted during the practical

execution of the individualized teaching plan in which the educational issues were clear; accordingly, this research was clearly affected by being carried out under such circumstances.

While the class teacher indicated a difficulty in distinguishing between "participation" and "activity," he/she also indicated that classification became easy if issues were viewed from the "participation" point of the student. The viewpoint in which importance is placed on "participation" is essential specifically in high school department, where the students are to enter society in the near future.

# 4) Discussion between class teacher and other professions

# 1 Discussion within high school department

In a high school department and junior high school department, teachers of guidance often differ from the homeroom teacher. Accordingly, the class teacher is often unable to monitor the students during learning activities, or a teacher of guidance is not able to sufficiently understand the attitudes of the students during other learning activities. To compensate for this situation, this class teacher held a discussion with other teachers while referring to the ICF model figure (Fig. 7) and attempted to examine teaching policies and other issues.

Such collaboration between teachers has conventionally been carried out on the basis of an individualized teaching plan. However, because the high school department of this school has a large population of over 60 students, it was necessary to investigate effective means of collaboration within a limited time. Through the use of the model figure, in which tasks in individualized teaching plans were plainly structured, it became easier during discussion to focus on teaching goals, and to predict the educational setting that should be prepared for the student and his/her future image after completing the educational activities.

# 2 Discussion with staff members of the workshop where Boy C expects to work after graduation

The model figure using ICF was favorably evaluated by the staff of the workshop as being easy to read compared with the conventional individualized teaching plan that comprises predominantly a textual description, and "it is easy to understand what kinds of activities are required in accordance with the actual conditions;" therefore, the discussion of activities aimed at supporting daily life after graduation could be effectively carried out. Within the background of criticism from outside the school that the activities being performed in the school are not clear, it is highly significant that, by presenting the model figure, the evaluation that "we now can understand matters on which importance was placed in school" was obtained.

#### (3) Evaluation of overall current case

The use of the ICF model figure resulted in the smooth exchange of opinions among staff members inside the school as well as with various professionals outside the school. In addition, in the discussion with the parents, the usefulness of ICF as a collaboration tool has also been indicated by, for example, the favorable evaluation regarding the presentation of the cause-and-effect relationship by extracting core sections from individualized teaching plans.

# 4. A case in which differences in understanding among various professionals were exposed

When opinions and policies among various professionals involved with a child differ, the child becomes confused and the goals of each professional are difficult to achieve; therefore, collaboration, including coordination among the professionals, is important. On this basis, collaborations mainly between the class teacher and the mother and between the class teacher and the PT are investigated in this case.

#### (1) Outline of case

Boy D is in the 1st grade of elementary school department. He was diagnosed as having hypoplasia of the callosal body and West syndrome, as well as severe mental retardation and physical disability. However, when he is greeted or called by name, he sometimes responds through facial expression and gestures. His mother takes him to school by car. In addition, he has been continuously going to multiple medical facilities since before he entered special school.

#### (2) Actual tasks

#### 1) Evaluation using checklist

After the evaluation, the class teacher asked Boy D's mother mainly about life-related matters that were difficult to clarify. As a result of the involvement of the mother, the class teacher indicated the following outcome. First, although there were some points which were difficult to understand in the evaluation criteria and contents of the questions, a common understanding with the mother was deepened during the explanation of such evaluation criteria to her. Second, the class teacher was able to obtain not only the requested information, i.e., issues about Boy D that were recognized as being unknown, but also a great amount of completely new information during the conversation with the mother.

Among the checklist items considered to be the field of PTs, the class teacher evaluated "b7: Neuromusculoskeletal

and movement- related functions" under "Body functions" and "s1: Structure of nervous system" and "s7: Structure related to movement" under "Body structures" and then asked the PT to confirm the evaluation; as a result, the following was indicated. First, the evaluation criteria are difficult to follow; further lower-level evaluations are required for more precise judgment, which requires indepth reading of the "ICF: International Classification of Functioning, Disability and Health ?Revised Version of International Classification of Impairments, Disabilities and Handicaps-." Second, differences in evaluation scores may be reduced by having multiple evaluators perform the evaluation. In particular, items with large differences in evaluation scores are considered to have ambiguous evaluation criteria; accordingly, the necessity of reexamining the items themselves was indicated. Third, there are items that are insufficient to describe the stages of infants and early development.

Through the above activities, the following unexpected outcome was obtained as a result of differences in the viewpoints of evaluators. Namely, when there are differences in evaluation scores, we tend to see the negative aspect of the presence of errors; however, in this case, the differences in understanding by each professional and in the attitude of the child in different situations were mutually recognized by the various professionals, as evidenced by the differences in evaluation scores.

# 2) Preparation of life map

Figure 8 shows the life map for Boy D prepared by the class teacher. Boy D has been continuously involved with multiple medical facilities since before he entered special school; the strength of the connection is indicated by the kind of line connecting the items. Similar to the case of Boy B, Boy D as well as all of his family members are shown in the center of the figure. Strictly speaking, this representation should be re-arranged in terms of whether this means support only for Boy D or support for the entire family.

#### 3) Preparation of model figure

After the evaluation using the checklist, the class teacher prepared the model figure shown in Fig. 9 and held discussions; then, using the results of the discussion, the class teacher attempted to modify the model figure so that it could be used more easily.

The following are the characteristics of the original figure in Fig. 9.

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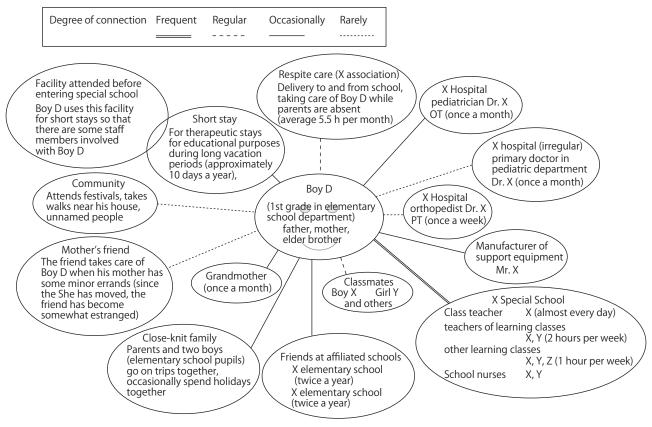


FIGURE 8 Life map for Boy D

- The arrows (↑↓) in the box for each item of the constitutive elements show the capacity and actual performance in this order from the left; the upward arrow ↑ indicates those considered to be positive items for Boy D, and the downward arrow ↓ indicates those considered to be negative items for Boy D.
- In the boxes, specific forms and conditions are also described.
- Lines connecting each of the constitutive elements show the respective relationships.

After the discussion using the original model figure, the class teacher indicated the following.

- Because each item is described briefly in the figure, it is more easily understood than text references, and the overall relationship could be easily explained by following the flow of the figure.
- The figure was created as a tool for discussion; however, understanding the figure may be difficult when the understanding of ICF itself is lacking.
- There are terms such as "undertaking tasks" and "nonverbal messages" whose meanings are difficult to understand; improvement is required.
- Because the individualized teaching plan had already been made, contents that were considered necessary for Boy D were selected from the teaching plan and made into the figure. If an individualized teaching plan had not been

available at the time immediately after entering the school, creating a model figure might have been more difficult.

Points indicated by the mother and the PT regarding the actual conditions of Boy D were then corrected, and lines expressing the relationships between items were changed. Item names were expressed such that they could be easily understood. The modified model figure is shown in Fig. 10. Such modifications were not made for other cases; the modified model figure was a result of seeking ease of understanding and ease of use.

# 4) Discussion among class teacher, family member and other professions

#### 1 Difference in opinion

During the discussion with the mother, the following difference in opinion was clarified. Namely, the class teacher considered the medical care with "differences in policies among health-related professionals" as "barriers." While the mother agreed with this, she also wished to consider favorably that the same primary physician and the same rehabilitation staff were continuously in attendance and to categorize this state under "facilitators." From this, the following necessity has been clarified: namely, we should recognize that the total evaluation score for the entire area of medical care should not be set at ±0, but that

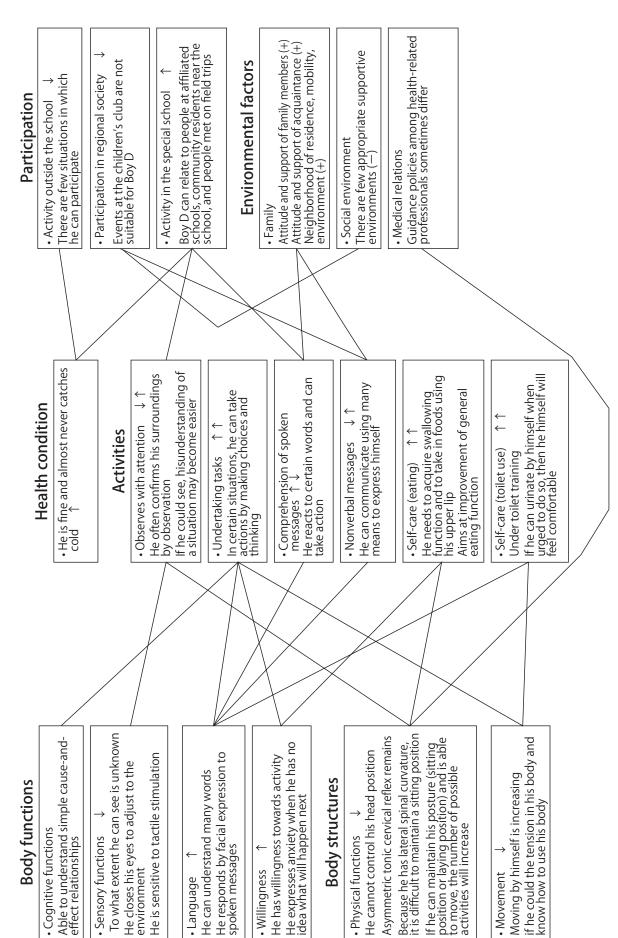


FIGURE 9 Model figure No. 1 for Boy D

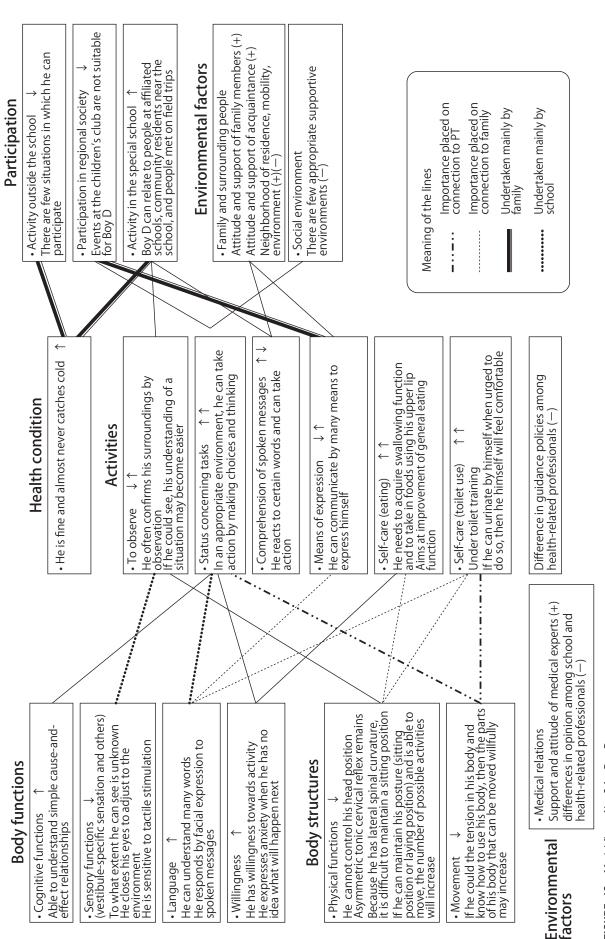


FIGURE 10 Model figure No. 2 for Boy D

"barriers" and "facilitators" are found in combination in the same medical-care area. Furthermore, when a difference in policy is made apparent, there is no place to seek advice, which is considered a "barrier." This is an important viewpoint and an issue to be examined in the future.

Meanwhile, a difference in the opinion with the PT was also clarified during the discussion. As a concrete example, for the item "Observes with attention," opinions of the PT and the class teacher are presented below.

#### PT:

"I consider that it may be difficult for Boy D to observe with attention. Even if he does observe, considering his actual condition, he is probably at the stage of understanding not the meaning of what he sees, but only that there is an object."

#### Class teacher:

"I think that Boy D understands an object visually under certain limited conditions. We can see that Boy D moves his eyes to watch the object being presented, and that he confirms the object visually."

A difference in opinion does not necessarily mean misunderstanding by either party. Similar to adults, children are considered to differ in their facial expressions and actions depending on location, partner, and time. The recognition of such differences by each professional may lead to deeper mutual understanding, which is considered to be linked to more extended teaching and therapy beyond the temporal treatment.

#### 2 Division of roles

On the basis of the model figure, the overall picture of Boy D was confirmed and roles undertaken by each professional were discussed; the PT also proposed the issue of the roles of rehabilitation, school, and home. I can say that the outcome of the study is that we could share the viewpoint of various professionals undertaking their respective roles.

### (3) Evaluation of overall current case

The point to be noted in this case is the differences in the viewpoints between evaluators. When there is a difference in evaluation scores, we tend to consider the error as a negative aspect. However, here the error leads to a common understanding regarding the differences in the opinions and in the child's condition depending on the situation.

I also paid attention to differences in the understanding of ICF itself. The current study focuses on the characteristics of ICF as a common language. However, ICF is not everybody's common language. Health-related professionals in medical care and health and welfare, for example, have many opportunities to become familiar with ICF or its former International Classification of Impairments, Disabilities, and Handicaps (ICIDH) during their training or in their actual workplaces; accordingly, it is easy for them to gain a common understanding by using ICF. However, the parents' standpoint is not necessarily the same. Therefore, in actuality, a simple reference that facilitates the understanding of ICF is required. Similar points are indicated in cases A and B as well.

# 5. A case of a facility-affiliated school where collaboration is carried out well on a routine basis

In some special schools affiliated with medical and welfare facilities, communication between the facility and the school is well maintained; however, there are cases in which activities are not mutually known by the facility and the school. In this case, communication among staff members is carried out routinely. I investigated the method of collaboration in this case.

#### (1) Outline of case

Girl E is in the 6<sup>th</sup> grade in special school. She is physically handicapped and has mental retardation due to cerebral palsy, but she can move around by herself in a wheelchair and communicate in everyday conversation. She stayed in a facility for children with physical/motor disabilities and attends the affiliated special school. She returns home only several times a year, so that the facility and the school are her major place of living. Because the school and the facility in this case were established by the same founder, communication among staff members is frequent; for example, activities to promote independence performed jointly by the facility and the school are included in the curriculum of the school.

#### (2) Actual tasks

#### 1) Evaluation using checklist

First, the class teacher performed the evaluation, then the class teacher asked another teacher who was also in charge of Girl E regarding points that were difficult to understand concerning Girl E as well as points to be confirmed, and then finalized the evaluation. The class teacher indicated that this process led to a deepening of mutual understanding. As a result of this evaluation, the class teacher indicated the following.

First, the teacher noted evaluation scores and their later application. In the current evaluation method, items presenting almost no problem or items that are favorites of the child are expressed by the score of 0 (excluding "Environmental factors"). Accordingly, positive aspects of the case are not apparent. Considering the actual subsequent teaching program, contents focusing only on

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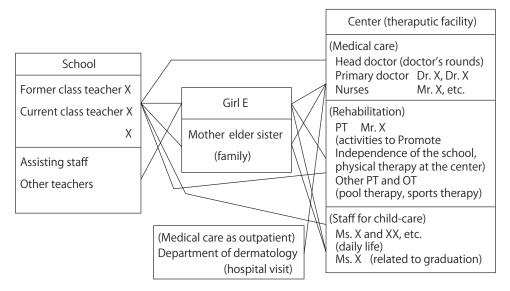


FIGURE 11 Life map for Girl E

negative aspects can hardly be said to be good ones. Items which can be made use of as hints in actual teaching are not only the scores, but also information such as that described in concrete terms in the notes, for example, "what kind of difficulties actually exist?" and "in what situation can the child perform the activity?".

The second point is related to a blind spot hidden behind the fact that a wide variety of items are included. While evaluation using a checklist enables the clarification of a broad view of aspects which had not been previously noted, we should not forget that we are not able to understand everything about the child from these items. In earlier studies concerning the use of ICF, specific difficulties and the wishes of guardians were elucidated for the first time through communication with the guardians and the use of information from other organizations.<sup>9</sup>

# 2) Preparation of life map

Figure 11 shows a life map for Girl E prepared by the class teacher. In this case, as individuals involved with Girl E, mainly staff members of the school and the facility to which she belongs are presented. Because she returns home infrequently, there is no description of her home neighborhood.

#### 3) Preparation of model figure

Figure 12 shows the model figure prepared by the class teacher on the basis of the evaluation using the checklist. Compared with the figures in the other cases, this figure is characterized by the connection between each environmental factor and related items, as indicated by the lines.

With respect to the symbols used in Fig. 12, those which differ from other model figures are listed below.

- The arrows (↑↓) in each box indicate that the actual performance is higher than the capability of Girl E.
- The correlation between "environmental factors" and other items is expressed by the arrow →.

The class teacher indicated a difficulty in selecting from the evaluation items in the checklist when preparing the figure. If the number of selected items is too small, many items will be omitted; however, if the number is too large, it will become difficult to read the figure. Similarly, if all the necessary constitutive elements are connected by arrows, the figure will again become too difficult to see. A reduction in the number of items and modification of the type of lines is required to secure ease of reading of the figure. The class teacher suggested making two types of figure: a figure showing the entire picture, and a figure focusing on certain items; he/she also proposed the use of different lengths of the arrows (\\psi\) in each item to express the evaluation scores.

# 4) Discussion between class teacher and other professions

Discussion of this case was conducted with the PT who was in charge of training at the facility, the staff member in charge of daily life, and the nurse in charge of medical care. The discussion using the model figure of ICF (Fig. 12) was held in August. In Girl E's school, staff members involved with the children meet at the beginning of each fiscal year, and they communicate routinely; accordingly, the discussion in August was held with the aim of determining the changes in the actual condition of Girl E after the initial staff meeting and reconfirming the respective roles of the staff members. As a result, the aim was achieved and the

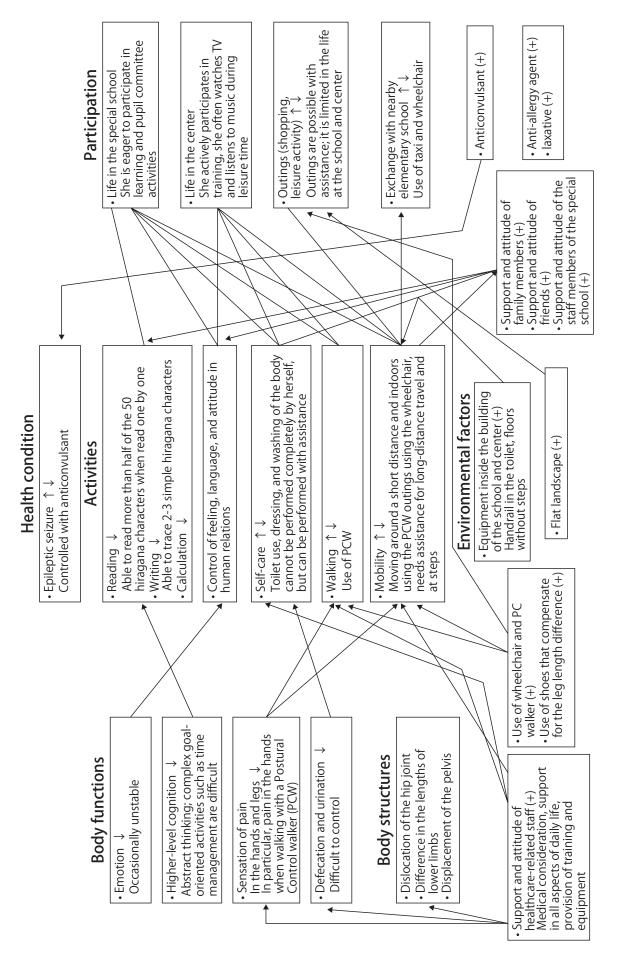


FIGURE 12 Model figure for Girl E

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discussion was conducted more effectively, according to the class teacher. The figure was considered to be effective not only in the midyear meeting described, but also in the staff meeting at the beginning of the fiscal year.

#### (3) Evaluation of overall current case

As in this case, even when good communication among various professionals is carried out routinely, the series of attempts using ICF had the effect of reconfirming the overall situation of the child and deepening the mutual understanding about their respective roles. To lead cases such as this one in a better direction, in which discussion for collaboration has already been carried out, we must investigate in detail the objectives ICF can achieve in concrete terms in the future. In addition, some of the staff members of the facility became interested in ICF itself through the current discussion. This suggests the possibility of ICF creating new forms of collaboration not only based on proposals from schools, but also based on the school staff working together.

# IV. Comprehensive Discussion

In this section, the results of investigating the five cases and the findings obtained through discussions with research collaborators are combined and organized, and the possibility of and issues in the practical application of ICF as a tool for collaboration among various professionals are considered in relation to individualized educational support plans. In addition, I will state my opinion regarding what collaboration among various professionals is and what it should be.

# 1. Towards practical application

#### (1) ICF checklist

In this study, the "ICF CHECKLIST version 2.1a Clinician Form" was translated with reference to its official Japanese translation, and on the basis of this checklist, class teachers evaluated each case. Through the process of such evaluations, the efficacy of and problems in the ICF checklist as a tool for collaboration among various professionals were clarified.

## 1) Viewpoint of covering entire daily life

In all instances of cases, positive comments that the items listed in the checklist cover broad regions of the overall daily life were submitted. Among the comments, a frequently noted characteristic was that, compared with the issue-relationship figure of the KJ method, which is frequently used during the preparation of individualized teaching plans and in which the subjectivity of the creator of the figure is often dominant so that some aspects are not completely clarified, the overall daily life is covered by the current checklist.

Meanwhile, because the range of items was so broad, it was also clarified that in all cases, even the class teacher does not know about many of the items. In particular, it seems that many of the "environmental factors" such as "e5: Service, policy" were not known. With respect to these items, positive opinions were stated, such as "it was good to know that there were matters I did not know about," and "to ask about what I do not know is important;" however, considering the application in actual schools, the possibility of generating the feeling of "being ashamed of not knowing" or "getting things done within what I know" cannot be denied.

The author should also note that knowing everything is not necessarily good. From the standpoint of the children themselves as well as their families, they do not necessarily want teachers and staff to know everything about the children, and data must be collected with special care from the viewpoint of protecting personal information. However, according to the reports of the current five cases, the class teachers indicated that they had a good chance to reconsider issues and tasks from the standpoint of a class teacher or the school through the processes of knowing the total situation of the children to some extent, with the consent of the guardians, while receiving additional information from various professionals; in this regard, the guardians did not express any negative opinions.

From these findings, knowing a broad range of the entire daily life through the use of the checklist is suggested to be effective in promoting collaboration among various professionals.

#### 2) Problems with items: Selection of items

The current ICF checklist has been prepared by selecting major second-level items from among the constitutive elements of ICF; accordingly, not all items of ICF are included, and naturally some are omitted. As an case from this study, in case A, the item "d415: Maintaining posture" was added to "Activity" in the checklist. The addition of items which originally are not in the checklist is allowed with reference to ICF itself when necessary. However, to do this, one is required to know the entirety of ICF, which may be difficult to accomplish with the current checklist alone. To solve this problem, investigation is currently under way in using the "ICF: International Classification of Functioning, Disability and Health ?Revised version of International Classification of Impairments, Disabilities and Handicaps-" as a complement, and using simpler methods including the use of electronic tool.

Meanwhile, the school teacher in case C indicated the necessity of "e130: Product and technology for education,"

and the school teacher in case D indicated the necessity of "b510: Ingestion function." The lack of these items in ICF differs from the lack of "d415: Maintaining posture." The former omission means that ICF itself does not sufficiently cover students in their childhood and early developmental stages. To cope with this, a study aiming at the creation of a children's version of ICF is now under way,<sup>4</sup> and currently the author also is conducting an investigation in the direction of supporting such studies.

# 3) Problems with items: difficulty of evaluation

Here I describe the reasons behind the difficulty in conducting the evaluation in terms of two separate problems: a problem concerning evaluation criteria and a problem concerning the difficulty in evaluating collaboration partners.

One problem with the evaluation criteria is that there are difficult-to-understand terms for both the evaluators themselves and for collaborating partners, such as "d210: Undertaking a single task," which was pointed out in cases D and E. In addition, in case C, for "Walking," the following problem was indicated: while its definition presents no problem in the second level of ICF described in the checklist, at the third level, the range of definition is extended so that making a decision on the evaluation became difficult. Finally, an ambiguity in evaluation scores was indicated. For example, regarding the differences in the degree of difficulty of "Activity" and "Participation," there are the descriptions "mild difficulty" and "moderate difficulty" corresponding to 5-24% and 25-49%, respectively. However, actual judgment is difficult and may depend on subjectivity of evaluators. This problem should be solved promptly to enable the practical application of ICF.

Meanwhile, concerning the difficulty in evaluating collaboration partners, the difficulty exists in numerically evaluating those involved in a case under "Environmental factors." For example, in "e3: Support and relationship," it is, in fact, very difficult to categorize the attitudes of collaborative partners and guardians as "barriers." A research collaborator proposed that the evaluators should fill in the evaluation column not by themselves but together with research collaborators because collaboration is the aim.

### 4) Toward actual teaching

In this checklist, because a scale including negative meanings is used, the condition wherein no difficulties exist is evaluated as a score of 0; therefore, things the child is good at are not readily apparent. Accordingly, guidance to promote those things the child is good at is difficult, and information related to such guidance is difficult to find. Therefore, in this study, space for notes was provided in the checklist, and we attempted to use the information in this space in actual guidance. Furthermore, in "Activity" and "Participation," capacity evaluation is divided into the capacity with the support of people and equipment, and the capacity without support, so that differences compared with performance can be clarified and used as hints for guidance.

#### (2) Preparation of life maps

In one of the five cases, a life map had already been used in the individualized teaching plan at the school. In the other four cases, similar figures were prepared in the study to confirm collaborating partners. As a result, the class teachers who prepared the figures, as well as collaborators who had discussions with the class teachers, indicated that it was useful to confirm their mutual presence. Meanwhile, because the life map figure basically only shows the names of the individuals and organizations involved, the actual relationships among them, including physical, temporal and psychological distances, cannot be presented.

Here I note the blind point of this map figures as a future issue. When this figure is used in collaboration, there is a risk that support to the child will tend to be considered only within the range of the figure. Essentially, the priority is not individuals and organizations, but that there are issues that require support. Without this recognition, new ideas such as "let's find new individuals and organizations," or "let's exclude these individuals and organizations on the basis of judgments made concerning the issue" may not be generated.

#### (3) Preparation of model figures

Because model figures were created with the aim of using them as materials for discussion, they were made to represent the entire situation of the child on the basis of the evaluation items in the checklist. Using the model figure, the actual conditions and issues could be visually understood quickly and future policies could be efficiently discussed; thus, the efficacy of the model figure as a collaboration tool was noted both by the class teachers who prepared them and by the partners who discussed them.

In contrast, all the class teachers who prepared the model figures indicated that it was difficult to determine the items to select from the checklist. The most frequently used viewpoint in such selection was based on the child's issues noted in his/her individualized teaching plan that had already been prepared. In the future, when considering the practical incorporation of ICF into an individualized educational support plan, it will be necessary to reorganize the correlation between not only the model figure, but also

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the series of tasks performed in the current study, and the current individualized teaching plan.

Many comments were also made concerning the presentation of the figures. The most frequently indicated comment was that the incorporation of a large amount of information in a single figure makes the figure difficult to understand, but a reduction of items results in the omission of information. In this regard, because the aim of the model figure in this study was to use it as a tool for discussion, the consensus that a rough, easy-to-understand presentation of the overall situation is sufficient was obtained. There was also the opinion that to compensate for the rough figure, multiple figures of specific situations and objectives could be prepared, such as "a model figure related to the guidance of activities to promote independence."

In this study, I asked those who prepared the figures to use arrows and symbols as they deemed appropriate and to classify "Activity" and "Participation" as they saw fit; accordingly, various representations were made in each case. To date, although I have not yet obtained any unified representation on the whole, I intend to examine such unification in the future.

#### (4) In discussions

Through the use of model figures, efficient discussions were achieved with various professionals from outside the school and with staff members inside the school. The merit, as noted by one class teacher, may be a result of points such as "this child may have this kind of problem in this situation in daily life" becoming clear from the relationships between items and each professional. Thus, ideas regarding what each professional should target can be easily obtained.

Furthermore, it was also reported that, in addition to the presentation of materials made by the class teacher and asking questions about the actual condition of the child, by sharing tasks such as evaluation using the checklist and the preparation of the model figure during discussion, a more proactive attitude of the partners can be obtained, and the collaboration itself, in addition to the discussion, can be performed more smoothly. In contrast to this, the existence of differences in the understanding of ICF, which should function as a common language, was also indicated; to compensate for this, the document shown in Fig. 13 was made for case A to promote understanding among the collaborators, and it led to smooth discussion, according to the report.

As an issue to be resolved, the scheduling of discussions was noted. In the five cases in this study, each of the class teachers arranged a discussion by his/her effort,

such as visiting the collaborative partners during summer holidays. In the case E, the discussion with the staff of the affiliated facility, which was physically close to the school, was included in the annual plan. In contrast, because of the managerial problem that discussion alone does not warrant any medical or technical service payment, participation by PTs and OTs was difficult. Considering practical applications in the future, systematically ensuring discussion will be a key issue. Furthermore, in the case of residence in a remote area or of a child going to distant facilities, it will be difficult to meet the individuals involved directly. Ways of holding meetings in such cases, or the adoption of other methods, such as the Internet, should be investigated as well.

# (5) Relationship with individualized educational support plan

To practically apply collaboration with various professionals in the school, I consider that use of the ICF checklist together with an individualized educational support plan is necessary. In this study, in the five cases, various professionals attempted the following tasks: gain a common understanding of the actual condition of the child, and confirm their roles in the future from their respective standpoints. However, how to carry out the actual tasks after understanding and confirmation were achieved was not considered. Therefore, the author proposed that they present their roles and policies in writing as a "support team sheet," as recommended by Ishikuma and Tamura, and then evaluate them later. However, the class teacher in case E and the OTs in case B indicated that such things were not necessary as a team, and that occasional examinations of the respective plans and evaluations might be sufficient.

The author nevertheless feels that some kind of written material is necessary for a practical joint application with individualized educational support plans. Under the circumstance that a concrete image of the individualized educational support plan is sought at present, while reorganizing the comments indicated, I will attempt to resolve this issue and address the production of a manual for the entire process.

# 2. Again considering the meaning of "collaboration"

Thus far, I have investigated the methodology of promoting collaboration among a various professionals. Here I once again consider "collaboration" itself.

# (1) Is "collaboration" really necessary?

First, I ask if "collaboration" among various professionals is really necessary. In this report, I have stated the necessity of "collaboration" at the point of education of children with disabilities, which recently is noted quite often.

#### What is ICF?

- ICF: International Classification of Functioning, Disability and Health
- ICF, adopted in May of 2001 at the General Assembly of WHO, is a revised version of the International Classification of Impairments, Disabilities, and Handicaps (ICIDH) regarding the functional impairments and social handicaps published in 1980 by WHO as a supplement of the International Classification of Disease (ICD).

#### ☆Difference from ICIDH

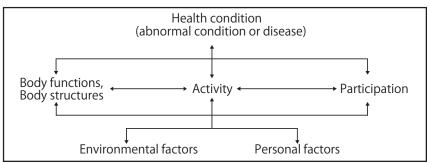
ICIDH Mainly based on the idea of classifying functional impairment in daily life because of physical functions

ICF Focuses on activity, participation, and environmental factors

# ☆Constitutive elements

- Body functions: physiological functions of body systems (including psychological functions)
- Body structures: anatomical parts such as organs and limbs and their components
- Impairments (including structural disorders): problems in body functions or structures such as a significant deviation or loss
- Activity: the execution of a task or action by an individual
- Participation: involvement in a life situation
- Activity limitation: difficulties an individual may have in executing activities
- Participation restriction: problems an individual may experience in involvement in life situations
- Environmental factors: factors in physical, social and attitudinal environment in which people live and conduct their lives

# ☆When visualizing the interaction between components



Source: WHO: ICF International Classification of Functioning, Disability, and Health

FIGURE 13 Explanatory chart of ICF

As mentioned in "I. Introduction," the author has searched for what the collaboration between the teachers at the special school affiliated with a facility and the staff at the affiliated facility should be, and what the efficient division of roles should be. <sup>10, 11, 12, 14</sup> I originally had the idea that many professionals involved with each child should not teach them separately or inefficiently. The research starting from that point has led to efficient and effective teaching that has been well accepted by the staff involved

and by the guardians. However, this is our thought as a service provider, not the thought of individuals involved as major players in collaboration.

In contrast, the starting point of "collaboration" among a variety of professionals, which I previously reported (2003), was the earnest desire of a mother, who requested "lateral collaboration" because of her sense of heavy burden. 

The mother was solely responsible for managing all the

professionals and organizations involved with her child so that she had to repeat the same explanations over and over again. The various professionals involved to some extent hesitated to share information to protect private information, but after they received the mother's approval to share information, each professional attempted to devise a successful "collaboration." As a result, respective effective approaches were obtained.

Among the current cases, the guardians in case D were reported to be confused by differences in the policies of various professionals, and there was no place for them to ask for advice. To avoid such a situation, collaboration among various professionals is truly required.

The attempt at "collaboration" starting from the viewpoint of service providers and guardians has provided, or is expected to provide, successful outcomes. However, the intentions of the children themselves, who are the main players in this "collaboration," have not yet been sufficiently heard. Their intentions should be respected as much as possible, and the "collaboration" should start from there. On the basis of this thought, I asked the class teacher in case C to investigate a policy in which the child himself can participate maximally. The result has not yet reached a stage to be reported, but I consider this to be an important aspect that should be investigated further.

# (2) What is considered to be "collaboration" and what is the goal?

Although this may be repetitive, the necessity of collaboration among professionals has been much mentioned in the process of special needs education. To date, in a facility-affiliated special school, "collaboration with the facility" has always been noted as the important issue. Where the necessity of collaboration is mentioned as an inevitable factor, the kind of situation that can be referred to as "collaboration" in concrete terms and the state of successful "collaboration" are not at all obvious.

Collaboration itself is not a goal. It is only a means of achieving something, for example, with collaboration, more effective teaching is possible for the children in front of us. In addition, as can be seen from the five cases, the desired "collaboration" varies depending on the case. What is important is to clarify the goals set for each child, what we should ask for in "collaboration" as a means of achieving those goals, and to what extent those goals are expected to be achieved in each case. After clarifying the causes of failure to reach the desired state of "collaboration" and how to resolve them, I plan to continue the investigation on the roles of ICF as an tool of resolving such issues.

\*With respect to the descriptions of the cases in this study, the consent of the guardians and related individuals was obtained through the research collaborators. Consent was also obtained for the content of the text, after the content was reviewed by the research collaborators. In addition, consent was obtained for listing the names and affiliations of the research collaborators in the acknowledgement below.

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