

# National Survey on the Implementation Realities of Art Education at Hearing Special Needs Schools in Japans

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**Abstract:** This research aimed to survey the actual condition and characteristics of the implementation of art classes in hearing special needs schools in Japan and to present future perspectives and issues. A questionnaire was sent to the chief teachers of art in each division of 80 schools, excluding branch schools; 70 responses were received, 68 of which were complete and analyzed. The results of the analysis showed that the difficulty of teaching tended to be generally lower among teachers of hearing special needs schools compared to the results for all types of special needs schools. However, acquiring specialized knowledge about disabilities and developing curricula for playing art activities were more difficult for teachers of hearing special needs schools. Moreover, many of the respondents were positive about the establishment of art and design courses in the higher division and in majors after graduating from the higher division. It is recommended that, in the future, a survey of hearing special needs school graduates and the positioning and utilization of art and design with an inclusive society in mind be conducted.

**Key words:** hearing special needs school, art education, national survey, Japan, questionnaire

## 1. Context and aim

This research is a continuation of a nationwide survey of special needs schools conducted by the authors in 2016, where they showed the actual implementation of art in all types of special needs schools in Japan (Ikeda, Kodama & Takahashi, 2017). Subsequently, the authors made comparisons between school types for all 25 items regarding the difficulty of teaching art classes, showing differences by school type (Ikeda & Kodama, 2018). Furthermore, Ikeda (2019) conducted multiple comparisons of the five factors identified in the factor analysis for teaching difficulties by faculty affiliation, years of teaching experience, and licenses held, and compared teaching difficulties by different teacher attributes. This paper is a continuation of such research.

In this context, Ikeda (2018) suggests that hearing special needs schools, in particular, show different characteristics as compared to other types of special needs schools. Specifically, it was reported that 11 items out of 32 questions asking about the difficulty of teaching showed significant differences between hearing special needs schools and other school types, and all of them were less difficult for hearing special needs schools.

The field of art and design is important for Deaf or hard-of-hearing people as a field in which they can flourish and work. For example, Tsukuba University of Technology has established the Department of Integrated Design in the Faculty of Industrial Technology as a faculty and department

for Deaf or hard-of-hearing people. The university's guide indicates that the content of the studies is to think comprehensively about the living environment and learn about design to create aesthetically pleasing living spaces and environments, tools and products, information, and communication that are relevant in daily life in a way that is comfortable, convenient, easy to understand, and with an expanded perspective to universal design (Tsukuba University of Technology, n.d.).

Universal design can also be proposed from the viewpoint of people with disabilities. According to Suzuki (2014), who published in the Tsukuba University of Technology's research bulletin, a system for evaluating universal design setting has been developed to assess whether or not it is possible for Deaf or hard-of-hearing people to directly participate. Inoue (2014) investigates the graphic symbols for guidance, which are often misunderstood by Deaf or hard-of-hearing people, by producing a revised version incorporating suggestions from Deaf or hard-of-hearing students in the design field and reevaluating their understandability. As described above, among special needs schools, the positioning and role of art in hearing special needs schools may be slightly different, and art may be viewed as a carrier of design that makes use of the career choices and disability characteristics of art students.

Therefore, the aim of this paper is to clarify the actual conditions and characteristics of the implementation of art in hearing special needs schools, the attitudes of teachers, and future possibilities. In particular, we focus on the responses of teachers at hearing special needs schools and present findings on other items not shown in previously published papers.

## 2. Methods

The data collected in Ikeda et al. (2017) were used for this study. The specific survey methodology was as follows: [1] Subjects: We targeted 80 hearing special needs schools, excluding branch schools in Japan. However, since the divisions of elementary, middle, and high school established by each school differed, we checked each school's webpage and mailed a questionnaire enclosed with the survey according to the number of divisions. [2] Duration: The survey was conducted from February to May 2016. [3] Procedure: Questionnaires were sent to each school in early March 2016 using the mail survey method, and the response and return period was from March 15 to March 31 of the same year. Two types of letters were prepared: one was a greeting letter addressed to the head of the art teacher in each school; the other was addressed to the chief art teacher of each division and included a face sheet, questionnaire, and return envelope, all bound together with a paper clip. The face sheet included the survey's background, purpose, and objectives, as well as a statement that personal information would be kept strictly confidential and that the utmost care would be taken to ensure that respondents would not be disadvantaged in any way. Consent to participate in the survey was obtained by responding to the survey form. [4] Methods of Analysis: 70 respondents responded to the survey, and the 68 who had provided complete responses were included in the analysis. SPSS (Statistics, Regression, Advanced, version 24) was used for statistical processing.

## 3. Results

### 3.1. Attributes

The attributes of the respondents are shown in Table 1.

### 3.2. Actual conditions of implementation

The results of the tabulation regarding the actual conditions of implementation of art classes show that 100% of the respondents answered "Yes" to the question of whether or not art classes were offered. The name of the art class was "*Zuga-kousaku*: arts and crafts" (or "*Zukou*" in short) in the elementary

division and “Art” in the middle and high divisions, although there were some differences in the names of the classes. These are the subject names used in the national curriculum guidelines (MEXT, 2017). The most common number of art classes periods per week was two (50%), followed by one (32%). A characteristic of hearing special needs schools was that many of the divisions set up two classes in the middle and high divisions as well. For example, according to the guidelines for junior high schools in general schools, art classes are set at 1 to 1.4 periods per week, but several hearing special needs schools set more than that. In addition, most of the elementary division had 45 minutes of class time per session, while most of the middle and high divisions had 50 minutes. The average number of teachers specializing in art assigned to each department was 0.9, with one art teacher being the most common (47%), followed by zero art teachers (35%). Since it is not mandatory for elementary schools to have a teacher specializing in art assigned to them, many of them had none. Some respondents indicated that art teachers oversaw both the middle and high division or the elementary, middle, and high divisions concurrently. In high schools where more than one art-related subject was offered, two or more art teachers were assigned to the school. For example, the schools with the largest number of art teachers assigned (six), including majors, had Art I (first-year required), Art II (optional), Art III (optional), Printing Design (optional), Drawing, Color Composition, Interior Elements, Graphic Design, Graphic Design, and Design Drafting, Image Processing, DTP, Modeling Design, Visual Expression, Painting Expression (optional), Craft (optional), and CAD (optional). The program offered art-related courses across multiple specialties.

### 3.3. Difficulties in art classes

Fig. 1 shows the contents of art classes at hearing special needs schools that are difficult to teach, with 25 items in descending order of percentage from “very difficult” to “somewhat difficult” and responses scored on a 4-point scale (black). It also includes the responses of teachers of all school types (gray).

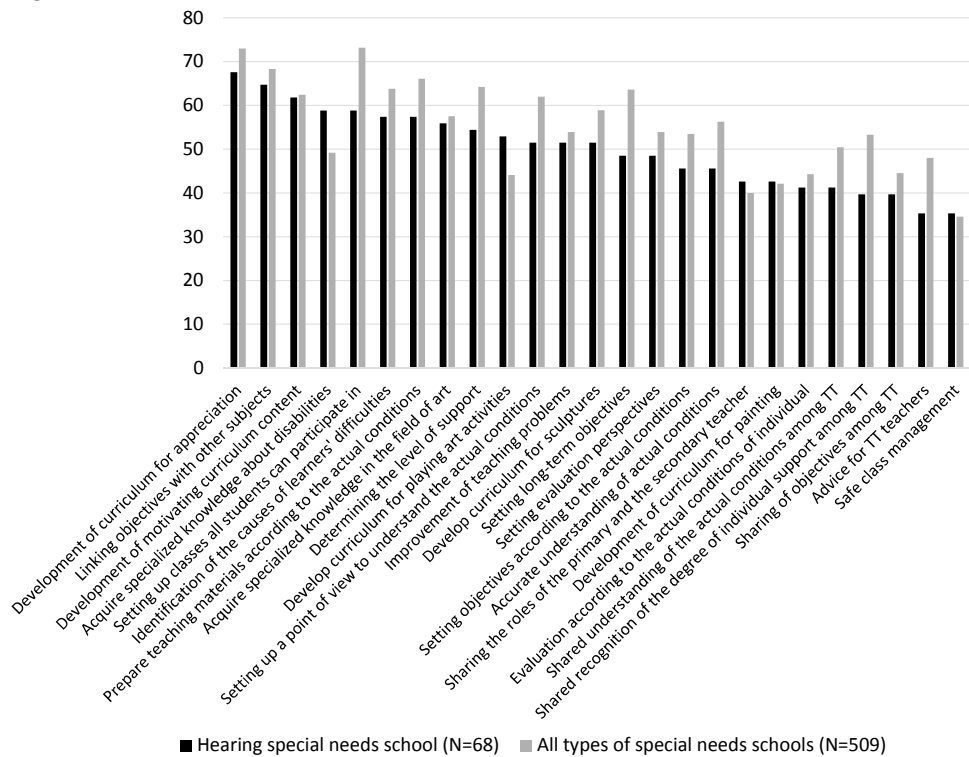
Regarding the difficulty of teaching, the scores of hearing special needs schools’ teachers tended to be lower in general when compared to those for all special needs school types. However, teachers at hearing special needs schools felt more difficulty with regard to four items, namely “acquire specialized knowledge about disabilities” (+7.9%), “develop curriculum for playing art activities” (+8.3%), “share the roles of the primary and the secondary teacher” (+0.5%), and “safe class management” (+1.1%).

There were also some items whose rankings changed by more than five places. [Rankings of all Type of special needs schools → Rankings of hearing special needs schools]. The item “development of motivating curriculum content” increased in ranking [8→2], while the following items decreased: “setting up classes all students can participate in” [1→7], “determining the level of support” [5→11], “setting long-term objectives” [7→14], “accurate understanding of actual conditions” [12→17], and “advice for

Table 1 The attributes of the respondents

		Number	Rate (%)
Work Area	Hokkaido & Tohoku	18	26.5
	Kanto	12	17.6
	Chubu	14	20.6
	Kinki	6	8.8
	Chugoku	3	4.4
	Shikoku	7	10.3
	Kyushu / Okinawa	8	11.8
School Divisions	Elementary Division	26	38.2
	Middle Division	15	22.1
	High School Division	21	30.9
	Multiple Division	6	8.8
Age	20s	10	14.7
	30s	18	26.5
	40s	15	22.1
	50s	21	30.9
	60s	4	5.9
Special Needs School Teaching Experience	Less than 4 years	14	20.6
	4–10 years	19	27.9
	11–20 years	14	20.6
	21–30 years	14	20.6
	More than 31 years	7	10.3
Licenses Held	Special Needs (Hearing) + Art in secondary school	22	32.4
	Special needs (hearing) + Elementary school	7	10.3
	Special needs (other than hearing) + Art in secondary school	13	19.1
	Special needs (other than hearing) + Elementary school	7	10.3
	Others	19	27.9

Fig. 1 Difficulties in art classes



TT teachers” [19→24]. In addition, the ranking of some items changed by more than 10 places. Items that moved up in ranking are “acquire specialized knowledge about disabilities” [18→4] and “develop curriculum for playing art activities” [22→9].

### 3.4. Necessity of specialized education in art and design

Table 2 shows the results of a question asking whether any of the student enrolled in the school would like to make a living by creating artworks (i.e., become professional artists or designer) in the future. Table 3 shows the results of the question asking whether the children enrolled in the high division should have a specialized art and design course. Table 4 shows the results of the question asking whether there should be a major course specializing in art and design after graduation from the high division.

As shown in Tables 2-4, the responses to the question about students wishing to become artists or designers did not differ much from the overall results for special needs schools.

Table 2 Students wanting to become artists or designers

	All types of special needs school (N = 509)		Hearing special needs school (N = 68)	
	Number	Rate (%)	Number	Rate (%)
Exist	137	27.0	20	29.4
Not exist	371	73.0	48	70.6

Table 3 Requirement art and design course in the high division/designers

	All types of special needs school (N = 509)		Hearing special needs school (N = 68)	
	Number	Rate (%)	Number	Rate (%)
Strongly agree	42	8.3	10	14.7
Agree a little	121	23.8	11	16.2
Neither agree nor disagree	155	30.5	28	41.2
Disagree a little	150	29.5	15	22.1
Strongly disagree	40	7.9	4	5.9

However, the percentage of “strongly agree” for the question of establishing art courses in the high division (Table 3) was 6.4%—higher than the results for all types of special needs schools. Although the combined percentages of “strongly agree” and “agree a little” remained the same, the higher percentage of “strongly agree” might indicate a higher degree of need for such a course. A trend similar to that in Table 3 was also found for the establishment of a major course specializing in art and design after graduation from the high division (Table 4). The percentage of “strongly agree” was 7.6%—higher than the results for all types of special-needs schools, indicating a strong demand for more than the establishment of art courses. We believe that this is a characteristic of hearing special needs schools. This background is thought to be related to employment after graduation and can be interpreted as the need for students enrolled in hearing special needs schools to develop expertise in the field of art and design.

**Table 4 Requirement major course specializing in art and design after graduation from the high division**

	All types of special needs school (N = 509)		Hearing special needs school (N = 68)	
	Number	Rate (%)	Number	Rate (%)
Strongly agree	51	10.0	12	17.6
Agree a little	152	29.9	14	20.6
Neither agree nor disagree	148	29.1	29	42.6
Disagree a little	123	24.2	11	16.2
Strongly disagree	34	6.7	2	2.9

**3.5. Opportunities for learning**

The university departments from which the respondents graduated were the “department of education” (53%), “department of fine art or design” (43%), “department of special needs education” (2%), and “others” (2%). The authors were asked whether they had the opportunity to take art classes for children with disabilities during their undergraduate years, and their answers were rated on a 4-point scale ranging from “often” to “never.” The result was “often attended classes” (3%), “sometimes attended classes” (7%), “rarely attended classes” (31%), and “never attended classes” (59%); thus, the total percentage of “rarely” and “never” was 90%. This result was the same for all types of special needs schools.

**Fig. 2 Contents of classes that should be offered**

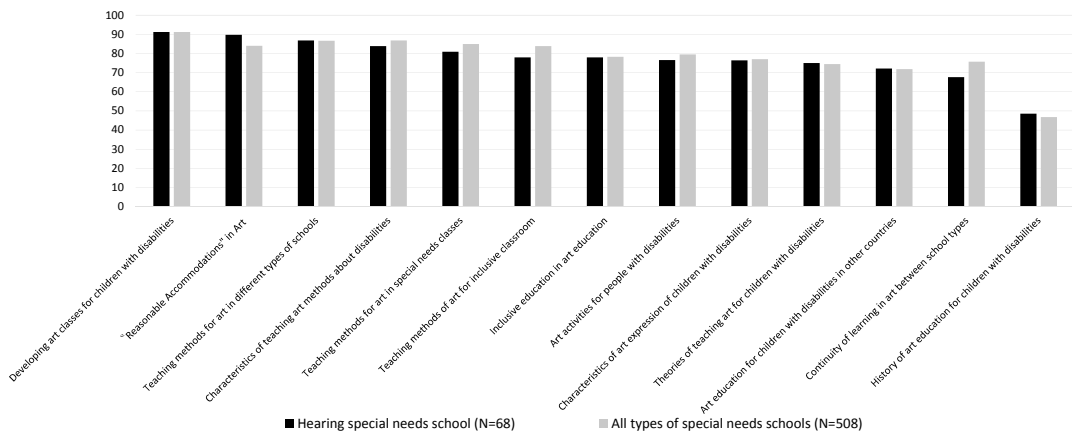


Fig. 2 shows the contents of the 13 items, in descending order of percentage, of respondents who answered “strongly agree” or “somewhat agree” on a 4-point scale about what they wished they had learned when they were students. For 11 out of 13 items, more than 70% of the respondents answered “strongly agree” or “somewhat agree.” Regarding the content of the classes that they wished were

offered, a comparison of the numbers for the hearing special needs schools and all types of special needs schools showed a similar trend in both number and ranking. However, seven of the 13 items on this question had higher numbers in the hearing special needs schools. Two items that differed by more than 5% were “reasonable accommodations in art” (+8.9%) and “history of art education for children with disabilities” (+5.7%). For some items, the ranking changed by more than three places [ranking of all types of special needs school → ranking of hearing special needs schools]. The item that increased in ranking was

“reasonable accommodations in art” [5→1], while the item that decreased in ranking was “teaching methods of art based on the characteristics of disabilities” [2→5]. The ranking of the other items changed from 1 to 2.

**Table 5 Opportunities and frequency of teacher training in art education**

	Once a year	Once a semester	Not at all	Other
By the Board of Education	14.7	1.5	55.9	27.9
By the school	4.4	14.7	75	5.9
By teachers on their own initiative	1.5	1.5	89.7	7.4

Table 5 shows the opportunities and frequency of teacher training in art education. With no training organized by the board of education (56%), no in-school training (75%), and no opportunities for self-organized training (90%), the results also reveal that teachers in hearing special needs schools do not have sufficient opportunities for training in art education. Note that 12 (28%) of the respondents who responded to the “other” category of training sponsored by the Board of Education in the results answered “don’t know,” “not aware of it,” or “unknown.”

## 4. Discussion

### 4.1. Toward compatibility between art education and education for understanding disabilities

This research compared the results of the analysis of art departments in hearing special needs schools with those in all types of special needs schools to show the implementation and characteristics and trends of art classes from the perspective of teaching difficulty, the need for specialized education in art and design, and teacher training opportunities. Among these, the difficulty of teaching art classes tends to be low overall, as pointed out by Ikeda and Kodama (2018). However, acquiring specialized knowledge about disabilities was more difficult for art teachers in hearing special needs schools compared to other school types. We believe this to be due more specialized knowledge and skills being required as it is an issue directly related to teachers’ instructional operations and communication with students. On the other hand, the survey also revealed that many teachers working at hearing special needs schools have not received sufficient classes or training in art education for people with disabilities, both during their undergraduate training and after their employment. In light of these survey results, to resolve the issues raised by hearing special needs schools and improve professional growth, it is necessary to provide not only training in art education but also training in understanding disabilities. Nagase and Fujita (2021) highlight that while a wide variety of disability education practices have been conducted in Japan, insufficient training has been provided for teachers who can implement disability education. One possible solution to these problems is to create opportunities to interact with Deaf or hard-of-hearing people through art. It would be beneficial to practice art exchange activities—including education to understand disability—for university students aiming to become art teachers at hearing special needs schools, as well as for current art teachers.

#### 4.2. Contacts with Deaf Culture and Deaf Arts

A survey on Deaf arts by Kanno, Osugi, and Kobayashi (2016) found that research or investigation on Deaf arts or Deaf people's artistic activities is almost non-existent in Japan. Many Deaf or hard-of-hearing children live in a world without sound, and many perceive visual information (e.g., text, illustrations, and colors) and communicate their intentions using body language, sign language, and facial expressions. In considering such characteristics, teachers at hearing special needs schools should develop not only teaching methods and design reasonable accommodations according to the characteristics of Deaf or hard-of-hearing students but also art curricula that enable these students to acquire knowledge about Deaf culture and Deaf arts as their own culture and to utilize this knowledge in the development of. According to Kanno, Osugi, and Kobayashi (2016), the concept of art closely related to Deaf culture was created by the Deaf community in the United States. It is also possible to reconsider the content of activities and teaching methods that maximize the ability of Deaf or hard-of-hearing students to take in visual information and communicate using their bodies on a daily basis and to utilize them in expressive activities; for example, theater and performing arts that utilizes art and physical expression has the potential to help them transform their own "disabilities" into "advantages" and can be expected to enhance their self-confidence and identity. Ikeda (2021) suggests that focusing on visual expressions and performance embodiment through the physical experiences of people with disabilities can respect the expressions and statements spoken from within by people who experience disabilities and shift the social perception of society and disability to a different one than before. In the survey, teachers at hearing special needs schools had a positive attitude toward the establishment of an art course in the high division and of specialized art and design majors after graduation. Therefore, it was suggested that not only should art and design-related specialized courses and majors be established to increase opportunities for Deaf or hard-of-hearing students to learn and anticipate their future career paths, but these students should learn how to more actively utilize their own strengths in the field of art and design and to look at themselves more closely while creating their artwork.

### 5. Future Prospects

The first recommendation is to research the career paths of Deaf or hard-of-hearing people after they graduated from special needs schools and universities. How do people who have learned specialized skills in art and design make the most of their expertise after graduation? How do they grow professionally after entering the workforce, and in what ways do they find it difficult? What kind of learning was necessary during their school years? By conducting these surveys, it is necessary to reconsider art education for school-aged students in the future. The second point is an international comparison. It is necessary to survey the extent to which and how art education for Deaf and hard-of-hearing individuals is conducted at higher education institutions in other countries. For example, China has universities for the Deaf and hard-of-hearing, with departments specializing in art and design. It is necessary to survey what kind of curriculum and content of art and design education is provided in hearing special needs schools and higher education institutions in other countries. Third, related to the second point, it is necessary to survey how Deaf or hard-of-hearing people are pursuing careers in art and design or related activities after graduation from educational institutions in other countries. The fourth point is to consider how art can be used for an inclusive society. It is necessary to discuss what role art and design can assume to be inclusive of Deaf or hard-of-hearing people when considering inclusion rather than segregation.

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