Translation

Study on the Mastery Process for Workshop Design:
Turning Points for the Design Methods of Workshop Designers *

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This study investigates how workshop designers master the design process by focusing on the turning points in their workshop design methods. Semi-structured interviews were conducted with workshop designers having over five years of experience (n = 19). The analysis suggests that workshop designers realize the need to change their design methods when (1) encountering different types of participants, (2) changing positions in their teams, (3) collaborating with people from different professional and educational backgrounds, (4) becoming conscious of mentoring younger designers, and (5) using introspection to realize their ideal design methods. In addition, the findings indicate four elements important to the design mastery process of workshop designers: (1) original experiences and motivations, (2) conflicts and breakthroughs with others, (3) positive attitudes toward building a good relationship with co-workers and participants, and (4) establishment of theories on an individual level.

Key words : workshops, mastery process, design, turning points

1. PROBLEMS AND OBJECTIVES

Workshops have recently drawn attention as “a new learning approach” (Nakano 2001). However, Shindo (2004) indicates a shortage of skilled and experienced workshop designers as well as well-structured expertise in workshop design. Although several short-term training courses exist, workshop designers are usually trained through the apprentice system. Moreover, few researchers have studied training methods for novice workshop designers (e.g., Ueda et al. 2006); therefore, no universally accepted training methodology has been established (Ueda and Mori 2005).

Shindo (2004) highlights two reasons why few scholars have studied workshops. First, workshops are typically organized by private organizations. For example, non-profit organizations (NPOs) and enterprises organize more workshops than do public organizations, which have been studied in terms of social education. The second reason is that workshop phenomena are too varied to apply existing research theories and methodologies of education and learning. Baeg (2005) argues that the formalization and theorization of the methods for training workshop designers should be further investigated. Mori (2008) demonstrates the differences in the ways of thinking about the workshop design process between expert and novice designers. However, no research has addressed the process by which workshop designers acquire proficiency in workshop design.

In studying other types of training, multiple researchers have investigated learning through vocational experience. For example, Sakamoto (2007) considered a teacher to be an “adaptive expert” and asserted that teachers must plan long-term changes in the learning environment. Multiple teacher studies have examined teacher development: the five-stage model of teacher development (Berliner 1986; 1988), case studies (Kihara 2004; Yoshizaki 1998), a life history study (Yamazumi and Ujihara 1999), and a study on experiences that enhance teachers’ expertise (Kiishino and Muto 2006). Knowledge obtained through these studies can be applied to methods for training teachers and facilitating their development. Furthermore, methods for training nurses and social workers, whose expertise includes interpersonal care, are often based on studies of how they master such care (e.g., Benner 2001; Hosho et al. 2006). McCall et al. (1988), examining business administration, focused on how business people learn from experience. They studied the workplace experiences of business people and their career development based on the
lessons learned from them. Defining the opportunity for career development as “an experience that matures oneself,” Kanai (2002) classifies the experiences. He claims that there are two types of workplaces: those with abundant opportunities for career development and those with few opportunities. Further, he notes that studies on methods for managing enterprises that can enhance workplace learning can be founded upon his study.

To develop methods for training workshop designers, it is essential to understand their long-term mastery process. Therefore, this paper describes the process by which workshop designers gain proficiency, focusing on the turning points for their design methods. The knowledge provided by this study can be used for future training of workshop designers.

2. METHODOLOGY

2.1. Research Outline

Semi-structured retrospective interviews were conducted with 19 workshop designers (all with over five years of experience). A number of studies have questioned the reliability of retrospective interview protocols (e.g., Ericsson and Simon 1993). More recent discussions, however, have noted the significance of recognising and employing narratives as a source of useful data. For instance, Nakajima (2006) and Suwa (2005) regard “the subjects’ own words” as important data for understanding the cognition and mastery process. Because it would be logistically impractical to observe workshop designers for extended durations, retrospective interviews are effective and practical for collecting data on the mastery process.

The interviews were conducted from December 2007 to February 2008 at locations agreed upon by the author and interviewees. Each interview lasted approximately 100 minutes and was recorded with a digital voice recorder. The interviewees agreed to the aim of the study, the recording of the interviews, and the academic use of the data (with protection of their personal information). Each interviewee’s work experience was calculated from the time he/she became involved in workshop design as a staff designer and excluded periods (if applicable) when he/she was away from practice.

According to Shindo (2004), a characteristic feature of workshops is the variety of interests and affiliations of the designers. Because this feature is a vital consideration for the development of training methods for workshop designers, this study surveyed interviewees with varying levels of experience, interests, and affiliations. The interviewees’ interests included fine art education, formative art education, expression and communication, community planning, and the ability to develop new ideas for merchandise planning. In addition, the interviewees varied in their professional roles and affiliations: Interviewees included an NPO representative, an art museum curator, an university instructor, an artist, and an enterprise manager.

2.2. Interviews

First, each interviewee was afforded 20 minutes to create a timeline of his/her history as a workshop designer. This strategy was used in a study on the mastery process of contemporary artists (Yokochi and Okada 2007) and is applicable to this study. If the interviewee declared his/her timeline completed before 20 minutes had passed, the point of declaration was considered the end of his/her timeline creation. Following this exercise, each interviewee was asked several questions regarding their timelines. The questions addressed their first experiences as workshop designers and important career events.

For the subsequent 60–80 minutes, the interviewees answered the following questions: (1) When did the interviewee feel that his/her design method had changed? (2) With regard to (1), what specifically changed? (3) What triggered the change of the design method? (4) When did the interviewee feel that his/her way of thinking about practice changed? (5) With regard to (4), what specifically changed?, and (6) What triggered this change in attitude? As noted by Mori (2008), the design processes of experienced workshop designers reflect practitioners’ underlying mind-sets and values. As designers’ mind-sets may therefore be closely related to changes in their design methodology, this study also addressed changes in attitudes towards practice.

Table 1. List of Interviewees

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Gender</th>
<th>Years of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewee 1</td>
<td>male</td>
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<tr>
<td>Interviewee 2</td>
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</tr>
<tr>
<td>Interviewee 3</td>
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<td>Interviewee 6</td>
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<td>Interviewee 16</td>
<td>male</td>
<td>25</td>
</tr>
<tr>
<td>Interviewee 17</td>
<td>female</td>
<td>28</td>
</tr>
</tbody>
</table>
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Table 2. Typical patterns in turning points of workshop designers

<table>
<thead>
<tr>
<th>Turning points of workshop designers</th>
<th>Contents</th>
<th>Cases</th>
<th>Median Year of Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encountering different types of participants</td>
<td>cases in which participants worked with unfamiliar workshop participants</td>
<td>10</td>
<td>4th</td>
</tr>
<tr>
<td>Having their positions in their teams changed</td>
<td>cases in which participants' professional position is changed, such as becoming a member of another organization</td>
<td>6</td>
<td>5th</td>
</tr>
<tr>
<td>Working with collaborators with different professional and educational backgrounds</td>
<td>cases in which a participant designed a workshop in collaboration with someone from a different cultural background</td>
<td>11</td>
<td>6th</td>
</tr>
<tr>
<td>Becoming conscious of bringing up the younger generation</td>
<td>cases in which participants became aware of the training and development needs of other designers or the need to create a system in order to continue conducting workshops</td>
<td>8</td>
<td>6.5th</td>
</tr>
<tr>
<td>Trying to realize their ideal ways of design based on introspection</td>
<td>cases in which participants reflected on their workshop practices and attempted to bring them closer to a personal ideal</td>
<td>5</td>
<td>15th</td>
</tr>
</tbody>
</table>

3. RESULTS

3.1. Interview Results

From the 19 interview protocols, 17 were analyzed. Two were unusable because interviewees were unwilling to be recorded. Specifically, the following items were analyzed in the 17 protocols: (1) the turning points in the interviewees' design methods and (2) their process for mastering workshop design (Table 1).

3.2. Analysis I: Turning Points in the interviewees' Design Methods

Analytical Method

The experiences that interviewees described as turning points in their design methods are classified into several categories, described below.

Results

In Figure 1, the bars illustrate the interviewees' careers as workshop designers, and the turning points in their design methods are marked with double lines. Interviewees cited a total of 40 turning points (averaging 2.35/interviewee).

Experiences triggering these turning points are classified into five categories as shown in Table 2. This table indicates the median of the years of professional practice at which the changes occurred.

(1) Encounters with Different Types of Participants

This category covers experiences in which interviewees worked with unfamiliar workshop participants. Ten out of 40 design method changes were triggered by interactions with different types of workshop. Cases include changes in the third
year for Interviewee 7 and the fourth year for Interviewee 11.

Case 1-1

Living in Town O, Hokkaido, on a long-term basis, Interviewee 7 was involved in drama workshops as a member of an NPO. At the beginning of his career, he could merely follow older members’ instructions. However, in his third year, the change occurred: Social educational institutions from outside the town asked the NPO to organize workshops on topics other than drama. The NPO had no experience in this and Interviewee 7 experienced difficulty organizing workshops as he had previously done. Thus, he attempted a different method: He designed workshop programs while considering participants’ feelings during the workshops. Interviewee 7 noted the following:

What would young mothers hope to achieve through this workshop? Though their children are little, they would like to refresh themselves as mothers, women, and simply humans, and they would like to befriend those with whom they can share concerns about child raising. I understood the background for the workshop, and accordingly modified the contents of the workshop. Consequently, my manner of talking and goals for the 90- or 120-minute workshop also changed. (Interviewee 7)

Interviewee 7 then took the initiative to learn the participants’ backgrounds by reading relevant books and speaking to childcare and education experts.

Case 1-2

Interviewee 11 had extensive experience in organizing workshops. In her fourth year, a private elementary school asked her to organize a workshop. As it was the second of a series of three workshops, she visited the first one, which was organized by another workshop designer. She realized that the workshop participants’ behavior did not match her expectations based on past experience. Therefore, she designed her workshop on the basis of her observation and analysis of participant behavior in the first workshop. Interviewee 11 stated the following:

I observed the participants in the first session and perceived something different from my prior experience. I wondered about what made the difference, and I believed that I couldn’t apply what I had previously done. I pondered on or simply analyzed their behavior. As a result, I realized that they participated in the workshops not because they wanted to, even though they were in familiar environment, at school. My previous workshops were conducted outside the participants’ environment, such as in art museums or classrooms outside their school. The participants in the first session were in their own environment, thus they were in a different situation. In addition, they differed because they did not necessarily wish to participate in the workshop. Some of them participated only because it was a part of their curriculum, while the participants I was already acquainted with voluntarily attended my workshops. Although these differences were negativities, I tried to transform them into positive aspects in this workshop. (Interviewee 11)

Summary of (1)

Yoshizaki (1987) notes that teachers’ knowledge includes knowledge about students as well as about educational materials and methods. In workshops, the attributes of participants are rarely fixed, unlike in school lessons designed by teachers. Yet, participant information is important in both workshops and lessons (Mori 2008). Therefore, information gathering and knowledge about participants is essential in workshop design.

As seen in Cases 1-1 and 1-2, when designing workshops for participants with whom they were unfamiliar, practitioners recognized the need for analytical assessment of these participants and undertook this task with that need in mind. This experience may have deepened their general understanding of workshops as well as increased the variety of workshops they can design.

(2) Changing Positions in their Teams

This turning point category refers to changes in interviewees’ professional position in workshop design, such as becoming a member of another organization. Six out of 40 changes in design methods occurred when the workshop designers’ positions on their teams changed or when they moved teams. Cases include changes in the fourth year for Interviewee 3 and the fifth year for Interviewee 9.
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Case 2-1
Interviewee 3 had been involved in multiple workshops for over three years, but she had never independently designed workshops. In her fourth year, she obtained employment at an institution that organized workshops for children, where she took the lead in designing a workshop. Interviewee 3 said the following:

In this period, while I independently designed workshops, I alone planned the workshops while the remaining staff volunteered. So, even if I said, “I want to do this” or “Do that,” it would not be effective. For a good design, I realized that I must clarify why I formulated a plan (for example, offer a detailed explanation of why the activities were needed). Thus, when I was alone, I truly understood that I had to construct a very detailed plan in order to explain it to others and motivate the staff. (Interviewee 3)

Afterwards, Interviewee 3 learned to assess her workshop activities, as well as how she presented them to participants, in light of their aims and axis of orientation. She is currently in her sixth year, and her planning team includes five members. She regards this experience as useful for training younger designers.

Case 2-2
As a university student, Interviewee 9 had assisted at a workshop led by O, who conducted workshops for disabled children. Interviewee 9 made the following observation regarding that experience:

In particular, in the workshops with Mr O, I wasn’t responsible for anything. He was responsible for everything, so he was looking over it all and I didn’t need to think about that at all. So, at that time I was worried about each individual child. [...] When he was taking the main role, I could just listen to his instructions and he would say “this is what I want to do. Let’s do this”. Then, he would leave me to organise the contents, so I would do that. But, because he was constructing the main framework, I couldn’t really do things by myself. What made me really frustrated at that point was that I felt like I really wanted to talk to the mothers more. (Interviewee 9)

When Interviewee 9 graduated from university (in her fifth year of practice), O left the workshop. At this point, Interviewee 9 says that she became aware of her new role and responsibility and was able to introduce a notebook exchange activity for communicating with participants’ parents, something she had previously been unable to do. Hence, as a result of her own change in position, the situational awareness Interviewee 9 experienced as a staff member came to be reflected in specific activities in her workshop design.

Summary of (2)
Taniguchi (2006) studies career development in business managers and refers to such role changes as “an experience that matures oneself.” This characterization may also apply to events management experience. Cases 2-1 and 2-2 suggest that the “change of position” in workshop practitioners is not uniform. While the nature of positional changes varied among workshop practitioners, including in Cases 2-1 and 2-2, these changes fostered consideration and awareness towards others in different positions.

(3) Collaborating with People from Different Professional and Educational Backgrounds
This turning point category includes cases in which a interviewee designed a workshop in collaboration with someone from a different cultural background. Eleven of 40 changes in design method were triggered by collaborating with people from different professional and educational backgrounds. Cases include the changes in the seventh year for Interviewee 6.

Case 3-1
Interviewee 6 is a curator. Her background includes doctoral research on art education. She has experience designing classes, such as arts and crafts, and has observed many classes in graduate school. Based on this, she obtained a position as an educational representative to a museum. “I believed that because I’d completed university and school education, being a museum curator would be a rewarding and easy career that would capitalize on my expertise,” she stated.

During her fourth year at the museum, Interviewee 6 began a series of workshops related to an exhibition in collaboration with K, a theater company president; the series is still ongoing. K had an extensive background in workshop design.

In the twelfth workshop of this series, Interviewee 6 was stymied. It became necessary to
link the program to an exhibition of the ceramic art of living national treasure T. However, Interviewee 6, could not perceive the benefit of doing this and was unable to devise any ideas to implement it (it was her seventh year in the position). However, despite the fact that K was experiencing the same situation, by playing the part of devil’s advocate, K was able to come up with an idea that was completely unforeseen yet attractive for Interviewee 6. Thus, for Interviewee 6, K’s attitude in this context proved to be a source of major insight.

My limitation when considering educational programs and workshops within the art gallery was that I was restricted to artistic frameworks or frameworks related to art galleries. Even though I was doing this because I wanted to challenge the concept of an “art gallery,” I found myself constricted, I realized this when I could not come to terms with the concept of “breaking pottery.” It is impossible. But pottery does break! It physically shatters. It is impossible to appreciate and view pottery without considering that; however, I passed through without thinking about it, constantly regarding pottery as abstract or a work of art. But I realized that K was different. It was extremely satisfying to know that K was thinking, “This will break!” So, I realized that I should tackle objects—objects in the art gallery. I strongly felt that this was the point from where I should begin. It became easier. It may be a concept that I cannot understand, and I may never be able to understand it. But I realized that this was the reality of the situation. (Interviewee 6)

Due to K’s comments, Interviewee 6 could subjectively consider her fixed ideas at the time. In addition, she grasped elements of direction and goals for future workshop design.

Summary of (3)
In many cases, Interviewees noticed their own habits and prejudices by collaborating with others. Some teacher studies also report that views towards colleagues changed as a result of collaboration on activities (such as during regular events over the school year) (Kihara 2004). Similarly, Fujimori & Fujimori (1992) noted in their social psychology research positive effects of interpersonal conflict: (1) a deepened understanding of oneself, others, and existing relationships; (2) the opportunity to discover new perspectives and new sources of mutual understanding; and (3) the development of the ability to adjust to and effectively cope with future interpersonal conflict. On the other hand, Araki (2007) empirically studied how communities facilitate career development in business and suggested that participation in the community triggers the possibility of deep reflection.

This analysis suggests that collaborative workshop design enables designers to deepen their awareness of their own design practices.

(4) Becoming Conscious of Mentoring Younger Designers
This category refers to turning points in which interviewees became aware of the training and development needs of other designers or the need to create a system in order to continue conducting workshops. Eight out of 40 design method changes were triggered by a consciousness of a mentoring or training role. Cases include changes in the sixth year for Interviewee 2 and the seventh year for Interviewee 17.

Case 4-1
At the recommendation of his university academic advisor, Interviewee 2 began working at a non-profit organization that held workshops. Initially, when serving as a facilitator, he had considered himself more of a visitor than a staff member. As he was given increasing responsibilities for planning around his fourth year of practice, however, his confidence grew and his self-image began to change. Interviewee 2 recalled the following regarding that experience:

From here onward, I also wanted to nurture people capable of conducting workshops. [...] Although four of us participated, one became a teacher (found employment) and left the program. There was one who persisted but maintained that he wanted to become a teacher, and it was evident that he would eventually leave. I thought we needed someone else to continue. So, I invited various people, and I think it was around then that I began voicing my opinions to these people. (Interviewee 2)

Although Interviewee 2 experienced a change in perspective, it did not immediately reflect in his design methodology. However, in his sixth year, he delegated the planning to junior designers and
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assumed a supporting role. The junior designers succeeded in conducting the workshops, and Interviewee 2 has since been able to sit back and relax.

Case 4-2
Following her six-year spell as an art museum curator, Interviewee 17 resigned because her interests changed; she became involved in the launch of a children’s museum. During this time, it occurred to her that rather than personally conducting workshops, she should have staff at the new facility independently implement and conduct these workshops.

At S Centre, it wasn’t clear whether I should have been involved. But it was necessary to design a menu of workshops for the staff, something resembling a workshop recipe. At the time, keeping the textualization process in mind, I began considering the nature of preparation. (Interviewee 17)

Interviewee 17 recognized the importance of preparation time and scheduling constraints when considering the modes of communication necessary for workshops to be continuously conducted.

Summary of (4)
In Cases 4-1 and 4-2, it was found that, despite their differing circumstances, practitioners in both cases were keenly aware of ensuring the continuation of the workshop and creating mechanisms for training personnel. Although there is no system for workshop design analogous to the preceptor system used for training new nurses (Yoshitomi and Funajima 2007) or the mentor system used in business (Hisamura 1997), the results indicated that designers became conscious of nurturing junior designers during the sixth through eighth years of practice. Further, this consciousness was reflected in their own workshop design (the only exception was Interviewee 10, who had extensive teaching experience).

In addition, the results suggested that workshop designers who recognized the need for continuity gained consciousness of matters beyond the scope of professional training and could accordingly modify their workshop designs. Case 4-2, for example, concerned the establishment of a new facility and events. In other cases, infrastructure was developed for the continuation of workshops (Interviewee 16) and a vacant house was rented and managed (Interviewee 8). Having developed an awareness of the need for workshop continuity, as illustrated by these examples, the designers became concerned with not only staff training but also management practice. This unique phenomenon may be attributed to the fact that the workshop exercises were conducted by private groups, such as NPOs and enterprises (Shindo 2004), and often began without attachment to a physical location.

(5) Using Introspection to Realize their Ideal Design Methods
This category includes experiences in which interviewees reflected on their workshop practices and attempted to bring them closer to a personal ideal. Five out of 40 design method changes were triggered by attempts to realize ideal design methods through introspection. Cases include changes in the 15th year of practice for Interviewee 15.

Case 5-1
Interviewee 15 is an artist. In addition, he has held a teaching job in Papua New Guinea and has worked in real estate for some years. During this period, he also designed workshops.

At the beginning of his practice, Interviewee 15 focused on conveying his own message and method. However, after interacting with ethnologists and sociologists in Papua New Guinea, he became interested in research methodology that involved eliciting narratives from local residents. Simultaneously, being involved in various large-scale art projects, he began thinking about implementing workshops in a manner that adapted to Japanese culture in order to collectively “create landscapes” with workshop participants. This turning point occurred in the 13th year of his practice.

This change in perspective was reflected in his workshop design in the 15th and 16th years of his practice. During the former, he regularly conversed with local residents over tea (twice a month for a year) and designed workshops by discussing their content with participants. Owing to these meetings, another group was formed to implement the conceived ideas, and this group began operating independently. Although Interviewee 15 is no longer part of that organization, the group remains active.

In his 16th year, Interviewee 15 planned a bartering event involving an entire downtown...
shopping area, in which participants designed a "workshop producing another workshop" by devising frameworks and tools as well as conducting demonstrations.

Summary of (5)

In addition to Case 5-1, other responses indicated that by reflecting on past experiences, designers developed new ideas, which they implemented in their own design methodology.

Mori (2008) suggests that "individual-level implementation theories" shaped through experience operate in the background during the workshop design process.

Based on an examination of multiple cases in construction and psychoanalysis, Schön (1983) indicates that specialists conduct "reflection in action." Matsuo (2006) highlights the importance of experience in the learning processes of professionals and proposes that "conviction" is related to "the ability to learn from experience."

An interesting element of the mastery process for workshop designers is that changes in ways of thinking were not immediately reflected in workshop design methodology. Instead, as in Case 5-1, while forming personal hypotheses on the basis of past experiences, workshop designers examined ways of incorporating them into their design processes.

3.3. Analysis 2: Methods of Analysis

Analytical Method

Section 3.2 revealed the nature of the turning points responsible for the changes in the design methods of workshop designers. In addition, it confirmed that various instances of "realization" occurred approximately when the interviewees changed their design methods.

However, the results of the analysis in 3.2 do not comprehensively clarify the mastery process. Since most of the analyzed turning points were coincidentally experienced, it is difficult to link them to the interviewees’ development using this data alone.

Therefore, to further analyze the interviewees’ mastery processes, I transcribed the gathered spoken data and linked it to the mastery processes. The strategy uses the Grounded Theory Approach (GTA) (Glaser and Strauss 1967) because it is more detailed and systematic than other qualitative research methodologies.

Although there are several versions of the GTA, from among them, the revised Grounded Theory Approach (below, the Revised GTA) (e.g., Kinoshita 2003; 2007) is well suited to the analysis of interview surveys. Because it not only details specific procedures but is also often used in the analysis of dynamic processes, this method provided a principle referential axis.

According to the revised GTA, data analysis and collection are simultaneously conducted. By confirming the results of the analysis using newly collected data, distinct explanatory categories are formed (Kinoshita 2003). The primary difference between the GTA and revised GTA is that while the former segments data, the latter instead analyzes contexts expressed within the data according to the researcher’s understanding of issues. The analysis was conducted according to the following procedure:

1) Formation of "Concepts": Multiple concepts were concurrently determined through open coding. The analysis worksheet (Kinoshita 2007) was used during the concept discovery process, and it recorded the concept name, concept definition, and specific examples. In addition, the interpretation guide and inter-concept connectivity were recorded and the analysis worksheet was created for each concept.

2) Checking for Extremes and Contradictions: All concepts were checked for extreme or contradictory data. This step prevented data from being arbitrarily or manipulatively interpreted.

3) Theoretical Saturation: Theoretical saturation was reached when there were no further examples of extreme or contradictory data among the concepts formed from data collection and when it was no longer possible to form new concepts. According to the revised GTA, objectivity can be ensured by setting two levels of theoretical saturation: the point when concepts are individually analyzed and the point when models are formed.

4) Grouping: Multiple similar concepts were organized into categories according to their mutual connectivity. These categories were separated into groups according to their inter-category connectivity. During the category formation, each concept was individually cross-checked against other concepts for possible connectivity. Categories were then organized according to this connectivity. While categories
were being formed, they were simultaneously divided into groups. Connectivity was defined using several parameters: the temporal ordering of concepts, closeness of meaning, and degree of behavioral similarity.

(5) Displaying the Results: Inter- and intra-category group connectivity were examined and relationships between concepts were organized into a model diagram.

Results

Twenty-five concepts were formed from the analysis of the 17 interviewees. Categories and category groups were formed according to the temporal ordering of concepts, closeness of meaning, and degree of behavioral similarity. As a result, ten categories and four category groups were formed (see Table 3). In the following discussion, [ ] indicates a category group, <>indicates a category, and [ ] indicates a concept.

The contents of the category groups and categories are as follows:

- [Original experiences and motivations]

- [Conflicts and Breakthroughs with others]

- [Discomfort towards others]

- [Positive attitudes toward building a good

- [Consideration of context]

- [Evaluation of others]

- [Interest in workshop Continuity]

- [Establishment of theories on an individual]

- [Reinterpretation of experience]

- [Reflection on design practices]

- [Writing on their own practice]

Table 3. Concepts, Categories and Category groups

<table>
<thead>
<tr>
<th>category groups</th>
<th>categories</th>
<th>concepts</th>
<th>The ID of the interviewee whose episode includes the concept</th>
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</thead>
<tbody>
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<td>&lt;Original background&gt;</td>
<td>[referential learning experience] [way of perceiving of schools]</td>
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</tr>
<tr>
<td></td>
<td>&lt;Spirit of self-dependence&gt;</td>
<td>[fundamental motives for workshop design] [Independent-mindedness]</td>
<td>3,5,6,7,8,9,10,11,12,13,14,15,16,17</td>
</tr>
<tr>
<td>[Conflicts and Breakthroughs with others]</td>
<td>&lt;Acceptance of the design practices of others&gt;</td>
<td>[realisation of the design practices of others] [encounters with superiors] [statements of others] [realisations during cooperative design activities] [methods of dealing with other designers]</td>
<td>1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17</td>
</tr>
<tr>
<td></td>
<td>&lt;Discomfort towards others&gt;</td>
<td>[unfamiliar workshop practices] [worries related to work awareness and work period] [discord with those nearby] [difficulties in conveying workshop design to those from different</td>
<td>1,3,4,5,7,8,9,14,17</td>
</tr>
<tr>
<td>[Positive attitudes toward building a good</td>
<td>&lt;Consideration of context&gt;</td>
<td>[realisation of the necessity for workshop design to be adapted to] [realisation of the necessity for workshop design to be adapted to] [interest in workshop contexts and backgrounds]</td>
<td>2,5,7,8,9,11,12,13,14,15,17</td>
</tr>
<tr>
<td></td>
<td>&lt;Evaluation of others&gt;</td>
<td>[evaluation of others]</td>
<td>1,4,5,9,11,13,14,16</td>
</tr>
<tr>
<td></td>
<td>&lt;Interest in workshop Continuity&gt;</td>
<td>[worries and concerns about the continuity of the practice]</td>
<td>2,3,6,7,8,9,10,11,12,13,14,15,16,17</td>
</tr>
<tr>
<td>[Establishment of theories on an individual]</td>
<td>&lt;Reinterpretation of experience&gt;</td>
<td>[personal significance of workshops] [workshop design preferences]</td>
<td>1,2,3,4,5,6,7,8,10,11,12,13,14,15,16,17</td>
</tr>
<tr>
<td></td>
<td>&lt;Reflection on design practices&gt;</td>
<td>[reflection on design practices]</td>
<td>1,2,4,5,6,7,8,13,14,15,16,17</td>
</tr>
<tr>
<td></td>
<td>&lt;Writing on their own practice&gt;</td>
<td>[writing on their own practice]</td>
<td>1,6,7,9,10,11,13,15,16,17</td>
</tr>
</tbody>
</table>

[ ] indicated a category group, <>indicates a category and [ ] indicates a concept.
workshops. These desires formed the category <spirit of self-dependence>, which comprises the concepts [fundamental motives for workshop design] and [Independent-mindedness]. Two further categories, <original background> and <spirit of self-dependence>, fell into the group [original experiences and motivations].

[Conflicts and breakthroughs with others]

The workshop designers were not only influenced by their [original experiences and motivations] but also by experiences involving other workshop designers. By coming into contact with the mindsets of other designers, they refined their own design methods and attached fresh meaning to their experience. Nevertheless, many designers were unable to immediately accept the design practices of others. While comparing their own design practices with those of others through <acceptance of the design practices of others> and <discomfort toward others>, the designers' gradual formation of characteristic mindsets was pivotal toward achieving mastery. The category <acceptance of the design practices of others> comprised the concepts [realization of the design practices of others], [encounters with superiors], [statements of others], [realizations during cooperative design activities], and [methods of dealing with other designers]. The category <discomfort toward others> consisted of the concepts [unfamiliar workshop practices], [worries related to work awareness and work period], [discord with those nearby], and [difficulties in conveying workshop design to those from different cultural backgrounds].

Case 1: [Conflicts with others and breakthroughs]

Interviewee 4 became interested in workshops and participated in forums with several other designers (realization of the design practices of others). However, she reported that the forums focused "completely on methodology" (unfamiliar workshop practices). She realized that the nature of workshop design changes according to the participants and themes of the workshop (realization of the necessity for workshop design to be adapted to participant differences), stating, "I think I realized that workshops differ depending on their designers" (methods of dealing with other designers).

[Positive attitudes toward building a good relationship with co-workers and participants]

When designers become proficient in workshop design, they may experience shifts toward new frameworks and role changes, resulting in [realization of the necessity for workshop design to be adapted to changes in one's own position]. As designers experience workshops of different sizes or are requested to conduct workshops with unfamiliar participants, there are instances of [realization of the necessity for workshop design to be adapted to participant differences] along with a strengthening of [interest in workshop contexts and backgrounds]. These concepts formed the category <consideration of context> (see Cases 1–1, 1–2, 2–1, and 2–2 in Section 3.2). The category <evaluation of others> contained the concept [evaluation of others], which refers to others' evaluations on a workshop as well as the contents of these evaluations. Moreover, it refers to one's interest in how others are evaluated. In addition, as their workshop experience increased, workshop designers experienced [worries and concerns about the continuity of the practice] and [involvement in training others]. These concepts constituted the category <interest in workshop continuity> (see Cases 4–1 and 4–2 in Section 3.2). The categories <consideration of context>, <evaluation of others>, and <interest in workshop continuity>, which represent a step further from <acceptance of the design practices of others>, formed the group [positive attitudes toward building a good relationship with co-workers and participants].

[Establishment of theories on an individual level]

Each designer is considered to possess a characteristic manner of viewing the workshop mastery process based on his/her experience. Categories related to this notion formed the group [establishment of theories on an individual level]. The group [original experiences and motivations] is comparable to [establishment of theories on an individual level] (see Case 5–1 in Section 4.2). Moreover, [conflicts with others and breakthroughs] can lead to profound <reflections on design practice>, and these may end up acting as important elements promoting the [establishment of theories on an individual level]. Furthermore, as designers displayed [positive attitudes toward building a good relationship with co-workers and participants], such as by writing books or reports on their workshop experiences, their [reflection on design practice] deepened, thus encouraging the [establishment of theories on an individual level] (see Case 4–2 in Section 3.2).
Case 2: [original experiences and motivations] and [establishment of theories on an individual level]

During university, Interviewee 1 engaged in fieldwork by joining a youth group in a fishing village. He reported this experience as a [referential learning experience] in terms of his current workshop design. While referring to the content of his learning through these experiences, namely that "we are able to create a unique world through interactions with others" ([referring to past learning experiences]), he sufficiently considered seating arrangements and scheduling for creating workshops in which people could “engage in passionate discussion seriously” ([workshop design preferences]). Moreover, Interviewee 1 valued his workshops as mediums where he, as well as his participants, could conduct research and acquire an awareness of unanswered questions ([personal significance of workshops]).

Case 3: [Conflicts with others and breakthroughs] and [establishment of theories on an individual level]

As Interviewee 5 had assisted Artist H with his workshops ([realization of the design practices of others] and [encounters with superiors]), he was familiar with conducting workshops; however, he was not acquainted with making scheduling decisions.

However, he interacted with a group that employed different methods ([unfamiliar workshop practices]), and when collaborating with this group on workshop designs, he initially felt "uncomfortable" ([discord with those nearby]). He gradually developed the ability to “understand the intentions of others” ([realizations during cooperative design activities]) and understood why he was “not able to accept their approaches.” He reported that “while watching each other, I had to explain my design methods and build relationships” ([difficulties in conveying workshop design to those from different cultural backgrounds] and [methods of dealing with other designers]). Furthermore, by aiming for things that ‘only he could accomplish’ and putting these into practice ‘live’, he became more keenly aware of his own bearing ([personal significance of workshops]; [workshop design preferences]).

4. CONCLUSION

This analysis suggests that workshop designers can become aware of the need to change their design methods when (1) encountering different types of participants, (2) changing positions in their teams, (3) collaborating with people from different professional and educational backgrounds, (4) becoming conscious of mentoring younger designers, and (5) using introspection to realize their ideal design methods. In addition, the findings indicate four elements important for mastering the design process: (1) original experiences and motivations, (2) conflicts and breakthroughs with others, (3) positive attitudes toward building a good relationship with co-workers and participants, and (4) establishment of theories on an individual level.

Figure 2 illustrates the conceptual category groups revealed by the analysis. The order of category groups was generally determined by when

![Fig. 2. A model of mastery process for workshop design](image_url)
its corresponding categories or concepts appeared or failed to appear in the Interviewees’ workshop design history. The results of the analysis, organization, and examination of the category groups indicate that the workshop design mastery process tends to assume the following order: 

- [original experiences and motivations]
- [conflicts with others and breakthroughs]
- [positive attitudes toward building a good relationship with co-workers and participants]

The passage of time is illustrated by the arrows within the figure.

Moreover, the group [establishment of theories on an individual level] plays a pivotal role, connecting the three abovementioned category groups. This is supported by the analysis, which confirms the continuous activity of [establishment of theories on an individual level] throughout the mastery process.

Furthermore, [original experiences and motivations], [conflicts with others and breakthroughs], and [positive attitudes toward building good relationships with co-workers and participants] are factors supporting the [establishment of theories on an individual level]. The interaction of these factors is illustrated by the dashed lines in the figure.

5. FUTURE ISSUES

This study reveals data on turning points for workshop designers’ design methods and presents a model for the workshop design mastery process.

Several recommendations to cultivate workshop designers can be made on the basis of the analysis thus far. Examples of such recommendations are outlined below.

Stages of the Design Mastery Process

The turning points appear to be correlated to specific years of professional practice. Thus, the developmental stages for teachers—initial, mid-career, and veteran stages—may also be applicable to workshop designers.

Discovery of Design Models

All the designers had experienced workshops designed by others as well as gained insights not directly related to workshop design. Moreover, reflecting on these experiences prompted designers to examine their own future goals and ambitions. The results suggest that discovering a unique design model (Mori 2008) through past experiences and reflecting on these experiences is important for workshop designers' mastery process.

Importance of Understanding Target Participants’ Backgrounds

As the workshop designers became involved in workshop design through a variety of background processes, the nature of their mastery and the rates at which they achieved it varied. Therefore, the motivation and readiness of designers can be expected to vary at the beginning of their professional practice, and issues related to their development may also vary. In the future, it will be necessary to develop a supporting methodology that considers participants’ individual backgrounds.

Necessity of Workshop Research Opportunities

Comments indicating the need for “research,” “analysis,” and “investigation” in workshop design were made at various points by interviewees with extensive experience in workshop design. As these facts suggest, workshop design seems to require the collection of detailed information and advance simulations to generate hypotheses as well as the development of activities whose logic reflects workshop goals. In the future, it will be necessary to offer learning environments that help designers record and share design processes; collaborate with other designers; and connect with researchers in other, related areas of research.

Moreover, this environment should incorporate technology.

A limitation of this study, however, is that it does not adequately analyze what designers learn through changes in their perspectives and values as well as through their mastery processes. Moreover, because this study targeted practitioners’ retrospective reflections on their own experiences, there will necessarily be individual differences in terms of memory and cognition. In addition, this study did not analyze the historical contexts in which the designers operated, their connections to other work experiences, and the possibility of transfers. In the future, cohort studies must be conducted that target designers and gather data on their connections with other specialized fields, activities, and transfers.

ACKNOWLEDGMENTS

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REFERENCES


