A Preliminary Study of Practice-Led Research in Arts and Design Higher Education: Analysis of Typology

Lin Fang-Tzu and Lin Hui-Wen

Abstract—In recent years, it has been a trend in higher education to do practice-led research rather than theoretical research in art and design. The ability of making creative work is indispensable. However, the definition and the methodology of practice-led research have still been discussed. The definition and the use vary among countries, institutions, disciplines. It leads to some problems such as the dissemination and the application of practice-led research. More and more scholars in Taiwan began to discuss about this approach. Yet in Taiwan, doctoral theses in arts and design still tend to be theoretical research. Professors may need a certain criteria and standards to instruct students.

This paper focused on literature review and analysis of postgraduate practice-led theses. The purpose is to clarify the application methodologies of practice-led theses and to view the research methodologies, research results, and the connection between practice and research. Furthermore, to talk about the pedagogy design on practice-led research. This paper analyzed around fifty postgraduate theses and categorized into two main categories of practiced-led theses in art and design, which are Creation Practice and Teaching Practice. Hoping to provide scholars in arts and design some references on instructing practice-led research to their students.

Index Terms—Practice-led research, higher education, arts and design, typology, creation practice, teaching practice.

I. INTRODUCTION

Recently, practice-led research has been a trend in higher education. Especially in Europe, the U.S.A, and Australia. While the definition of practice-based research and practice-led research have not been explicitly defined, there are more and more theses mentioning practice-based and practice-led that have been finished. I wondered how it works and if they actually have some common points or similar methods to be counted as practiced-based research or practiced-led research.

Many scholars have discussed about the relationship between practice and research. Practice is an activity which can be employed in research, the method or methodology must always include an explicit understanding of how the practice contributes to the inquiry and research is distinguished from other forms of practice by that explicit understanding [1]. Kathrin Busch (2009) had pointed out that art and theory was entangled in multiple ways and focused on the production of knowledge rather than the production of artworks. Nowadays artistic practice is more than just an application of theory and that theory is more than a mere reflection on practice [2]. The concept of design as research is either applied research, where the resulting knowledge is used for particular application, or action research, where the action is calculate to generate and validate new knowledge or understanding, or even fundamental research. C. Frayling had said that at the college, higher doctorates or honorary doctorates are given to individuals with a distinguished body of exhibited and published work, but they do not at present offer research degrees entirely for work where the art is said to speak for itself [3]. The artwork has to be presented publicly as a requirement in order to achieve doctorates. Besides, the researcher cannot just present the artwork based on his or her own thought. Therefore, research has to be applied to the artwork so that the new concept or knowledge can be validated.

K. Lampela had suggested three delineations- a written research focusing on an issue connected to the work or field of an artist, a written report of an art production focusing on the artistic process and the art production's connection to a specific research problem, and an art production- as a functional approach to include one's personal artwork in research [4]. G. Petelin addressed that in visual art, a thesis constitutes a practical or studio component and a written component like an exegesis or dissertation. The studio component may be an exhibition of artefacts or images, a performance, an installation, a film, a script, a design…or something entirely unexpected [5]. Based on these, we know in arts and design, it's important to have art production alone with a documentation to record the process of making the art production, the insight that the artist had gotten during the whole process.

A. Viewing the Art Degree Offering Situation Worldwide

The reformation of doctoral degrees in Australia, UK, and Finland in the early 1980s allowed university faculties and departments offering art degrees to conduct their own research practices [6]. In Finland, the Doctor of Arts degree has been available in Aalto University School of Art and Design since 1983. The opportunity to create products as part of the dissertation began in 1992 [7].

B. Scholars in Taiwan Are Following up the Trends of Doing Practice-Led Research

In Taiwan, more graduate institutes of arts and design have been established than before. There have been more and more

postgraduate theses about practice research in arts and design. However, doctoral theses in arts and design still tend to be theoretical research. Ph. D who got degree in arts and design in Taiwan are rare to see in higher education in Taiwan [8].

To create artworks as one way to achieve master degrees has been available in Taiwan since 2013. According to the degree conferral law from Ministry of Education, Taiwan in 2013, *Graduate students enrolled in a master's degree program in fine arts or an applied science or technology may, in lieu of a master's thesis, submit a creative work or performance accompanied by a written report, or a technical report* [9]. Therefore, besides a performance of the creative work, postgraduate students in Taiwan have to submit documentation about the process of making the creative work. Some Taiwanese scholars (W. L. Ho, C. F. Lee, and C. H. Chen, 2013) have mentioned that students in Taiwan often have problems like the insufficient of understanding and applying literature and theories. It is difficult for them to form concepts well. And they lack of the ability of describing their words and analyzing data [10].

II. LITERATURE REVIEW ON PRACTICE-LED RESEARCH

The definition and the methodology of practice-based research and practice-led research has been discussed for years. The definition and the use varies among countries, institutions, disciplines. It also leads to some problems such as the dissemination and the application of practice-based research and practice-led research.

Frayling came up three categories about the relationship between research and art and design in 1993, which are *Research into art and design, Research through art and design, and Research for art and design* [3]. Research *into* art and design is to do research into a variety of theoretical perspectives on art and design. Research *through* art and design includes material research, development work, and action research. To be more detailed, action research includes writing a research diary step by step and writing a resulting report to contextualize the research. The third category is Research *for* art and design. Research where the end product is an artefact. The goal is to communicate a knowledge in a sense of visual or iconic or imagistic communication rather than in a sense of verbal communication [3].

Practice-based and *practice-led* are terms that are still being contested. Researchers (RUST, Chris, MOTTRAM, Judith and TILL, Jeremy, 2007) have adopted a basic definition of practice-led research. Which is *Research in which the professional and/or creative practices of art, design or architecture play an instrumental part in an inquiry* [1]. G. Petelin had referred that practice-led means that a practical goal rather than gaining knowledge of an external phenomenon primarily drives the research [5]. Nowadays, practice-led research is the current term used in most universities in the UK and in the design discipline, whereas artistic research is used more extensively in other European countries and in the field of fine arts [6], [11]. To do practice-led research can help researchers to improve the self-understanding of them, to interpret the meaning and the value of their creations, also to improve their creativity [10].

III. DOCUMENTATION IS A SIGNIFICANT ELEMENT

Many scholars had discussed the methodology and the utilities of practice-led research. Reflection and documentation are important elements for doing practice-led research. M. Mäkelä and N. Nimkulrat (2011) had reviewed and discussed reflection and documentation in practice-led design research through four doctoral research projects completed at the Aalto University School of Art and Design. They came up two ways to utilize documentation which are documentation *of* making artefacts and documentation *for* making artefacts. Documentation of making artefacts takes place at the same time as the artist-researcher gradually forms material into artefacts, whereas documentation for making artefacts arises before the actual creation of artefacts when the artist-researcher is in the process of searching inspiration for his/her creation [12].

Some researchers prefer to use the word *practice-led* than *practice-based* since 2007. Practice-led research emphasizes on creative work and to integrate practice in arts and design into the research progress [13]. Practice-led research focus more on the documentation of the research process also the evaluation and reflection of the researchers themselves than the theoretical research part. As a consequence, we will just mention *practice-led* afterwards as the focusing research.

IV. FINDINGS

While doing literature review, we analyzed around fifty postgraduate theses, which are all in art and design and mostly from Taiwan. Among all the theses, we categorized two main categories, which are *Creation Practice and Teaching Practice.*

A. Category 1-Creation Practice

In work creation category, the researcher has to record the whole progress when doing the creative work. The creative work has to be presented publicly. It can be presented in a way like an exhibition, an event, or other artistic acquisition. The theoretical part comprises the student's written analysis of his or her own creative work in relation to the chosen research topic [3]. The analyzed theses in this category all have the plan and the preparation for their work, including naming the title, brainstorming, drafting the creative work…etc. After finishing the creative work, they presented it publicly. When they got public views and comments, they could evaluate their work along with their record of the whole progress.

There are three types in the category of Creation Practice that we sorted, which are Standard Creation, Testing Creation, and Community-Involved Creation.

1) Type 1 — Standard creation

Fig. 1. Standard creation in creation practice.

In Fig. 1, researchers have to finish creating the artwork in person and to present it publicly. For example, I-Pei Chang (2007) did research on Hakka culture in Taiwan and then designed some artefacts such as tableware and furniture

based on the research. And then she attended a design competition as a way to let her artwork be publicly viewed [14].

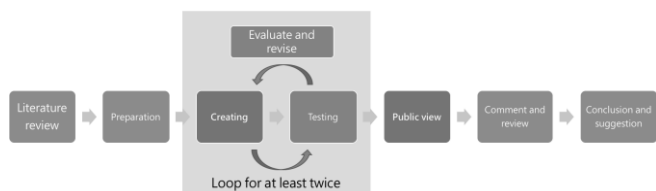### 2) Type 2 — Testing creation

Fig. 2. Testing creation in creation practice.

In Fig. 2, during the creating phase, researchers test the creative work such by doing interview or demonstrating prototype before the phase of public view. Researchers evaluate and revise the artwork for at least twice while creating the work. For example, Ching-Ru Chen (2014) shot a short film as the work creation. The film included some issues like the transition of family structures in Taiwan and dementia. She revised the content of the film after evaluating with experts and partners for many times. As for the public view, she displayed the film in a cinema with ninety audiences attended. After that she arranged a forum after the film to get feedback from the audiences [15].
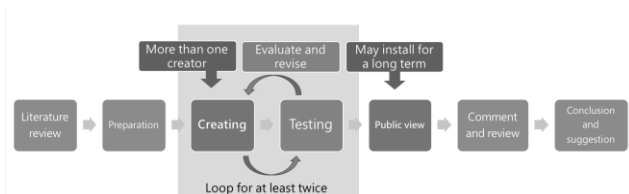
3) Type 3 — Community-involved creation

Fig. 3. Community-involved creation in creation practice.

We found there are some special theses that the researchers got involved in a community by participating a project or having an internship. In Fig. 3, usually the researcher made the creative work with the local people in the community instead of making it by their own. During the research process, it is important to get familiar with the community. The researcher has to know more about the research area and research subjects to have deeper understanding so that he or she can get more explicit result. Besides, the researcher has to document the whole participating process and the findings during the research process. After the project ends, the researcher has to interview the research subjects and to analyze the result along with his or her own documentation. Finally, to sort out conclusions and suggestions. For example, Hao-Yueh Chang designed a kitchen including the interior, the flow, and some renovation with the local people in their community by designing some activities for the community [16]. Because the kitchen is in the community, it can be viewed publicly and also be used for a long term rather than just be exhibited for a short term.

B. Category 2 — Teaching practice

Among some graduate institutes of art and design, we found many theses used *teaching* as a method to do the practice-led research. Researchers discovered the problems, faced the problems, and solved the problems as practitioners or teachers. Some of the researchers may have experience of teaching already before they start doing the research. Aside from designing lessons, researchers have to evaluate the lesson plan with either research partners or experts. Researchers have to teach lessons in person and document the process of teaching either by themselves or by research partners. Also, researchers have to list down some problems during teaching and come up solutions for the problems. Finally, to analyze and evaluate the result. In this category, the creative work of the researchers is the lesson plan. In Addition, their creative work is viewed publicly during the phase of teaching.
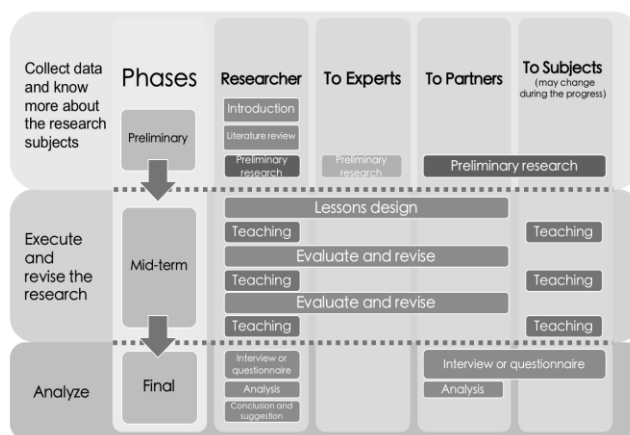

Fig. 4. Overview of teaching practice.

In Fig. 4, there are three phases and four characters. In preliminary phase, the researcher collects data, does the introduction and literature review, and gets to know more about the research subjects. The researcher has research partners to help with knowing more about the research subjects and the teaching environment. Sometimes the researcher asks experts to help with the preliminary research. But the experts usually are not involved in the final phase. In addition, one of the four characters is researcher subject. Research subject may not always be the same group during the whole research process. S. A. Chen (2012) recruited research subjects through posters and recruitment messages on social media. The researcher had two recruitments because the required background of the research subjects were different and they were asked to do different tasks [17]. In the mid-term phase, the researcher designs the lessons and executes the lesson plan. Meanwhile, to evaluate and revise the lesson plan with research partners or experts for more than two times. In the final phase, the researcher gets the feedback from partners and subjects by doing interviews or questionnaires. Finally, the researcher analyzes the result and writes the conclusion and suggestions.

Furthermore, we sorted three types in the category of teaching practice, which are *Preparation Evaluation, Teaching Evaluation, and Two-Loop Evaluation*.

1) Type 1 — Preparation evaluation

Preparation Evaluation shows in Fig. 5 that during the phase of design the lessons, researchers would evaluate the lesson plan with experts or research partners and revise it. Besides, this procedure has to be done at least twice. P. C. Liu

(2013) designed a lesson plan combining art with Orff Schulwerk and taught to kindergarten students. She evaluated and revised the lesson plan by giving a testing teaching and interviewing the research partners during the phase of design the lessons. She collected more information by evaluating observation documentation and the teaching diary to complete a formal lesson plan. And the researcher didn't revise the lesson plane again during the phase of teaching. P. C. Liu also interviewed the research partner before and after every class and designed two questionnaires based on the result. One was for the students' parents after the researcher finished all the lessons and the other was for the audiences, like parents and teachers who came for the performance of the students. After receiving the questionnaire result, the researcher analyzed it during the phase of analyze [18].
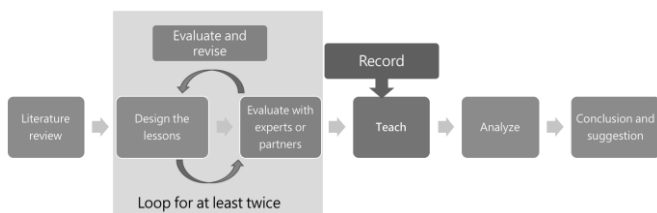

Fig. 5. Preparation evaluation in teaching practice.

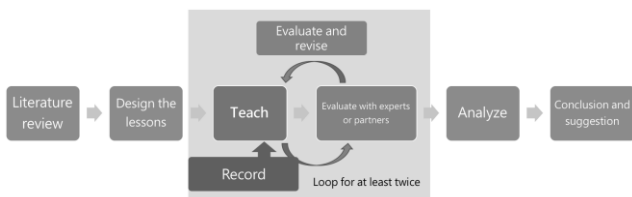### 2) Type 2 — Teaching evaluation

Fig. 6. Teaching evaluation in teaching practice.

In Fig.6, Teaching Evaluation is that after designing the lesson plan, researchers evaluate and revise the lesson plan with experts or research partners during the teaching phase and loop the procedure at least twice. J. Meng (2016) tried to teach creative dance to high school students to stimulate student's interests on learning dance. Her research partner was a dance teacher in the high school who gave advises based on her understanding about the students in the class and her own previous teaching experience to help the researcher revise the lesson plan during the phase of teaching. J. Meng designed six learning sheets for the students and asked students to finish the learning sheets so that she could revise the lesson plan as well during the phase of teaching. Besides, the researcher wrote the reflection diary by evaluating the documentation during the class after finishing every class [19]. There may be several sections in the phase of teaching with different purposes. S. A. Chen (2012) had two sections in the phase of teaching. The first section was focusing on documenting the opinions of the research subjects through discussions and also bonding the relationship between each other. The second section included students in a community, and was focusing on letting the research subjects think how to implement art into the locals and the community. During the phase of teaching, the researcher was doing action research, observation, and

analysis at the same time, which the researcher referred as repeating evaluation. [17].
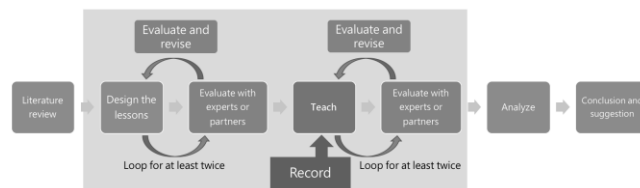
3) Type 3 — Two-loop evaluation

Fig. 7. Two-loop in teaching practice.

Two-loop Evaluation as Fig. 7 shows that researchers evaluate and revise the lesson plan with experts or research partners in both phases of designing the lessons and teaching, and each loop has to be run for at least twice. C. L. Chung (2013) interviewed some experts and students and used the result as references to revise the lesson plan during designing the lessons phase, also she interviewed the same group of experts again during the teaching phase [20]. K. L. Chao (2017) designed a lesson plan combining art with role playing and taught to primary school students. The researcher had more than one research partner, including the homeroom teacher of the class, the director of academic affairs in the school, one performing art teacher, and three intern teachers. The researcher revised the lesson plan by doing interview with the research partners during the phase of design the lessons and also during the phase of teaching. Besides, the researcher gave the evaluation sheet to students and asked them to finish it after every class to see how much did the students understand about the lessons. During the phase of analyze, the research analyzed data from the observation documentation, teaching diary, interview result from the researcher partners, and the interview result from the students [21].

V. CONCLUSION AND SUGGESTION

This paper sorted out two main categories in practice-led research. The two categories all have creative work but with different kind of presenting ways. In the category of Creation Practice, the creative work can be an artefact, a product, a film, a drama, a dance and so on. One significant point is during the work production process, the researcher has to document the whole process along with his or her reflection. In the category of Teaching Practice, the lesson plan is the creative work of the research, and it is viewed publicly during the phase of teaching. The researchers in Teaching Practice have to have the documentation of the whole research process as well. However, the documentation of the phase of teaching can also be done by their research partners.

An interesting finding we proposed is that some theses categorized in Creating Practice can also be categorized in Teaching Practice. For example, Chia-Lin Chung (2013) designed a drama as the creative work and also designed the lessons for instructing the actors and actress before they start to act for the drama, which fulfilled the teaching phase in Teaching Practice. In the end the drama was performed publicly, which fulfilled the public view phase in Creating Practice [13]. This approach has some characteristics in

common with other research- there is a purposeful process of production, which may include experiments or other investigations, followed by a form of peer review.

However, some researchers had pointed out that it can become problematic if the creative work includes experiments or other investigations followed by a form of peer review, for example if it is not clear whether the peer reviewers are party to the research agenda or assessing the work from some other standpoint entirely [7]. When doing the practice-led research, researchers can just take peer reviewers' opinions as advices and evaluate the research mainly based on their own documents and reflections rather than to just follow the peer reviewers' opinions.

Lastly, this paper hoped to provide scholars in arts and design some references on instructing practice-led research to their students and suggested that scholars in arts and design can form a committee of practice-led research to further discuss about that application methodology of practice-led research. Therefore, to set up their own criteria and standards of verifying practice-led theses.

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Fang-Tzu Lin was born in Kaohsiung, Taiwan, in 1994. She received the B.S. in computer science from National Chiao Tung University in Hsinchu, Taiwan, in 2017 and became a MA student at Institute of Creative Industries Design in National Cheng Kung University, in 2017.

Hui-Wen Lin is an associate professor at the Institute of Creative Industries design in National Cheng Kung University in Taiwan. She is also the Associate Librarian in the university library.

She joined the National Cheng Kung University faculty in 2012. She was awarded the Best Teaching in 2011. She was invited to be the Visiting Scholar at the Centre of Humanity and Social Science in the National Science Council in Taiwan (July, 2013) as well as the Visiting Scholar in Fudan University in China (April, 2013). Her recent achievement is to be awarded as the Distinguished Teaching Faculty in 2016. Her experiences and expertise has enabled her to contribute over 30 research papers to conferences and Journals. These have mainly focused on issues relating to the sites and places that are associated with significant events, for their social and cultural meanings. Her research outcomes include the paper published in the International Journal of Heritage Studies was also published by Taylor & Francis in 2015, under title of "The selected representation of contested prison history: memorial exhibitions and tourist experiences.

Dr. Lin has been a member of the International Council on Monuments and Sites (ICOMOS) since 2013. She has also been elected as Board member of the Foundation of Historic City Conservation and Regeneration in 2012.