EXEGESIS IN CREATIVE ARTS THESIS

Su-Hie Ting*[1], Saiful Bahari Mohd Yusoff[2], Nancy Kissa[3], Wan Jamarul Imran Wan Abdullah Tha[4], Noorhaslina Senin[5]

[1]Faculty of Language and Communication, Universiti Malaysia Sarawak
[2,3,4,5]Faculty of Applied and Creative Arts, Universiti Malaysia Sarawak
Email: suhieting@gmail.com

Abstract

Writing creative arts theses based on a social sciences model does not allow documentation of the creative process. The study examined content structuring of creative arts theses. The specific objectives were to examine creative arts lecturers' views on students' problems in thesis writing, analyse the content structuring of creative arts theses, and formulate a conceptual model of the content structure of the exegesis to accompany creative work. The study involved analysis of theses writing guidelines and the content of research methodology courses in two Malaysian universities offering creative arts academic programmes. The results showed recommendations on the conventional social science thesis structure with some space for the design processes. In addition, the analysis of 11 creative arts theses revealed confusion on the content structuring and student weaknesses in amassing research findings to contextualise the creative work. Based on the results, a conceptul model of creative arts exegesis with separate chapters for "Proposed final product and human factor issues" and "intellectual property documentation" was formulated and validated by creative arts lecturers. The exegesis model which builds in design processes and research processes would resolve issues on unclear expectations in creative arts students theses and elevate the significance of the creative work.

Keywords: *creative arts, exegesis, thesis, research higher degrees, intellectual property*

INTRODUCTION

Much of the research on academic writing has been on research articles because of the "publish or perish" culture. The research article is a genre with recognisable discourse features (content structuring and language). The extensively researched components of a research article are the abstract (Hartley & Sydes, 1995) and the introduction (e.g., Ankomah & Afful, 2019; Duenas, 2008; Kanoksilapatham, 2005; Swales, 2004; Ting, 2013). Research on the structure and rhetorical strategies of the Method (Lim, 2006), and the discussion/conclusion (Hopkins & Dudley-Evans, 1988; Joseph & Lim, 2019; Ting, 2010, 2011; Yang & Allison, 2004) have shown differing levels of compliance with conventional structures. As various disciplines may have variations in the content structure of theses, academic writing and formatting (Azlan et al., 2018), it is important that students familiarise themselves with the academic writing guidelines that are in place. Ting's (2006) analysis of student research reports revealed frequent misfits between the content and section headings (Ting, 2006), revealing that is is difficult for novices to learn the conventions of the academic communities of practice. University students have difficulties produce good academic writing, particularly in project papers (Abdul Hamid, Hashim, Stapa, &

Mustafa, 2012).

The difficulty of creative arts students in writing their thesis is potentially greater. Examples of creative works are music compositions, novels, art works, dance, and painting. Berridge (2008), a creative arts postgraduate student, wrote about her difficulty of writing a PhD thesis without clear guidelines about expectations and having to adapt the guidelines of a traditional PhD thesis. The lack of clarity on creative arts thesis may adversely affect timely completion of the research higher degrees (Mann & Fletcher, 2004). The difficulty is compounded by the "diversity of naming practices for these relations [components of a thesis], institutional variation in guidelines and expectations, and fundamental functional roles for the respective components" (Paltridge et al., 2011: 242).

An exhaustive search of literature on thesis writing revealed a lack of studies on theses in the creative arts. The void may stem from the lack of recognition to "practice-led" or "practice-based" research in the performing arts and design discipline (Gray & Malins, 2004). The visual and creative approaches and methodology that are specific to industrial design research are visualisation, photography, video, sketching and three-dimensional modelling (Gray & Malins, 2004). Industrial design is classified as a sub-discipline of creative arts in Malaysia (Malaysian Qualifications Agency, 2011). The skills to produce sketches and illustrations, as well as the process of developing designs is sometimes regarded as research that is not concrete. Since the 1990s, there is an ongoing debate on the thesis in creative arts, particularly whether art or creative work can be recognised as research (Mann & Fletcher, 2004; Perry & Brophy, 2001). Evans et al.'s (2003) study was on the type of projects that could be classified as PhDs in the creative arts, defined as research that contribute to the field through the production of a creative work that makes a significant, original contribution to knowledge in a field. The perception that creative work does not count is so strong that the academic research is often considered as necessary to legitimise the creative work (Arnold, 2005).

Because of the absence of a framework specific to the creative arts thesis, social science and humanities frameworks have been used as the benchmark for theses (Rahman & Majid, 2017). Creative arts project reports written in the mould of science and even social science thesis models do not allow the distinctive nature of creative arts to be shown. For example, creative arts theses need to present descriptions of the proposed product and validation, human factor issues, and intellectual property documentation. The introduction of an exegesis to accompany the creative works and applied research of students in creative arts, design and media began in the mid-1990s (Hamilton & Jaaniste, 2010). An exegesis includes the cultural and personal ideas which inform the work, the practical constraints on the creative work, the physical context of the work, the function of the work and the relationship between form and function, and at a postgraduate level, an exegesis should add to the understanding of art, culture and humanity as a whole (Edith Cowan University, n.d.). Some universities have theses guidelines (e.g., Curtin University of Technology, 2010; Edith Cowan University, n.d.; Newcastle University, 2013; University of Technology Sydney, 2013). However, little is known about these translate into documentation of the creative process and the place of research in the creative process in creative art theses.

The exegesis has been a presence in some Australian universities for more than the last 15 years, even if it has been introduced in some instituitions within the last 15 years. Considering that the content structure of creative arts theses is still evolving and there is lack of research into the exegesis, this area warrants investigation. Hence, it is vital to investigate the interrelations between the exegesis and the creative work. The aim of the study was to analyse content structuring of final year project reports and theses in creative arts. The specific objectives of the study were to examine creative arts lecturers' views on students' problems in thesis writing, analyse the content structuring of creative arts theses and formulate a conceptual model of the content structure of creative arts theses. In this paper, the final year project report and thesis will be referred to as "thesis" for ease of reference because the final year project reports resemble the postgraduate thesis in its content structure.

REVIEW OF LITERATURE

In Malaysia, creative arts was recognised as a discipline on its own by Malaysian Qualifications Agency (2011) only a decade ago. "The Programme Standards: Creative Multimedia" states the necessity of Creative Arts and Design curriculum to have both the practical and theoretical aspects. The practical aspect is assessed through project or studio work taking the forms of project proposals, visual and experimental research, journals, portfolio, presentations and exhibitions. The theoretical aspect requires students to conduct a research project but does not recommend a thesis structure. In the last one and a half decades, some Australian universities introduced creative work plus exegesis (e.g., Curtin University of Technology, 2010; Edith Cowan University, n.d.; Newcastle University, 2013; University of Technology Sydney, 2013). In Arnold's (2005) view, a PhD research in creative arts can be written as a traditional dissertation (thesis) on textuality and discourse or as an exegesis to accompany a creative production (genre work or artefact).

Milech and Schilo (2004) posit three models for the exegesis. Firstly, the Context Model has been described by Mann and Fletcher (2004) where an exegesis "describes the research process and elaborates, elucidates, and contextualises the resulting creative work". The exegesis presents the historical, social and/or disciplinary context(s) within which the student developed the creative work. Milech and Schilo (2004: 7) are of the view that the Context Model of exegesis may be the dominant model across Australian universities and "accommodates normative university definitions of research as work that deals with theoretical, historical and disciplinary matters in a fashion that contributes to knowledge in the discipline, and possibly adds to social capital". Secondly, in the Commentary Model the exegesis explicates or comments on the creative production and is secondary to the creative work. Evans et al.'s (2003) characterisation of the exegesis as a critical commentary is closest to the meaning of exegesis in the Commentary Model. Both the Context and Commentary Models preserve the theory-practice divide (Milech & Schilo, 2004). In their third model, the Research Question Model, "both the exegetical and the creative component of the research thesis hinges on a research question posed" (Milech & Schilo, 2004: 9) and both independently answer the same research question. Milech and Schilo (2004: 11) propose that the Research Question Model integrates creative and production-based theses with traditional notions of research at different levels in undergraduate and postgraduate education as follows:

At one level of education (the Honours research level), a research question may simply enable the student/practitioner to ask the question that enables her or him to better understand the field, and to produce a work that exemplifies practice in that field. At another level (the research Master of Arts), that question may enable the research student to identify a question of significance in the field and amplify the debates and practices related to that question in an effective fashion. And at still another level (the doctoral level) that question may be posed in a fashion that not only takes account of presiding debates and practices but also opens the way for contributing new understandings.

An example of a content structure that emphasises the context for the product creation is Hamilton and Jaaniste (2010): Introduction, Situation Concept, Practical Context, Researcher's Creation, and Conclusion. While the Introduction and Conclusion may be similar in linking the product creation to society-oriented issues which form the basis for the research problem, the other parts of the thesis emphasise design process. Hamilton and Jaaniste's (2010) recommendation reflects Milech and Schilo's (2004) Commentary Model of the exegesis. Rahman and Majid (2017) concur with Jones (1992) on the need for the design process to start from research findings pertaining to societal issues and problems that give rise to a research problem, and the output is a new product that can contribute to the society. For Jones (1992), the researcher's imagination, readings and observation leads to idea generation for a new product design, and this may be

translated to sketches, illustrations and 3-D models. Next, the idea and design development takes the form of details on the form and functions of the product. The product may be pilot tested on users. This leads to the final idea construction where detailed sketches, technical drawings, mock up and prototype models are produced. The model of exegesis that is dominant in a particular institution may be conveyed to students via theses guidelines and research method courses. Considering that creative arts is a relatively young discipline in Malaysia, it is important to investigate student writing of the exegesis that accompanies creative works.

METHOD

A study was conducted to examine the content structuring of creative arts theses using three techniques of data collection: (1) investigation of lecturers' views on students' problems in writing their thesis, (2) identification of thesis structure that is taught to students, and (3) analysis of the content structuring of creative arts theses. The multi-pronged approach enables data triangulation to reach a better understanding of the context and the writing of creative arts theses.

Participants

To investigate lecturers' views on students' problems in writing their thesis, five lecturers were interviewed to find out the expectations with respect to thesis written in the industrial design. Table 1 shows the background of lecturers interviewed, and they are given the codes L1 to L5 in this paper.

Table 1. Background of Lecturers Interviewed

Code for lecturer	Institution	Position	Field	Teaching experience (years)
L1	Universiti Teknologi MARA Kelantan	Head of department	Industrial design	28
L2	Universiti Putra Malaysia	Senior lecturer	Industrial design	18
L3	Universiti Teknologi MARA Shah Alam	Lecturer	Industrial design	7
L4	Lim Kok Wing University	Lecturer	Industrial design	10
L5	Universiti Malaysia Sarawak	Deputy Dean (Academic)	Fine arts	20

Creative Arts Theses

A total of 11 creative arts theses from the industrial design sub-discipline were analysed to examine the content structuring. The theses comprised six theses written in English and six theses written in Malay by undergraduate and postgraduate students from two public universities in Malaysia (referred to as Uni 1 and Uni 2 in Table 2). The topics of the theses included recreational park chairs, wooden bridge, the place to take holy water in mosques, school chairs, speed bumps, camper vans, furniture, and lip synchronisation animation for translation of movies into other languages. In this paper, the theses are referred to as T1 to T11.

Table 2. Creative Arts Theses Analysed in This Study

Thesis	Title	Level	University	Language	Number of pages
T1	Study on ergonomic aspect that can assist secondary school student in placing their schoolbag in classroom	Undergraduate	Uni 1	English	40
T2	Eco-friendly speed bump with kinetic energy in urban area	Undergraduate	Uni 1	English	48
T3	An investigation of the potential of three wheeled commercial vehicle using the electric technology	Undergraduate	Uni 1	English	47
T4	*Reka bentuk jelatung bagi penduduk di*	Undergraduate	Uni 2	Malay	91

	kawasan persisir Sungai Sarawak [Jelatung design for residents in the coastal area of Sungai Sarawak]				
T5	*Reka bentuk kerusi taman berkonsepkan cantuman tembok penahan* [Garden chair design with the concept of retaining wall joints]	Undergraudate	Uni 2	Malay	69
T6	*Reka bentuk tempat wudhu inovasi untuk orang kurang upaya* [Innovative ablution place design for the disabled]	Undergraduate	Uni 2	Malay	43
T7	The study of automobile interior space for the development of family vacation	Master in Art	Uni 2	English	153
T8	The attributes of Asmaa' al-Husnaa as a conceptual model of Islamic furniture design Assessment	Master in Art	Uni 2	English	231
T9	Performance of real time lip sync animation on viseme based human speech	PhD	Uni 2	English	237
T10	*Kajian Identiti Rekaan Perabot Berdasarkan Nilai Semantik dan Metafora Masyarakat Tempatan di Sarawak* [Furniture Design Identity Study Based on Semantic Values and Metaphors of the Local Community in Sarawak]	Master of Art	Uni 2	Malay	201
T11	*Hampas Sagu Sebagai Sumber Alternatif dalam Reka Bentuk Model Automotif* [Sago Waste As An Alternative Source In Automotive Model Design]	Master of Art	Uni 2	Malay	121

The theses were written in double-spacing and 1,282 pages of texts were analysed. The page count excluded the front and back matter of the theses and focussed on the chapters (which ranged from five to seven chapters). The results chapters which may include intellectual property documentation and product validation may be reported in one chapter or three chapters.

Instruments

Two instruments were used in this study, that is, an interview guide and a framework for the analysis of the content structuring of creative arts theses. To interview the creative arts lecturers, the following interview questions were used to find out aspects emphasised in terms of students' problems in writing their thesis, and the content of creative arts theses:

Table 3. Instruments

No	Questions
1.	Can you tell me the characteristics of academic writing in industrial design?
2.	Based on your experience as an academic, it is compulsory for final year students to produce a product?
3.	What are industrial design students' weaknesses when writing their final year project reports?
4.	In your experience of evaluating theses and final year project reports, do the framework and structure of the students' writing follow what is taught in the Research Methodology courses?
5.	Is intellectual property an important element in academic writing on industrial design?
6.	Have you come across documentation of intellectual property in the writing of industrial design students?
7.	What do you suggest as the model or approach for academic writing on industrial design?

To formulate a framework on the content structuring of creative arts theses to use in the data analysis, two sources of references were used: (1) the recommended thesis structure that is taught in research seminars and research methodology courses, and (2) the thesis writing guidelines provided by two universities offering creative arts programmes. A comparison of the thesis writing guidelines used in Uni 1 and Uni 2 is shown in Table 3. Uni 1's recommended content structure for creative arts thesis is similar to that of thesis written in the social sciences and humanities (see Andersson & Beveridge, 2007; Gray & Malins, 2004). For example, Gray and Malins (2004) recommended the following chapters in a thesis on arts and design: Introduction, Literature

Review, Methodology, Outcomes and Analysis, and Discussion and Conclusion. Only the results chapter is named differently as Outcomes and Analysis instead of the conventional Results and Discussion. Uni 2 incorporated elements of the design process into a conventional thesis content structure, such as the proposed approach/ technique for new idea in Chapter 4, evidence of the product in Chapter 5, and documentation of intellectual property in the appendix of the thesis.

Table 3. Recommended content structuring of creative arts theses in Uni 1 and Uni 2

Chapter	University		Comparison
	Uni 1	Uni 2	
Front matter	Research title Author declaration Abstract Table of contents	Title page Status endorsement form Endorsement and signature Acknowledgement Table of Contents Abstract	Similar
1	Introduction • Research focal area • Research problem • Objectives of study • Significance of study	Introduction • Background of study • Research problem • Objectives of study • Significance of study • Hypothesis • Study scope	Similarity • Background of study • Research problem • Objectives of study • Significance of study Differences • Hypothesis • Study scope
2	Background of Research • Background of overall proposal • Review/ Discussion	Literature review • Review of past studies • Discussion	Similar
3	Research methodology • Studio, functions of creative works, design • Research approaches (quantitative, qualitative)	Research method • Quantitative/ qualitative research	Similarity: • Quantitative/ qualitative research Differences: • Studio, functions of creative works, design
4	Analysis and Findings • Results/ Analysis (numbers, tables, descriptive texts)	Data analysis • Comparative study • Analysis and pilot test • Proposed approach/ technique for new idea	Similarity • Results Differences • Proposed approach/ technique for new idea
5	Conclusion & Recommendations • Overall conclusion • Recommendation	Results, Conclusion & Recommendations • Results • Discussion • Evidence of product	Similiarity • Results and outcome of study Differences • Evidence of product
Back matter	References Appendix	References Appendix • Documentation of intellectual property	Similiarity • References • Appendix Differences • Documentation of intellectual property

Sources: Universiti Malaysia Sarawak (n.d.); Universiti Teknologi MARA (2011)

Although Uni 1 and Uni 2 have their thesis writing guidelines, there is a need to find out what students produce in their writing. To analyse the 11 theses, the analysis framework shown in Table 3 was employed, keeping in view that design elements highlighted by other researchers

(Hamilton & Jaaniste, 2010; Jones, 1992; Milech & Schilo, 2004) may appear in the thesis.

Data collection procedures

For interviews on lecturers' views on students' problems in writing their thesis, potential participants were contacted and asked if they would be willing to be interviewed. They were informed of the purpose of the study, the confidentiality of responses and their freedom to withdraw from the study. Appointments were fixed with participants who consented to be interviewed. Permission for the interviews to be audio-recorded was sought. The four interviews with public university lecturers were conducted in Malay and only one interview with a private university lecturer was in English. The interviews took 20-30 minutes each.

To formulate the framework for the analysis of the content structuring of creative arts theses, firstly, a study of the recommended content organisation of creative arts projects was conducted using the thesis writing guidelines provided by the universities and the Programme Standards for Creative Multimedia (Malaysian Qualifications Agency, 2011).

Secondly, the first researcher conducted observations of the research methodology seminars and courses that creative arts students were required to attend. The research methodology seminar observed was a two-day seminar (16 hours) organised by the Centre for Graduate studies for 108 postgraduate students in social sciences and humanities, creative arts, and economics and business. Over the two days, eight lecturers gave seminars on the research problem, literature review, research planning and management, data collection, research ethics, thesis writing, and research presentations. The seminar aimed to increase students' knowledge on effective thesis writing techniques because postgraduate students face tremendous problems in writing their theses. During the observations, notes were taken on the content related to the reporting of creative arts research. Observations were also conducted in a 14-week research methodology course for undergraduate students in the creative arts faculty of Uni 2. The course was compulsory for Year 2 students from the industrial design, animation, graphic design, and fashion and textile design programmes. The lecturer for the research methodology course referred to the faculty guidelines on the final year project research report, theses of previous students in the library and publication in the social sciences. Students' attention was drawn to differences in the theses produced in the sciences, social sciences, and creative arts.

Finally, to obtain the creative arts theses from the industrial design sub-discipline, the second researcher contacted lecturers from the 10 universities and art academies offering undergraduate and postgraduate programmes in creative arts in Malaysia. There was not much response to most of the letters and emails requesting samples of creative arts theses for analysis. The first researcher also assisted in obtaining the samples. Eventually, 11 theses were obtained from lecturers in two public universities. When the theses have been analysed and a tentative conceptual model for creative arts theses has been formulated, the model was shown to creative arts lecturers for validation.

Data analysis procedures

This section explains the data analysis procedures for the interview data and the content structuring of creative arts theses.

The interviews were transcribed and the transcripts were content analysed to identify their views on problems in the theses written by creative arts student and their suggestions for addressing the situation. Considering that four out of five interviews were in Malay, the lecturers' views are reported in English in the results section for ease of reading.

Table 3 was used as the analysis framework to analyse the content structuring of the chapters in the 11 theses. The front and back matter were excluded from the analysis. During the analysis, attention was given to writing on the idea generation based on research findings, idea development and design, final idea construction, and description of final design. In addition, the theses were also categorised based on Milech and Schilo's (2004) exegesis models. The frequency of different

section headings and content were tabulated to determine the compulsory and optional elements for the conceptual model of the exegesis for creative arts. The proposed model was presented to design lecturers for their comments, and their feedback was analysed before finalising the conceptual model for the exegesis shown in Figure 1 (shown in the results section).

FINDINGS AND DISCUSSION

The results section presents the creative arts lecturers' views on students' problems in thesis writing, the content structure of 11 creative arts theses analysed; and the conceptual model of the creative arts exegesis.

Creative arts lecturers' views on students' problems in thesis writing

Interviews with the creative arts lecturers showed that the students' problems in thesis writing lie in three main areas: academic writing, research knowledge, and technical knowledge on industrial design. All five lecturers interviewed emphasised the lack of models on academic writing in creative arts. L2 stated that the lack of models on academic writing in industrial design caused students to depend on their lecturer's experiences and guidance. This causes variations in the format and content of creative arts theses. L1 also highlighted the shortage of academic books on industrial design written in Malay, and the lack of materials with local content because most of the available reference materials on industrial design are written in English. There are many academic books on research writing in the social sciences and humanities but L3 pointed out that academic writing required in industrial design is different. L4 who works in a private university explained that his university has a guideline for thesis writing but it is generic and applicable to all courses in the university. The lack of models on academic writing in industrial design, and creative arts in general, leads to students having difficulty in presenting content that is expected in creative arts theses.

Two lecturers mentioned students' language problems (L1 and L5). L1 stated that students were careless in their language and made many errors in grammar and terminology and also used colloquial expressions instead of academic words. The students' carelessness was also manifested in their disregard for format and layout of thesis guidelines, as reported by both L1 and L5. In addition, L5 stated that students did not understand terminology and also did not cite properly, resulting in rampant plagiarism in their thesis. Creative arts students with poor English proficiency could not understand English materials and they resorted to using direct quotations instead of paraphrasing. The problem is that these students do not use the citation conventions to indicate direct quotations using quotation marks and the page number for the citation. Their English proficiency may lead to their lack of reading (highlighted by both L4 and L5).

There were also problems in subject matter knowledge that is not directly related to students' problems in thesis writing, brought up by L2, L3, L4 and L5. For example, L2 stated that students lack knowledge in research, technical terms, empirical data collection and analysis, and they also cannot connect the results with theory. This is probably due to their lack of reading. In the context of what Rahman and Majid (2017) wrote about the concurrent research process and design process, the creative arts students may carry out their design process without the research process. L3 stated that students tend to create products without a sound justification but rely on current trends. Consequently, they have problems creating 3D designs. To L5, the weak documentation of the research behind the creation of the product is due to the students proceeding with the product without adequate reading on the subject matter. The lecturers also brought up students' lack of awareness of the intellectual property of their creative works.

In light of the results from the interviews with the creative arts lecturers, it is important for the model for creative arts theses to specify the explication of research knowledge and technical knowledge on industrial design that forms the foundation for the development of creative works as well as the intellectual property documentation.

Content structure of creative arts theses

The analysis of the 11 creative arts thesis showed that the content structure reflects that of the social science theses, except for the additional sections providing product description and validation. These design information were sometimes provided in the same chapter by some students, and in separate chapters by other students, as shown in Table 4.

Pertaining to compliance with university thesis writing guidelines, the analysis showed that the students' theses had roughly the same sections as those specified in their university guidelines. The variations are possibly due to their lecturers' preferences. As shown in Table 3, Uni 1's guidelines basically follow a social science content structure. Uni 2 has research design elements incorporated into the thesis content structure. Seven out of 11 theses (T4, T5, T6, T7, T8, T9, T11) decribe the proposed product or proposed conceptual design and the validation in separate chapters. Nor surprisingly, these were all students from Uni 2. The availability of university guidelines helps the students to cope with an unfamiliar genre of writing.

However, as far as the documentation of intellectual property goes, there is not much evidence of such information in the creative arts theses analysed. Uni 2 theses guidelines specify a separate chapter for the documentation of intellectual property but the students did not do this. The absence of intellectual property documentation concurs with the interview results where the lecturers mentioned students' lack of awareness of the importance of protecting their ideas. Uni 2 is the first Malaysian public university to offer intellectual property as a field of study ("UNIMAS jadi IPT pertama tawar bidang harta intelek," 2013).

In the context of Milech and Schilo's (2004) model, the results indicated that all the 11 theses analysed resembled the Context Model, where the exegesis contextualises the creative work in its historical, social and/or disciplinary contexts. The creative work is presented as starting from researcher observation of ergonomical problems or research findings on the weaknesses of certain products or designs. Jones (1992) emphasises the importance of creative work starting from research findings. It is not surprising that the Malaysian creative arts theses largely fall into the Context Model because Milech and Schilo (2004) had noted that the Context Model of exegesis also dominates across Australian universities that offer creative arts programmes. The content structure of the theses analysed do not reflect the Commentary Model where the creative work takes prominence or the Research Question model where "the written and the creative component of the thesis are conceptualised as independent answers to the same research question" (Milech & Schilo, 2004: 9). It is not easy to achieve this level of integration where neither the exegesis nor the creative work takes prominence.

Further analysis of the creative arts theses revealed some common weaknesses in the academic writing, which offers empirical evidence from content analysis to support the five lecturers' observations (results reported in Section 4.1). Table 5 shows weaknesses in various sections of creative arts theses.

Table 5. Content structure of creative arts theses

Thesis	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7
T1	Introduction	Literature review	Research method	Data analysis & findings	Conclusion & recommendations	-	-
T2	Background research	Objectives and research methodology	Analysis and findings	Conclusion and recommendation	-	-	-
T3	Introduction	Literature review	Research methodology	Data analysis & findings	Conclusion and recommendations	-	-
T4	Introducti	Literature	Research	Data analysis	Proposed design	-	-

	on	review	methodology				
T5	Introduction	Review of previous literature	Research methodology	Study outcomes	Proposed design	-	-
T6	Study background	Literature review	Research methodology	Data analysis	Analysis of design	Conclusion	-
T7	Introduction	Literature review	Methodology	Data analysis	Proposed conceptual design portable campervan box in automobile space	Validation	Conclusion
T8	Introduction	Current practice of furniture design	Applying Asmaa' Al-Husna attributes in good design	Methodology	Data analysis (+ construction of final idea)	Validation and discussion	Conclusion
T9	Introduction	Literature review	Methodology	Findings and discussion	Conclusion (+ model description)	-	-
T10	Introduction	Library research	Study approach	Study outcomes	Proposed design	Respondent validation	Conclusion
T11	Introduction	Literature review	Methodology	Experimentation	Data analysis and final product validation	Conclusion	-

Table 6. Weaknesses in Various Sections of Creative Arts Theses

Chapter	Weaknesses
1 Introduction	• Research problem is weak. • Limitations of study wrongly put here instead of Methodology chapter. • Research objectives and questions do not match. • Research objectives and hypotheses not clearly written.
2 Literature review	• Topics are disjointed from one another. • Operational definition of terms wrongly put here instead of Introduction chapter.
3 Methodology	• Research objectives and questions wrongly put here instead of Introduction chapter. • Conceptual framework, theoretical framework, progress flow chart and activity flow chart are mixed up, and sometimes redundantly included. • Research problem and significance of study wrongly put here instead of Introduction chapter. • Results of study wrongly put here instead of Results chapter. • Confusion over the content of the Participant, Instrument, Data Collection Procedures and Data Analysis Procedures sections
4 Results & Discussion	• Respondent profile is put here instead of the Methodology chapter. • The instrument (e.g., questionnaire) is wrongly put here instead of the Methodology chapter. • Data analysis procedures are wrongly put here instead of the Methodology chapter.
5 Conclusion	• Results and product description are too brief. • Lack recommendations for future research due to focus on creative work. • Contribution to solving practical problems is too brief.
6 Other design-focussed chapters	• Intellectual property description in point-form.

Some problems were found in a majority of theses but others surfaced in only one or two theses. The most common problem with the Introduction chapter is the weak research problem where students were unable to use the research findings to make a coherent argument to show a need for their proposed design or conceptual model. The literature review chapter suffers from a lack of subject matter knowledge where topics related to the research are included but the relationship between them are not clearly explained to show the practical need and the research basis for the proposed design or conceptual model. The weaknesses in the Methodology chapter seems to be due to confusion over the content of the Participant, Instrument, Data Collection Procedures and Data Analysis Procedures sections. The Results chapter is in place in postgraduate theses but the undergraduate theses (T1-T4) had content that should appear in the Methodology chapter (i.e. respondent profile, instrument, data analysis procedures). The Conclusion chapter is too brief in the description of the product or conceptual design and fails to make a strong case on the contribution of the creative work to solving practical problems.

The common weaknesses and the content structure of the creative arts theses analysed as well as the results of the interview with lecturers provided the input to propose a clearer thesis content structure than what is currently provided in either Uni 1 or Uni 2 guidelines.

Proposed conceptual model of creative arts exegesis

Figure 1 shows the proposed conceptual model of creative arts exegesis which was shown to two lecturers (L1 and L2) for validation of the model. Chapters 1 to 4 and the last chapter are similar to existing guidelines of Uni 1 and Uni 2, including conventional social science thesis structure. However, two additional design-focussed chapters are inserted before the conclusion chapter. In the proposed exegesis (Figure 1). Chapter 5 highlights the design process and is titled "Proposed final product & human factor issues" to give prominence to the design aspect. Chapter 6 is reserved for intellectual property documentation because every search has its own terminology.
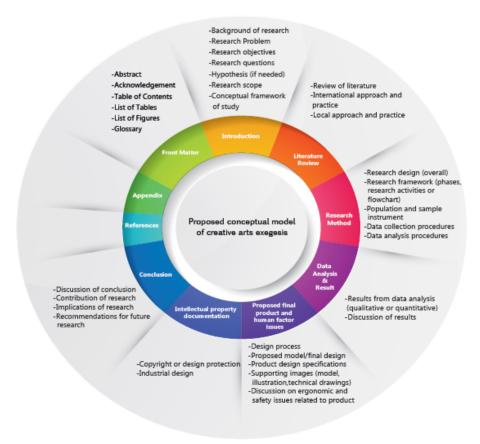

Figure 1. Proposed Conceptual Model of Creative Arts Exegesis

Table 6 shows comments by lecturers on the proposed conceptual model of creative arts exegesis during validation. The data validation with L1 and L2 shows that they agreed with the proposed exegesis model and they believed that the model would help students in their academic writing. In the context of the ongoing struggle for creative arts to gain recognition as research, the proposed conceptual model contextualises the creative work in research. The two additional chapters give prominence to design processes.

Table 6. Comments by lecturers on the proposed conceptual model of creative arts exegesis during validation

Chapter	Validation: Comments by creative arts lecturers
Front matter	Agree (L1, L2). Front matter content is subject to university guidelines (L2).
1. Introduction	Agree (L1, L2). Should emphasise qualitative data and hypothesis should be optional (L1).
2. Literature review	Agree to use the term Literature Review (Kupasan Literatur) (L1, L2) because other potentially confusing Malay terms are used (Sorotan perpustakaan, Sorotan kajian, Sorotan literatur, Tinjauan literatur).
3. Research Method	Students should be clear in description of appropriate sub-sections of Methodology (L1, L2).
4. Data Analysis and Results	Students need to clearly explain the methodology details (L2). Need to explain research findings and strategies to describe the proposed design (L1).
5. Proposed final product and human factor issues	This section is not related to academic writing in industrial design (L1). Need to explain proposed design in detail, including product design specifications and human factors (L2).
6. Intellectual property documentation	Documentation of intellectual property needs to be in a separate chapter (L1, L2). If students' work has intellectual property value, then they should write this chapter because early exposure to intellectual property documentation is important (L1).
7. Conclusion	Agree with components of conclusion chapter.
References	Agree (L1, L2).
Appendix	Agree (L1, L2).

The chapter on the proposed final product and human factor issues allows the context which gave rise to the creative work to have a legitimate place in a thesis. L2 was in strong support of having this chapter and L1 emphasised that it is a move away from the research-focussed writing in conventional social science theses. Edith Cowan University (n.d.) guidelines on exegesis writing states that it is important to give room to the cultural and personal ideas which inform the work, the practical constraints on the creative work, and the physical context of the work. To Jones (1992), it is important that a creative arts thesis highlights the society-oriented issues which triggered the generation of ideas for a new product design. In their proposed design-focussed exegesis, Hamilton and Jaaniste (2010) also call attention to the context for the product creation, seen in their recommendation to have separate chapters for the situation concept and the practical context. In fact, Hamilton and Jaaniste (2010) also proposed Researcher's Creation to be a separate chapter. This is where sketches, illustrations, technical drawings, 3-D models, mock up and prototype models are included to show the progression of ideas and the final product after validation. Having a separate chapter for describing the final product and human factor issues is

good to condition students, and researchers, in creative arts to describe their creation in detail.

The other new chapter in the proposed conceptual model of creative arts exegesis entitled "Intellectual property documentation" strengthens the new primary position of the creative work. This is particularly important for postgraduate theses which result in the production of a product or industrial design that is in need of copyright or design protection. Since our proposed conceptual model of creative arts exegesis retains the chapters that are present in a research-based thesis, it can emphasise both innovation and argumentation and fulfil the requirements for a Ph.D. To cite Kroll (2014), "The most important principles for a PhD are that the thesis will demonstrate "wide reading and the power to integrate information obtained from various sources into a unified whole" (statute 2); that it will demonstrate "a higher degree of independence of thought and approach" than a Masters; and finally that it make "a significant original contribution to knowledge" (statutes 3 and 4)".

CONCLUSIONS

The study showed that creative arts students have problems writing their thesis, which may be alleviated by a clear content structure for the thesis. The proposed conceptual model of creative arts exegesis comprises the following chapters: Introduction, Literature Review, Research Method, Data Analysis and Results, Proposed Final Product and Human Factor Issues, and Intellectual Property Documentation. The two additional chapters that are not found in conventional social science theses are Proposed Final Product and Human Factor Issues, and Intellectual Property Documentation. These chapters give prominence to the design processes. Having a clear content structure that allows research as a starting point for the creative work and design processes to take centre-stage will make it easier for students to integrate the creative and research aspects of their project. Our conceptual model for creative arts exegesis reflects Milech and Schilo's (2004) Context Model. The model also enables creative works to be established as research that can contribute to theoretical knowledge in the field and resolve practical issues in the society. Having a definitive exegesis model that clearly structure the design processes and research processes resolve issues on wide-ranging variations and unclear expectations, thereby facilitating research training of creative arts students in a manner befitting of their own discipline. The practicality of our proposed conceptual model for creative arts exegesis should be verified in further research to investigate whether it reduces the prevailing common weaknesses evident in theses written by creative arts students at undergraduate and postgraduate levels. These findings on research writing practices in creative arts will also offer a new angle on reporting of research involving creative works, of which not much is published. Other researchers in future can use the conceptual model for creative arts final year project reports to design a software to assist undergraduate students in their writing of these project reports.

ACKNOWLEDGEMENT

REFERENCES

Abdul Hamid, BD, Hashim, F, Stapa, SH, & Mustafa, J 2012 Konstruk personal pelajar dalam penulisan kertas projek cadangan penyelidikan. *Asean Journal of Teaching and Learning in Higher Education 4*(2): 17-32.

Andersson, B, & Beveridge, A 2007 *A guide to assessments and skills in SCCA.* Edith Cowan University, Perth, Australia.

Ankomah, C & Afful, JB 2019 Establishing a niche in research: Rhetorical strategies in undergraduate and postgraduate writings in the department of English, University of Cape Coast. *Journal of Teaching English for Specific and Academic Purposes 7*(3): 359-374.

Arnold, J 2005 The PhD in writing accompanied by an exegesis. *Journal of University Teaching*

& *Learning Practice 2*(1). http://ro.uow.edu.au/jutlp/vol2/iss1/5

Azlan, M, Bakar, M, Ismail, R, & Abu Bakar, N 2018 *Panduan penulisan akademik* [Academic writing guidelines]. Penerbit Universiti Sains Malaysia, Pulau Pinang.

Berridge, S 2008 What does it take? Autobiography as performative PhD thesis. *Forum: Qualitative Social Research 9*(2): Art 45. http://nbn-resolving.de/urn:nbn:de:0114-fqs0802451.

Curtin University of Technology 2010 *Guidelines for creative production theses*. http://research.curtin.edu.au/local/docs/graduate/TE-CreativeProdThesesGuidelines.pdf

Duenas, PM 2008 *Challenges for non-native writers: Cross-cultural variation in Anglo-Saxon/Spanish Business RAs*. Paper presented at 15th World Congress of Applied Linguistics (AILA Conference), Essen, Germany.

Edith Cowan University. n.d. *Exegesis: Academic tip sheet*. Accessed August 29, 2013, from http://intranet.ecu.edu.au/__data/assets/pdf_file/0017/20618/exegesis.pdf

Evans, T, Macauley, P, Margot, P, & Tregenza, K 2003 A brief review of PhDs in creative and performing arts in Australia. In R. Jeffrey & W. Shilton (Eds.), *Defining the doctorate: Doctoral studies in education and the creative and performing arts* (pp. 1-14). New South Wales: Australian Association for Research in Education Conference, 2-4 October 2003. http://hdl.handle.net/10536/DRO/DU:30004959

Hamilton, J, & Jaaniste, L 2010 A connective model for the practice-led research exegesis: An analysis of content and structure. *Journal of Writing in Creative Practice 3*(1): 31-44.

Hartley, J, & Sydes, M 1997 Are structured abstracts easier to read than traditional ones? *Journal of Research in Reading 20*(2): 122-136.

Hopkins, A, & Dudley-Evans, T 1988 A genre-based investigation of the discussion sections in articles and dissertations. *English for Specific Purposes 7*(2): 113-121.

Jones, JC 1992 *Design methods*. John Wiley & Sons.

Joseph, R, & Lim, JMH 2019 Directions for the future: A genre-based investigation into recommendations for further research and practical applictions in forestry. *ESP Today 7*(2): 124-147.

Kanoksilapatham, B 2005 Rhetorical structure of biochemistry research articles. *English for Specific Purposes 24:* 269-292.

Kroll, J 2004 Exegesis and the gentle reader. *TEXT: Journal of Writing and Writing Courses, Special Issue Website* Series 3. https://dspace2.flinders.edu.au/xmlui/bitstream/handle/2328/14076/2004053 967.pdf?sequence=3.

Lim, JMH 2006 Method sections of management research articles: A pedagogically motivated qualitative study. English for Specific Purposes 25: 282-309.

Malaysian Qualifications Agency 2011 *Programme Standards for Creative Multimedia*. Petaling Jaya, Malaysia: Malaysian Qualifications Agency.

Mann, A, & Fletcher, J 2004 Illuminating the exegesis: A discussion of the exegesis component of the creative thesis in Australian research higher degrees. *TEXT: Journal of Writing and Writing Courses, Special Issue Website series 3.* http://www.textjournal.com.au/speciss/issue3/fletchermann.htm

Milech, B, & Schilo, A 2004 Exit Jesus: Relating to the exegesis and the creative/production components of a research thesis. *TEXT: Journal of Writing and Writing Courses: Special Issue Website Series 3.* Accessed http://www.textjournal.com.au/speciss/issue3/milechschilo.htm

Newcastle University 2013 *Examination of theses in the Creative Arts Guideline*. http://www.newcastle.edu.au/policy/000826.html

Paltridge, B, Starfield, S, Ravelli, L, & Nicholson, S 2011 Doctoral writing in the visual and performing arts: Issues and debates. *International Journal of Art & Design Education 23*(2): 242-255. DOI: 10.1111/j.1476-8070.2011.01700.x

Perry, I, & Brophy, K 2001 Eat your peas: The creative Ph. D. thesis and the exegesis. In A Bartlett

& G Mercer (Eds), *Postgraduate research supervision: Transforming (R)Elations* (pp. 89-100). New York: Peter Lang.

Rahman R, & Majid, Z. 2017 *Asas penyelidikan dalam reka bentuk* [Research basics in design]. Universiti Putra Malaysia Publisher, Serdang, Selangor, Malaysia.

Swales, JM 2004 *Research genres: Explorations and applications*. Cambridge. Cambridge University Press.

Ting, SH 2006 *Writing in the research world: Baby steps*. Paper presented at 15th MELTA International Conference, 9-10 June 2006, Kuching, Sarawak, Malaysia.

Ting, SH 2010 *Tailoring research articles to journals*. Proceedings of TARC International Conference (TIC), 18-19 October 2010, One World Hotel, Petaling Jaya, Malaysia.

Ting, SH 2011 *Getting published: Strengthening the introduction and discussion sections*. Proceedings of 3rd International Conference on Teaching and Learning (ICTL2011), Penang, Malaysia, 14-16 November 2011.

Ting, SH 2013 *Structure of introductions to conference presentations*. Proceedings of 8th International Language for Specific Purposes (LSP) Seminar, Kuala Lumpur, Malaysia, 4-5 September 2013.

UNIMAS jadi IPT pertama tawar bidang harta intelek (2013, Jun 14). Utusan Sarawak. https://ir.unimas.my/id/eprint/8095/.

University of Technology Sydney 2013 *The doctorate in creative arts: The exegesis.* http://cfsites1.uts.edu.au/ugs/news-events/eventarchive-detail.cfm?ItemId=32504

Universiti Malaysia Sarawak n.d. *Format dokumentasi penulisan ilmiah untuk penyelidikan dan projek tahun akhir fakulti seni gunaan dan kreatif* [Academic writing documentation format for research and final year project, Faculty of Applied and Creative Arts]. http://www.faca.unimas.my/images/downloads/Penulisan_Ilmiah_rujukan.pdf.

Universiti Teknologi Mara 2011, Januari. *Academic writing guideline*. https://ad.uitm.edu.my/main/index.php/download.

Yang, RY, & Allison, D 1990 Research articles in applied linguistics: Moving from results to conclusion. *English for Specific Purposes 22:* 365-385.