JOEMLS DOI:10.6120/JoEMLS CODEN: CYTHD5 ISSN 1013-090X

Summa

# 教育資料與圖書館學共編版

# JOURNAL OF EDUCATIONAL MEDIA & LIBRARY SCIENCES English Summary Edition

第五十二卷 第四期 二〇一五年秋季號 Vol. 52, No. 4, Fall 2015

Vol. 52, No.4, Fall 2015



教育資料與圖書館學,始於1970年3月創刊之教育資料科學月刊, 其間於1980年9月更名為教育資料科學,改以季刊發行。自1982年9 月起易今名,而仍為季刊,每年冬(1月)、春(4月)、夏(7月)與秋季 (10月)各出刊一期,合為一卷。現由淡江大學出版中心出版,淡江 大學資訊與圖書館學系和覺生紀念圖書館合作策劃編輯。本刊為國 際學術期刊,2008年獲國科會學術期刊評比為第一級,2015年獲科 技部人文社會科學研究中心評定為教育學門專業類A級期刊。並廣 為海內外知名資料庫所收錄(如下英文所列)。

The JOURNAL OF EDUCATIONAL MEDIA & LIBRARY SCIENCES (JOEMLS), published by the Tamkang University Press and co-published with the Department of Information & Library Science (DILS) and Chueh Sheng Memorial Library, was formerly the Bulletin of Educational Media Science (March 1970 – June 1980) and the Journal of Educational Media Science (September 1980 – June 1982). In 2015, The JoEMLS is acknowledged as the A class scholarly journal in Taiwan by Ministry of Science and Technology (MOST). The JoEMLS has been a quarterly as well as a new title since

The JoEMLS is indexed or abstracted in Cabell's Directory of Publishing Opportunities Chinese Electronic Periodicals Service (CEPS) Directory of Open Access Journal (DOAJ) H.W. Wilson Database Index to Chinese Periodicals Library, Information Science & Technology Abstract (LISTA) Library & Information Sciences Abstracts (LISA) Library Literature & Information Science (LLIS) Public Affairs Information Services (PAIS) Scopus Taiwan Social Sciences Citation Index (TSSCI) Ulrich's Periodicals Directory

September 1982, appearing in Winter, Spring, Summer and Fall issues.

## 教育資料與圖書館學

#### JOURNAL OF EDUCATIONAL MEDIA & LIBRARY SCIENCES

#### 主編 ( Chief Editor )

邱炯友(Jeong-Yeou Chiu) 政治大學圖書資訊與檔案學研究所教授 Professor, Graduate Institute of Library, Information and Archival Studies, National Chengchi University, Taiwan 淡江大學資訊與圖書館學系兼任教授 Adjunct Professor, Department of Information and Library Science, Tamkang University, Taiwan

#### 執行編輯(Executive Editor)

林雯瑤(Wen-Yau Cathy Lin) 淡江大學資訊與圖書館學系副教授 Associate Professor, Department of Information and Library Science, Tamkang University, Taiwan

名譽主編 (Editor Emeritus) 黃世雄 教授(Professor Shih-Hsion Huang)

#### 歷任主編(Former Editors)

李華偉 教授(Professor Hwa-Wei Lee) 李長堅 教授(Professor Chang C. Lee)

> 編輯 ( Managing Editor ) 高禩喜(Sz-Shi Kao)

#### 編輯助理 ( Editorial Assistants )

張瑜倫(Yu-Lun Chang) 張瑜庭(Yu-Ting Chang) 尤玳琦(Tai-Chi Yu) 呂昱慧(Yu-Hui Lu)

#### 協同主編(Associate Editor)

張瓊穗(Chiung-Sui Chang) 淡江大學教育科技學系教授 Professor, Department of Educational Technology, Tamkang University, Taiwan

#### 英文協同主編 (English Associate Editor )

賴玲玲(Ling-Ling Lai) 淡江大學資訊與圖書館學系副教授 Associate Professor, Department of Information and Library Science, Tamkang University, Taiwan

#### 地區協同主編(Regional Associate Editors)

大陸地區 (Mainland China)

張志強(Zhiqiang Zhang) 南京大學出版科學研究所教授 Professor, Institute of Publishing Science at Nanjing University, China

#### 歐洲地區 (UK and Europe)

Dr. Judith Broady-Preston Director of Learning and Teaching, Department of Information Studies, University of Wales, Aberystwyth, UK

#### 美洲地區(USA)

Dr. Jin Zhang Professor, School of Information Studies, University of Wisconsin-Milwaukee, USA

#### 編務諮詢委員會(Editorial Board)

王美玉 (Mei-Yu Wang) 淡江大學資訊與圖書館學系主任 Chair, Department of Information and Library Science, Tamkang University, Taiwan

> 宋雪芳(Sheue-Fang Song) 淡江大學覺生紀念圖書館館長 Director, Chueh Sheng Memorial Library, Tamkang University, Taiwan

陳雪華(Hsueh-Hua Chen) 臺灣大學圖書資訊學系教授 Professor, Department of Library and Information Science, National Taiwan University, Taiwan

梁朝雲(Chaoyun Chaucer Liang) 臺灣大學生物產業傳播暨發展學系教授 Professor, Department of Bio-Industry Communication and Development, National Taiwan University, Taiwan

曾元顯(Yuen-Hsien Tseng) 臺灣師範大學資訊中心研究員 Research Fellow/Adjunct Professor, Information Technology

Center, National Taiwan Normal University, Taiwan 黃鴻珠(Hong-Chu Huang) 淡江大學資訊與圖書館學系教授 Professor, Department of Information and Library Science, Tamkang University, Taiwan

蔡明月 ( Ming-Yueh Tsay ) 政治大學圖書資訊與檔案學研究所教授 Professor, Graduate Institute of Library, Information and Archival Studies, National Chengchi University, Taiwan

薛理桂(Li-Kuei Hsueh) 政治大學圖書資訊與檔案學研究所教授 Professor, Graduate Institute of Library, Information and Archival Studies, National Chengchi University, Taiwan 方卿(Qing Fang) 武漢大學信息管理學院教授 Professor, School of Information Management, Wuhan University, China

沈固朝(Guchao Shen) 南京大學信息管理學院教授 Professor, School of Information Management, Nanjing University, China

吳建中(Jianzhong Wu) 上海圖書館館長 Director, Shanghai Library, China

Pia Borlund Professor, Royal School of Library and Information

Sam Hastings Professor, School of Library & Information Science, Uni-

versity of South Carolina, USA

Edie Rasmussen Professor, School of Library, Archival and Information Studies, University of British Columbia, Canada

Josephine Sche Professor, Information and Library Science Department, Southern Connecticut State University, USA

Peter Sidorko Librarian, The University of Hong Kong Libraries, The University of Hong Kong, Hong Kong

Hong Xu University Librarian, Duke Kunshan University, China

## Science, Denmark

### JoEMLS 編輯政策

本刊係採開放存取(Open Access)與商業資料庫付費途徑,雙軌發行之國際學術期刊,兼具電子版與紙本之平行出版模式。本刊除秉持學術規範與同儕評閱精神外,亦積極邁向InfoLibrary寓意之學域整合與資訊數位化理念,以反映當代圖書資訊學研究趨勢、圖書館典藏內容與應用服務為本;且以探討國內外相關學術領域之理論與實務發展,包括圖書館學、資訊科學與科技、書業與出版研究等,並旁及符合圖書資訊應用發展之教學科技與資訊傳播論述。

#### Open Access 典藏政策

JoEMLS向來以「綠色期刊出版者」(Green Publisher / Journal)自居,同意且鼓勵作者將自己投稿至JoEMLS之稿件,不論同儕評閱修訂稿與否,都能自行善加利用處理,但希望有若干限制:

(1)勿將已刊登之修訂稿(post-print)再自行轉為營利目的之使用;

(2) 典藏版以期刊排印之PDF 檔為首選;

(3)任何稿件之典藏版本皆須註明其與JoEMLS之關係或出版後之卷期出處。

#### JoEMLS Editorial Policy

The *JoEMLS* is an Open Access (OA) Dual, double-blind reviewed and international scholarly journal dedicated to making accessible the results of research across a wide range of Information & Library-related disciplines. The *JoEMLS* invites manuscripts for a professional information & library audience that report empirical, historical, and philosophical research with implications for librarianship or that explore theoretical and practical aspects of the field. Peer-reviewed articles are devoted to studies regarding the field of library science, information science and IT, the book trade and publishing. Subjects on instructional technology and information communication, pertaining to librarianship are also appreciated. The *JoEMLS* encourages interdisciplinary authorship because, although library science is a distinct discipline, it is in the mainstream of information science leading to the future of **InfoLibrary**.

#### **Open Access Archiving**

The *JoEMLS*, as a role of "OA green publisher/journal", provides free access onlined to all articles and utilizes a form of licensing, similar to Creative Commons Attribution license, that puts minimal restrictions on the use of *JoEMLS*'s articles. The minimal restrictions here in the *JoEMLS* are:

- (1) authors can archive both preprint and postprint version, the latter must be on a non-commercial base;
- (2) publisher's PDF version is the most recommend if self-archiving for postprint is applicable; and
- (3) published source must be acknowledged with citation.

#### JOURNAL OF EDUCATIONAL MEDIA & LIBRARY SCIENCES

Volume 52 Number 4 Fall 2015

### Contents

#### EDITORIAL

In and Beyond This Issue	
Jeong-Yeou Chiu	355
RESEARCH ARTICLE	
The Perceptions of "Healing" in BL (Boys' Love) Reading and the Situational Triggers Chieh-Yu Chang, & Chi-Shiou Lin	
Chieh-Yu Chang, & Chi-Shiou Lin	381
A Study of Measurement Invariance on E-Reading Strategy Scale	
Chao-Hsiang Hung, Po-Lin Chen, & Min-Ning Yu	409
Evaluating Learning Effectiveness of an	
Information Law Course in a Blended Learning Environment Based on the	
Kirkpatrick Model	
Nai-Cheng Chang, & Jason Tien Chou	441
Preliminary Analyses of Transmedia Adaptations of Pictorial Narratives and Aesthetic Pole Interpretations: Reflections on Theory	
Yu-Chai Lai	493
ACKNOWLEDGEMENT	
JoEMLS Reviewers for Volume 52	529



## EDITORIAL In and Beyond This Issue

2015 Cross-Strait cum Hong Kong and Macao Library and Information Science Journal Development Forum was just held in early November in Zhengzhou City, Henan Province, China. This is the second editors conference following the first Conference held in Macau in 2014. Participants in this conference are mostly journal chief editors and scholars in information and library science fields from Mainland China, Hong Kong and Macau, as well as representatives of Journal of Educational Media & Library Sciences (JoEMLS) and Journal of Library and Information Science Research (JLISR) from Taiwan. Experiences of scholarly journal editing and publishing are shared and relevant theories are discussed; issues regarding experiences and development of scholarly journal management in different environments are also raised. This conference is expected to be held in Hong Kong and Taiwan in the future, for maintaining the interaction and communication regarding the trend and research of library and information science journals. In this 2015 conference, Library and Information Science Journals Boycott of Academic Misconduct Joint Action Initiative is issued, in which the assertions include:

"Academic misconduct is a stumbling block to academic prosperity. Academic misconducts involving plagiarism, multiple submissions, data falsification, pseudo co-authorship, hiring of ghostwriters, etc., not only damage academic images, but also deter academic innovation and development. What we need is to reinforce research ethics, build decent academic atmosphere, boycott academic misconducts, and defeat academic corruption. All of these need collective participation and efforts from academic fields, journal publishing fields and global societies." In addition to the assertion above, four statements are also proposed:

1. All participants should have a deep awareness of the negative effects that academic misconducts have on academic development. We have to form a consensus, gather strength, and build an academic environment of honoring academic integrity, valuing research ethics and boycotting academic misconducts, for contributing positive energy to the academic development of library and information science.

2. Authors, editors, and manuscript reviewers should be trained to be able to distinguish and recognize various academic misconducts and phenomenon. Techniques of academic misconduct inspection should be introduced. Editorial boards and academic integrity institutions should actively involve in identifying academic misconducts, have a strict control over academic misconducts during the whole process of editing and publishing, and act as a gatekeeper blockading any papers involving academic misconducts.

3. Editorial boards of journals should actively make policies and regulations regarding academic misconducts. Announcing the statement, and once academic misconducts are identified, the institutions the authors are belonged to should be officially notified, and the misconducted authors should be punished by not being able to submit manuscripts within a certain period of time. Information regarding authors with academic misconducts should be openly shared; names of these authors should be listed; author integrity databases should be built. All of these are to manifest the resolution to punish academic misconducts.

4. Journal editors should strengthen their sense of responsibility and duty to boycott academic misconducts, value work ethics of journal publishing, avoid any activities that defy academic ethics, devote to building academic standards, develop strict guidelines regarding academic research and behaviors, maintain orders of scientific research, and promote healthy development of library and information science research.

From the content of the Initiative mentioned above, we can see that editorial boards of journals of library and information sciences across the Straits have already been aware of the importance and urgency of fighting for research ethics. Once the gatekeepers of journals have common concerns, it is expected of collective efforts for defeating academic misconducts in the near future.

In this issue (Volume 52, Issue 4), four manuscripts are published, including "The Perceptions of 'Healing' in BL (Boys' Love) Reading and the Situational Triggers" by Chieh-Yu Chang and Chi-Shiou Lin, "A Study of Measurement Invariance on E-reading Strategy Scale" by Chao-Hsiang Hung, Po-Lin Chen and Ming-Ning Yu, "Evaluating Learning Effectiveness of an Information Law Course in a Blended Learning Environment Based on the Kirkpatrick Model" by Nai-Cheng Chang and Jason Tien Chou, and "Preliminary Analyses of Transmedia Adaptations of Pictorial Narratives and Aesthetic Pole Interpretations: Reflections on Theory" by Yu-Chai Lai. Twelve manuscripts have gone through the review process, with eight others being rejected, and four accepted. The rejection rate is around 66.6%. Eight manuscripts are currently under review. Please look forward.

Jeong-Yeou Chiu JoEMLS Chief Editor



## The Perceptions of "Healing" in BL (Boys' Love) Reading and the Situational Triggers

Chieh-Yu Chang<sup>a</sup> Chi-Shiou Lin<sup>b\*</sup>

#### Abstract

Boys' Love (BL) is a fiction genre now enjoying high visibility and popularity among the young women in Taiwan. Inspired by the reader response theory, this study adopted a grounded theory approach to analyze female readers' perception of "healing" generated from BL reading. Based on the in-depth interviews with 22 readers, this study revealed three types of "healing" perception and four types of situations that prompted the emergence of the feelings. The three types of "healing" perception included the perceptions induced from the descriptions of interpersonal relations in the stories (i.e., the feeling of sweetness from reading about romantic love, coziness from reading about family love and friendships, and the pain and joy of looking back at the self's past), perceptions triggered by storylines or story characters (i.e., feeling relieved, feeling soothed, feeling of completion and satisfaction, feeling hilarious, feeling pampering toward story characters), and perceptions triggered by visual or audio sensations. The four types of situations for the emergence of the healing perception included the matching of textual characteristics and readers' romantic experiences, the matching of textual characteristics and readers' life experiences, an atmosphere of tenderness and softness induced by textual characteristics, and the reading of derivative creation based on other popular original fiction works that bring about satisfaction and completion. Based on the findings, this paper further discusses on the significance of the healing effects generated from everyday pleasure reading as well as the contribution of the analysis approach used in this study for future genre reading research.

**Keywords:** Boys' Love (BL), Pleasure reading, Healing reading, Women's reading

#### **SUMMARY**

#### Introduction

Boys' Love (BL) is a fiction genre that draws high visibility and popularity among female readers. BL works are romantic fantasies about love between two

<sup>&</sup>lt;sup>a</sup> Graduate Student, Department of Library & Information Science, National Taiwan University, Taipei, Taiwan

<sup>&</sup>lt;sup>b</sup> Associate Professor, Department of Library & Information Science, National Taiwan University, Taipei, Taiwan

To whom all correspondence should be addressed. E-mail: chishioulin@ntu.edu.tw

males created by women for women (Levi, 2010; McLelland, 2000a; Pagliassotti, 2010). Why female and predominantly heterosexual fandom is attracted to BL stories has been a topic of interest to researchers. Previous studies showed that women were attracted to BL because they were able to reverse the male gaze in BL reading and transcend the various gender constraints imposed on them in the rather patriarchic world (Chang, 2007; Chou, 2009; He, 2013; Lin, 2011; McLelland, 2000b, 2001). In other words, women often experience the pleasures of "transgression" from reading BL works (Lin, 2011).

However, observing fan postings about BL works in popular Internet forumsone may find that the pleasures of BL reading include more than transgression. For example, the fans in Taiwan often describe certain BL works as "healing" and "soothing", indicating a rather complicated and varying mixture of reading effects ranging from tranquility, warmth, sweetness, coziness, and sometimes, jubilation and exultation. And the sources of pleasures may or may not be transgressional. Existing studies have yet to systematically examine this type of reading perceptions. Hence, what constitutes the perceptions of healing and what triggers the healing perceptions become the inquiries of this study.

This study adopted a reader response theory approach to examine BL readers' reading experiences. The theory calls for a research focus on the interaction between texts and readers rather than treating textual and reader characteristics as predictors. Informed by the theory, this study strived to discern different types of feelings that are labeled as "healing" and the different situations that prompted the feelings. The situations refer to various conditions where the encountering of a text and a reader results in a positive, soothing, and healing feeling for the reader. This approach helped to reveal what types of healing perceptions were experienced by the participants and how/why the perceptions emerged in the reading processes.

#### **Research method**

This study employed a grounded theory approach to study the healing effects of BL reading (Strauss & Corbin, 1992/2001). Purposive sampling and snowball sampling techniques were used to recruit voluntary study participants who self-identified as having experienced the healing power of BL reading. The theoretical sampling technique was further used to sensitize the analysis. Readers who consumed mainly texts or images, as well as readers who read mainly original stories as opposed to those who read mainly derivative works based on popular titles, were systematically compared and contrasted.

By the end of the data collection and analysis, 22 female readers were included in the study. Semi-structured interview was used to collect narrative

data. The participants ranged between 22 and 30 in age. All of them were unmarried, and some of them had never had a romantic relationship. Half of them were college students, and the other half were college graduates and above. All of them have been reading BL for a rather long time, ranging from 3 years to more than 10 years. The types of BL works consumed varied from person to person, ranging from texts, manga, animation, radio dramas, etc.. A few of the participants also engaged in amateur creation of BL works.

#### Findings

#### 1. The Perceptions of Healing in BL Reading

Through the iterative and constant comparison of participant narratives, the analysis revealed at least ten different perceptions that were usually referred to as "healing." The ten perceptions can be further categorized into three majortypes:

(1) The healing perceptions induced by the interpersonal relations portrayed in the stories

Most of the participants who experienced this type of healing perceptions were touched either by the romantic love or the familial bonds and friendship/ comrade portrayed in the stories. Thus, they experienced the **sweetness of romantic love** and the **coziness of family love and friendship**. One participant reported that she enjoyed and relived her own regrettable past in reading sad and sorrowful stories in order to reexamine the becoming of the self. Such a practice was also defined as healing by this particular participant. This unique perception was called the **joy and pain of looking back at one's past** in our analysis.

(2) The healing perceptions induced by storylines or by story characters

Healing perceptions may also be caused by textual characteristics, mainly the storylines or the story characters. First, the pace of a highly dramatic story may help release tension and induce the **feeling of reliefs**. The descriptions of the soft and tender elements permeating many BL stories may induce the **feeling of comfort and soothing**. The happy ending of a story, which is usually a prerequisite of a popular BL work, can bring about the **feeling of completion and satisfaction**. Humorous tones that are usually observed in popular BL stories may cause a **feeling of hilarity**. Finally, the loveable story characters may induced a **feeling of pampering love** from the readers, and that was also described as very healing by the participants.

(3) The healing perceptions triggered by visual or audio sensations

This type of feelings include the **infatuation in beautiful male figures and voices** as well as the **feeling of warmth triggered by pictorial performances**, e.g., the tenderness or peaceful atmosphere conveyed in a still or moving image. These two perceptions are specific to readers who consume manga, animation, and radio drama.

#### 2. The Situations in Which the Healing Perceptions Arise

The analysis revealed four situations in which the encounter of a text and a reader resulted in positive, joyous and soothing perceptions for the participants.

(1) A match of the textual characteristics with the reader's romantic experiences or expectation

A work that portrays romantic love in ways that meets reader's reallife experiences or expectation may prompt a variety of healing perceptions aforementioned, e.g., sweetness of romantic love, joy and pain of one's past love. For participants with or without a real-life romantic experience, the relationships described in the stories spoke to their expectations for love and intimacy and induced strong sense of comfort, soothing, and the feeling of satisfaction and completion. Many of the participants expected their love relationships to be cozy and tranquil, to have a great mutual understanding with partners, to be mature and independent in the relationship, to have a strong sense of mutual belonging, to have a happy ending for the relationship, and finally, to be approved and accepted by the families. Stories fulfilling those requirements were often perceived to be more healing than others.

(2) A match of the textual characteristics with reader's life experiences

When a reader sees things beyond romantic love that echo her life experiences or expectations, such as story characters' adorable personality or working attitudes, a sense of comfort, relief, or satisfaction may arise. Further, some stories may be capable of soothing readers for the portrayal of suffering and struggling characters, vicariously through whom readers gain comfort and strengths to face their own challenges.

(3) An atmosphere of tenderness and softness induced by textual characteristics

Texts and images that were perceived as tender and soft may more likely induced the feelings of healing, although what were perceived as tender and soft varied from participant to participant. It could be the style of writing or illustration, story characters or narratives that incur a feeling of cuteness, or the portrayals of male figures as being warm, beautiful, and delicate rather than muscular and cold.

(4) Extended and prolonged reading in the consumption of derivative works

For participants who read derivative works, their admiration for and enjoyment from reading the original were extended and prolonged. Further, the derivative works often tell a story that meets readers' expectation for the fate of the story characters. Thus, it can provide them with a sense of completion and satisfaction.

#### Conclusion

The contribution of this study is the articulation of the fuzzy expression of "healing" from reading BL works. It shows that the healing perceptions are constituted by at least ten different sensations, and the healing perceptions are rooted in different contexts and have difference causes. While some of the perceptions appear to be highly specific to the genre of BL, others are more likely to be observed in other pleasure reading genres. For example, the healing perceptions induced by familial love, friendship and comrade, by audio or visual performance that incur the feeling of tenderness and softness and by the positive traits and attitudes of the story characters. Further, the reader response theory approach employed in this study has offered an alternative yet fruitful path for the genre reading research. Future research may focus more on observing the interactions of texts and readers to fully unveil how different reading effects come about in pleasure reading and genre reading.

#### ROMANIZED & TRANSLATED REFERENCE FOR ORIGINAL TEXT

- Strauss, A., & Corbin, J. (2001)。 紮根理論研究方法(吳芝儀、廖梅花譯)。嘉義市:濤石 文化。(原著出版於1992年)【Strauss, A., & Corbin, J. (2001). Basics of qualitative research (Chih-Yi Wu & Mei-Hua Liao, Trans.). Chiayi: Waterstone. (Original work published 1992) (in Chinese)】
- 中華民國行政院新聞局(2010)。2010 出版年鑑。檢索自http://webarchive.ncl.edu.tw/ archive/disk20/69/83/30/83/18/201205093011/20120725/web/info.gio/Yearbook/99/ index.html【Government Information Office, Republic of China. (2010). 2010 publication annual. Retrieved from http://webarchive.ncl.edu.tw/archive/disk20/69/83/30 /83/18/201205093011/20120725/web/info.gio/Yearbook/99/index.html (in Chinese)】
- 朱立元(編)(2005)。當代西方文藝理論(二版)。上海:華東師範大學出版社。【Zhu, Liyuan (Ed.) (2005). *Dangdaixifangwenyililun* (2nd ed.). Shanghai: East China Normal University Press. (in Chinese)】
- 何雨縈(2013)。腐女的歡愉一萌(未出版之碩士論文)。南華大學傳播學系,嘉義縣。 【He, Yu-Ying (2013). *Fujoshi'spleasure—Moe* (Unpublished master's thesis). Department of Communication, Nanhua University, Chiayi. (in Chinese)】
- 批踢踢實業坊(2015a)。批踢踢實業坊BL版。檢索自talent://ptt.cc【PTT. (2015a). *PTT-BL*. Retrieved from talent://ptt.cc (in Chinese)】
- 批踢踢實業坊(2015b)。批踢踢實業坊 BB-LOVE版。檢索自 talent://ptt.cc 【PTT. (2015b). *PTT-BB-LOVE*. Retrieved from talent://ptt.cc (in Chinese)】
- 李衣雲(2012)。變形、象徵與符號化的系譜——漫畫的文化研究。新北市:稻鄉。【Lee, I-Yun (2012). *Bianxing, xiangzheng yu fuhaohua de xipu: Manhua de wenhua yanjiu*. New Taipei City: Daw Shiang. (in Chinese)】
- 周典芳(2009)。台湾におけるヤオイ現象:読者インタビューから見出したヤオイの理由。日本ジェンダー研究,12,41-55。【Chou, Dien-Fang (2009). Yaoi phenomenon in Taiwan from interviews with female Readers: Reasons to enjoy male homosexual manga

and novels. Journal of Gender Studies Japan, 12, 41-55. (in Japanese)

- 林奇秀(2011年9月)。腐女的閱讀逾越/愉悦感: BL (Boys' Love)女性讀者閱讀經驗 分析。2011台灣社會研究學會年會:碰撞·新生:理論與實踐「踹共」發表之論 文,台北市。【Lin, Chi-Shiou (2011, September). Funu de yuedu yuyue/yuyuegan: BL (Boys' Love) nuxing duzhe yuedu jingyan fenxi. Paper presented at the 2011 TSA Annual Meeting: Pengzhuang xinsheng: Lilun yu shijian "chuaigong", Taipei. (in Chinese)】
- 林慧玲(2013)。從心理角度探討療癒系商品消費行為研究(未出版之碩士論文)。國立 政治大學廣告研究所,台北市。【Lin, Hui-Ling (2013). *Research on the consumer behavior of healing products from psychological view* (Unpublished master's thesis). Department of Advertising, National Chengchi University, Taipei. (in Chinese)】
- 張秀敏(2005)。 薔薇園裡的少年愛一同人誌文化與青少女性別主體(未出版之碩士論 文)。國立中正大學電訊傳播研究所,嘉義縣。【Chang, Hsiu-Min (2005). Boy's love in rosary garden: Research on Dojinshi culture and sexuality subjectivity (Unpublished master's thesis). Graduate Institute of Telecommunications, National Chung Cheng University, Chiayi. (in Chinese)】
- 張茵惠(2007)。 薔薇纏繞十字架: BL 閱聽人文化研究(未出版之碩士論文)。國立 臺灣大學新聞研究所,台北市。【Chang, Yin-Huei (2007). Crucifix entwisted with roses: Culture study on BL audience (Unpublished master's thesis). Graduate Institute of Journalism, National Taiwan University, Taipei, (in Chinese)】
- 許敏溶(2013年8月11日)。「同人誌」5萬人次擠爆。蘋果日報。檢索自http://www. appledaily.com.tw/【Hsu, Min-Jung (2013, August 11). "Dojinshi" wuwan renci jibao. *Apple Daily*. Retrieved from http://www.appledaily.com.tw/ (in Chinese)】
- 陳書梅(2008)。閱讀與情緒療癒-淺談書目療法。全國新書資訊月刊,120,4-9。 【Sheih, Chen Su-May (2008). Yuedu yu qingxu liaoyu: Qiantan shumu liaofa. *New Books: Recent Publications in Taiwan, ROC*, 120, 4-9. (in Chinese)】
- 陳書梅(2012)。從知性走向感性-以讀者為中心的閱讀推廣策略。檢索自http://blog. lib.npu.edu.tw/blog/wp-content/uploads/2012/05/05-17-%E5%88%86%E7%B5%843.1-%E5%BE%9E%E7%9F%A5%E6%80%A7%E8%B5%B0%E5%90%91%E6%84%9F% E6%80%A7-%E9%96%B1%E8%AE%80%E6%8E%A8%E5%BB%A3%E7%AD%96 %E7%95%A5%E7%9A%84%E6%96%B0%E6%80%9D%E7%B6%AD\_%E9%99%B 3%E6%9B%B8%E6%A2%85.pdf [Sheih, Chen Su-May (2012). Cong zhixing zouxiang ganxing: Yi duzhe wei zhongxin de yuedu tuiguang. Retrieved from http://blog.lib.npu. edu.tw/blog/wp-content/uploads/2012/05/05-17-%E5%88%86%E7%B5%843.1-%E5%B E%9E%E7%9F%A5%E6%80%A7%E8%B5%B0%E5%90%91%E6%84%9F%E6%80 %A7-%E9%96%B1%E8%AE%80%E6%8E%A8%E5%BB%A3%E7%AD%96%E7%9 5%A5%E7%9A%84%E6%96%B0%E6%80%9D%E7%B6%AD\_%E9%99%B3%E6%9 B%B8%E6%A2%85.pdf (in Chinese)]
- 陳書梅(2013)。國小兒童之情緒療癒閱讀。臺北市立圖書館館訊, 30(3), 69-79。【Sheih, Chen Su-May (2013). Emotional healing reading for elementary school children. Bulletin of the Taipei Public Library, 30(3), 69-79. (in Chinese)】
- 陳書梅(2014)。從沉鬱到淡定:大學生情緒療癒繪本解題書目。台北市:國立臺灣大 學出版中心。【Sheih, Chen Su-May (2014). *Revive from melancholy: An annotated*

*bibliography of emotional healing picture books for undergraduates*. Taipei: National Taiwan University Press. (in Chinese)

- 陳錦惠(2013)。閱讀歷程之美感經驗探究(未出版之博士論文)。國立臺北教育大學課程 與教學傳播科技研究所,台北市。【Chen, Chin-Hui (2013). An inquiry to the aesthetic experience in reading process (Unpublished doctoral dissertation). Graduate School of Curriculum and Instruction Communications Technology, National Taipei University of Education, Taipei. (in Chinese)】
- 單德興(1991)。試論小說評點與美學反應理論。中外文學,20(3),73-101。【Shan, Te-Hsing (1991). Shilun xiaoshuo pingdian yu meixue fanying lilun. *Chung-Wai Literary Monthly*, 20(3),73-101. (in Chinese)】
- 葉原榮(2010)。王子的國度:台灣BL(Boy's Love)漫畫迷的行為特質與愉悦經驗之研究(未出版之碩士論文)。國立臺灣藝術大學應用媒體藝術研究所,新北市。【Yen, Yuan-Jung (2010). The kingdom of princes: Research on the behavior characteristics and pleasure experience of BL (Boy's Love) manga fans in Taiwan (Unpublished master's thesis). Graduate School of Applied Media Arts, National Taiwan University of Arts, Taipei. (in Chinese)】
- 塵林(2014年5月24日)。動漫很忙:同人誌與cosplay次文化。蘋果日報。檢索自http:// www.appledaily.com.tw【Chenlin (2014, May 24). Dongman henmang: Dojinshi yu cosplay ciwenhua. *Apple Daily*. Retrieved from http://www.appledaily.com.tw/ (in Chinese)】
- 鍾瑞蘋(1999)。同性戀漫畫讀者之特性與使用動機之關聯性研究(未出版之碩士論文)。
  中國文化大學新聞研究所,台北市。【Chung, Jui-Ping (1999). Tongxinglian manhua
  duzhe zhi texing yu shiyong dongji zhi guanlianxing yanjiu (Unpublished master's thesis).
  Graduate Institute of Journalism, Chinese Culture University, Taipei. (in Chinese)】
- 耀斯(Jauss, H. R.) (1997)。審美經驗與文學解釋學(顧建光、顧靜宇、張樂天譯)。上海譯文。(原著出版於1982年) 【Jauss, H. R. (1997). Aesthetic experience and literary hermeneutics (Jianguang Gu, Jingyu Gu, & Letian Zhang, Trans.). Shanghai: Shanghai Translation. (Original work published 1992) (in Chinese) 】
- 饒婉平(2006)。療癒系商品之消費者體驗研究(未出版之碩士論文)。銘傳大學設計 管理研究所,台北市。【Jao, Wan-Ping (2006). Exploring the consumer experience of healing style products (Unpublished master's thesis). Graduate School of Design Management, Ming Chuan University, Taipei. (in Chinese)】
- Baruchson-Arbib, S. (1996). Social information science: Love, health, and the information society. Brighton, UK: Sussex Academic.
- Clark, C., & Rumbold, K. (2006). Reading for pleasure: A research overview. London, UK: National Literacy Trust. Retrieved from http://www.literacytrust.org.uk/assets/0000/0562/ Reading\_pleasure\_2006.pdf
- Greaney, V., & Neuman, S. B. (1990). The functions of reading: A cross-cultural perspective. *Reading Research Quarterly*, 25(3), 172-195.
- Iser, W. (1978). *The act of reading: A theory of aesthetic response*. Baltimore, MD: Johns Hopkins University Press.
- Jauss, H. R. (1982). Aesthetic experience and literary hermeneutics. Minneapolis, MN: University of Minnesota Press.

- Jones, E. H. (2001). What is bibliotherapy? In *Bibliotherapy for bereaved children: Healing reading* (pp. 15-24). London, UK: Philadelphia.
- Knox, E. (2014). Intellectual freedom and the agnostic-postmodernist view of reading effects. *Library Trends*, 63(1), 11-26. doi:10.1353/lib.2014.0021
- Levi, A. (2010). Introduction. In A. Levi, M. McHarry, & D. Pagliassotti (Eds.), Boys' love manga: Essay on the sexual ambiguity and cross-cultural fandom of the genre (pp. 1-8). Jefferson, NC: McFarland.
- Liu, T. (2009). Conflicting discourses on boys' love and subcultural tactics in Mainland China and Hong Kong. *Intersections: Gender and Sexuality in Asia and the Pacific*, 20. Retrieved from http://intersections.anu.edu.au/issue20/liu.htm
- Maatta, S. L. (2010). The role of the reader and the act of reading. In *A few good books: Using contemporary reader's advisory strategies to connect readers with books* (pp. 27-38). New York, NY: Neal-Schuman.
- McKechnie, L., Ross, C., & Rothbauer, P. (2007). Affective dimensions of information seeking in the context of reading. In D. Nahl & D. Bilal (Eds.), *Information and emotion: The emergent affective paradigm in information behavior research and theory* (pp. 187-196). Medford, NJ: Information Today.
- McLelland, M. (2000a). The love between "beautiful boys" in Japanese women's comics. Journal of Gender Studies, 9(1), 13-25. doi:10.1080/095892300102425
- McLelland, M. (2000b). No climax, no point, no meaning? Japanese women's boylove sites on the Internet. *Journal of Communication Inquiry*, 24(3), 274-291. doi:10.1177/0196859900024003003
- McLelland, M. (2001). Why are Japanese girls' comics full of boys bonking? *Intensities: The Journal of Cult Media*, *1*. Retrieved from http://intensities.org/essays/mclelland.pdf
- Pagliassotti, D. (2010). Better than romance? Japanese BL manga and subgenre of male/male romance fiction. In A. Levi, M. McHarry, & D. Pagliassotti (Eds.), *Boys' love manga: Essay on the sexual ambiguity and cross-cultural fandom of the genre* (pp. 59-83). Jefferson, NC: McFarland.
- Rane-Szostak, D., & Herth, K. A. (1995). Pleasure reading, other activities, and loneliness in later life. *Journal of Adolescent & Adult Literacy*, 39(2), 100-108.
- Ross, C. (1999). Finding without seeking: The information encounter in the context of reading for pleasure. *Information Processing and Management*, 35(6), 783-799. doi:10.1016/ S0306-4573(99)00026-6
- Ross, C. S. (2005). Reader response theory. In K. E. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior* (pp. 303-307). Medford, NJ: Information Today.
- Rubin, R. J. (1978). Using bibliotherapy: A guide to theory and practice. Phoenix, AZ: Oryx Press.
- Thron, M. (2004). Girls and women getting out of hand: The pleasure and politics of Japan's amateur comics community. In W. W. Kelly (Ed.), *Fanning the flames: Fans and consumer culture in contemporary Japan* (pp. 169-187). Albany, NY: State University of New York Press.

Chieh-Yu Chang **ORCID** 0000-0003-4636-7919 Chi-Shiou Lin **ORCID** 0000-0002-2312-7480



## A Study of Measurement Invariance on E-Reading Strategy Scale

Chao-Hsiang Hung<sup>a</sup> Po-Lin Chen<sup>b</sup> Min-Ning Yu<sup>c\*</sup>

#### Abstract

The study tested age invariance of the E-Reading Strategy Scale (ERSS) with multi-group structural equation modeling (MG-SEM) to compare age differences among the pupils, junior high, and senior high students in terms of e-reading strategy status. Data collected from Taiwan by stratified random sampling whose final sample size was 3,908, including 1,122 pupils, 1,601 junior high students, and 1,185 senior high students. The theoretical model of ERSS was a four-factor structure (searching and capturing, analyzing and understanding, using and communicating, reflecting and applying) with 11 Likert's scale items. The results showed that the ERSS had good fit index, acceptable reliability and validity. In the tests of invariance, there was factor loading invariance existed between pupils and junior high school students. However, just configuration invariance was existed between junior and senior high school students, and between pupils and senior high school students. The weights of item changed a lot on the junior high school students. In overall, all level student performance well on basic e-reading strategy, but still had much room to improve on advanced e-reading strategy. The results of the study increased the validity of age comparisons of ERSS and its applications. Further results and implications were discussed and proposed.

*Keywords:* E-reading strategy, Measurement invariance, Multi-group structural equation modeling

#### **SUMMARY**

Printed text reading strategies have been valued and studied for a long time in international and domestic educational fields, involving large-scale tests, such as PISA, to evaluate students' abilities of using reading strategies. In recent years, there is a shift of reading preferences from print materials to digital platforms (such as Google, Wiki, Facebook and blogs), but digital reading differs a lot in essence from printed text reading, and the time amount of using digital texts is much more than printed text reading, so Yu (2013) asserts to develop evaluation tools exclusively for investigating digital reading strategies. Digital reading reflects

<sup>&</sup>lt;sup>a</sup> Ph.D. Candidate, Department of Education, National Chengchi University, Taipei, Taiwan

<sup>&</sup>lt;sup>b</sup> Assistant Professor, Department of Applied Psychology, Hsuan Chuang University, Hsinchu, Taiwan

<sup>&</sup>lt;sup>c</sup> Professor, Department of Education, National Chengchi University, Taipei, Taiwan

<sup>\*</sup> To whom all correspondence should be addressed. E-mail: mnyu@nccu.edu.tw

the abilities of individuals' problem solving in digital environments, as well as the abilities of individuals' participating in societies and global communities. With the popularity of digital products, digital reading has naturally become a hot issue worth investigating.

Measurement Invariance (MI) is very important to standardized testing, because it usually involves large-scale testing and comparison of score differences. Without knowing MI, any score differences cannot be attributed to exact causes, including real differences, estimation differences, or tested subjects' different response patterns to manifest variables (test questions). A careless explanation or attribution might cause serious errors. In this study, multi-group structural equation modeling (MG-SEM) is adopted for the MI testing procedure to investigate the age differences of digital reading strategies. A series of nested models of comparison is adopted in the estimation procedure to examine step by step the different levels of MI hypotheses. In another word, MI estimation is not a matter of all-or-none statistical decision-making, and not to be completed in one single step; it involves a testing procedure from gradually identical to completely identical (Chiu, 2011). Through comparisons of groups at different levels of students of different levels of digital reading strategies among students of different ages.

The cross-sectional data collection approach is adopted in this study, aiming at Taiwanese students at levels of elementary, middle, and high schools, as well as vocational schools. Stratified sampling is involved, and surveys are delivered according to percentages of school numbers. After omitting invalid surveys, the total valid surveys include 1,122 ones from 12 elementary schools, 1,601 from 21 middle schools, and 1,185 from 12 high and vocational schools, with a total of 3,908 students. As to the gender distribution, 1,830 males (46.8%) and 2,078 females (53.2%) consists of the picture.

The scale of digital reading strategies includes four factors and eleven items, with factors of "search and retrieval", "analysis and comprehension", "use and communication", and "reflection and application". The tested participants are asked to rate the items with responses ranging from "never" to "usually so", which are then given with points of one to four. The higher scores mean that the tested participant has a higher frequency of using that digital reading strategy.

The version of SPSS 21 is adopted for descriptive statistics, relationship analysis and analysis of variance (ANOVA), SEM is adopted for advanced analysis to examine the scale's composite reliability (CR) and average variance extracted (AVE), and MG-SEM is used to examine if the digital reading strategy scale has an identical relation at different levels of education.

The results of MI test reveals that the digital reading strategy scale has a

factor loadings invariance in the sampled groups of both elementary and middle school levels, meaning that to these two sampled groups, the weighting of items in latent variable is identical. In another word, every manifest behavior has an identical importance to digital reading strategies. In the subsequent testing of scalar invariance and invariant measurement residual, there is no identical relation between the groups of elementary and middle school levels, meaning that there are differences between the intercept of digital reading behavior and the item reliability. In addition, since there is only factor loadings invariance but no invariant measurement residual between the sampled groups of elementary and middle school levels, it suggests that there is an identical weighting of every facet of the digital reading strategy scale, but the observed scores cannot be used for direct cross-group comparison, only good for evaluation of digital reading strategies among students in the same sampled group. The biggest difference is that, the sampled group of high and vocational school has only achieved configuration invariance with the other two groups. In another word, although the same tool and the same theoretical framework is applied, it has no problem for measurement and analysis of samples at the same educational level, but it might be affected by measurement bias if used for cross-group comparison of digital reading strategies of students at different educational levels or advanced analysis involving combined samples. It is advised not to do that.

According to the analysis results, compared with students at elementary and middle school levels, high school and vocational school students have relatively more mature digital reading strategies, especially for basic digital reading strategies. The comparisons reveal that students at all educational levels have relatively insufficient abilities for advanced digital reading strategies. Advanced digital reading strategies are essential for working in a digital era, and should be developed as early as possible for landing on ideal job positions. Internet is full of not only abundant information, but also highly interactive content. It is suggested to develop students' teamwork skills and digital reading and learning through practices.

#### ROMANIZED & TRANSLATED REFERENCE FOR ORIGINAL TEXT

余民寧(2006)。潛在變項模式: SIMPLIS 的應用。台北市:高等教育。【Yu, Min-Ning (2006). Latent varibable models: The application of SIMPLIS. Taipei: Edubook. (in Chinese)】

余民寧(2013)。他們透過網路閱讀,到底學到了什麼?人文與社會科學簡訊,14(3), 120-126。【Yu, Min-Ning (2013). Tamen touguo wanglu yuedu, daodi xuedaole shenme? *Humanities and Social Sciences Newsletter Quarterly*, 14(3), 120-126. (in Chinese)】

李彦玫(2015)。不同年齡與線上閱讀經驗在線上閱讀歷程及教學策略之差異比較研究

(未出版之碩士論文)。國立政治大學教育研究所,台北市。【Li, Yan-Mei (2015). A study on the comparison of online reading process and instructional strategies between different aged groups and online reading experiences (Unpublished master's thesis). Graduate Institute of Education, National Chengchi University, Taipei. (in Chinese)】

- 林尹千、洪碧霞(2010)。國中學生社會領域線上閱讀素養評量工具之發展。人文社會 學報,8(2),157-188。【Lin,Yin-Chien,&Hung,Pi-Hsia (2010). Development of an electronic reading assessment on social studies for junior high school students. *Journal of Liberal Arts and Social Sciences*, 8(2),157-188. (in Chinese)】
- 林珊如(2010)。數位時代的閱讀:青少年網路閱讀的爭議與未來。圖書資訊學刊, 8(2),29-53。【Chang, Shan-Ju Lin (2010). Reading in a digital age: Issues and future of reading on the web among young people. *Journal of Library and Information Studies*, 8(2),29-53. (in Chinese)】
- 林淑芳(2015)。【臺灣傳播調查】資料庫2014青少年資料研究成果分享(二):青少年網路素養與使用調查。檢索自 https://www.most.gov.tw/most/attachments/920bf203-3235-4f66-9efc-0191c803fc78【Lin, Shu-Fang (2015). "Taiwan Chuanbo diaocha" ziliaoku 2014 qingshaonian ziliao yanjiu chengguo fenxiang (2): Qingshaonian wanglu suyang yu shiyong diaocha. Retrieved from https://www.most.gov.tw/most/attachments/920bf203-3235-4f66-9efc-0191c803fc78 (in Chinese)】
- 林淑惠、孟瑛如、吳東光(2006)。提升網路閱讀的影響力與可及性-以學習障礙學 生為例。特教論壇,1,44-54。【Lin, Shu-Hui, Meng, Ying-Ru, & Wu, Tung-Kuang (2006). Raising the influence and accessibility of web-reading take students with learning disabilities for example. *Special Education Forum*, 1, 44-54. (in Chinese)】
- 邱皓政(2011)。結構方程式模型: LISREL/SIMPLIS的原理與應用(二版)。台北市:雙 葉書廊。【Chiou, Haw-Jeng (2011). Jiegou fangchengshi moxing: LISREL/SIMPLIS de yuanli yu yingyong (2nd ed.). Taipei: Yehyeh. (in Chinese)】
- 柯志恩、黃一庭(2010)。圖像優於文字?N世代學生認知發展之探究。教育研究月 刊,193,15-23。【Ko, Chih-En, & Huang, I-Ting (2010). Tuxiang youyu wenzi? N shidai xuesheng renzhi fazhan zhi tanjiu. *Journal of Education Research*, 193, 15-23. (in Chinese)】
- 洪碧霞(2011)。全民線上閱讀素養發展概況的調查與介入-線上閱讀理解構念模式及 介入效益之探討(NSC 99-2420-H-024-001)。台南市:國立臺南大學。【Hung, Pi-Hsia (2011). Quanmin xianshang yuedu suyang fazhan gaikuang de diaocha yu jieru: Xianshang yuedu lijie gounian moshi ji jieru xiaoyi zhi tantao (NSC 99-2420-H-024-001). Tainan: National University of Tainan. (in Chinese)】
- 孫劍秋、林孟君(2013)。從臺灣中學生PISA閱讀素養的表現談精進學生閱讀素養的教 學策略。中等教育,64(3),35-51。doi:10.6249/8E.2013.64.3.3【Hsun, Chien-Chiu, & Lin, Meng-Chun (2013). Issues on strategies for promoting reading instruction from the perspective of Taiwan high school students' performance in PISA reading. *Zhongdeng jiaoyu*, 64(3), 35-51. doi:10.6249/8E.2013.64.3.3 (in Chinese)】
- 張貴琳(2012)。國中學生線上閱讀素養發展現況調查。教育研究與發展期刊,8(2),87-117。【Chang, Kuei-Lin (2012). The survey of junior high school students online reading literacy. *Journal of Educational Research and Development*, 8(2), 87-117. (in Chinese)】

- 張貴琳(2013)。青少年線上閱讀素養評量工具之發展。教育實踐與研究,26(2),29-66。【Chang, Kuei-Lin (2013). The development of adolescent online reading literacy assessments. *Journal of Educational Practice and Research*, 26(2), 29-66. (in Chinese)】
- 張貴琳(2014)。青少年線上閱讀素養表現之關聯變項探討。市北教育學刊,45,29-68。【Chang, Kuei-Lin (2014). Impact of contextual factors on adolescents' online reading literacy. *Journal of Education of Taipei Municipal University of Education*, 45, 29-68. (in Chinese)】
- 教育部資訊及科技教育司(2014)。「聰明上網我不宅 幸福學習我最愛」—103年中小學 學生網路使用情形調查結果發表會。檢索自http://www.edu.tw/pages/detail.aspx? Node=1088&Page=25047&wid=3ee9c9ee-f44e-44f0-a431-c300341d9f77&Index=1 【Department of Information and Technology Education, Ministry of Education. (2014). "Congming shangwang wo buzhai, xingfu xuexi wo zuiai": 103 nian zhongxiaoxue xuesheng wanglu shiyong qingxing diaocha jieguo fabiaohui. Retrieved from http://www. edu.tw/pages/detail.aspx?Node=1088&Page=25047&wid=3ee9c9ee-f44e-44f0-a431c300341d9f77&Index=1 (in Chinese)】
- 陳木金、許瑋珊(2012)。從PISA閱讀評量的國際比較探討閱讀素養教育的方向。教 師夭地,181,4-15。【Chen, Mu-Jin, & Hsu, Wei-Shan (2012). Cong PISA yuedu pingliang de guoji bijiao tantao yuedu suyang jiaoyu de fangxiang. *Jiaoshi tiandi*, 181,4-15. (in Chinese)】
- 陳世娟、邵婉卿(2014)。臺灣民眾網路素養之調查研究。大學圖書館, 18(1), 33-57。 【Chen, Shih-Chuan, & Shaw, Wang-Ching (2014). A survey of the Taiwanese network literacy. University Library Quarterly, 18(1), 33-57. (in Chinese)】
- 陳柏霖、余民寧(2014)。新移民與非新移民子女家庭閱讀活動、閱讀策略及閱讀行 為之研究。高雄師大學報:教育與社會科學類,36,23-45。【Chen, Po-Lin, & Yu, Min-Ming (2014). A comparative study of family reading activities, reading strategies and reading behaviors between new immigrant and nonimmigrant children. *Kaohsiung Normal University Journal. Education and Social Sciences*, 36, 23-45. (in Chinese)】
- 陳柏霖、洪兆祥、余民寧(2013)。網路閱讀態度、網路閱讀行為及網路閱讀素養之橫 斷面研究。教育科學研究期刊,58(3),23-50。doi:10.6209/JORIES.2013.58(3).02 【Chen, Po-Lin, Hung, Chao-Hsiang, & Yu, Min-Ning (2013). Cross-sectional study of the relationships among e-reading attitude, e-reading behavior, and e-reading literacy. *Journal* of Research in Education Sciences, 58(3), 23-50. doi:10.6209/JORIES.2013.58(3).02 (in Chinese)】
- 曾炫鈞(2010)。從PIRLS 2006淺談國小四年級學童閱讀策略學習。國教之友,61(1),46-52。【Tseng, Hsuan-Chun (2010). Cong PIRLS 2006 qiantan guoxiao sinianji xuetong yuedu celue xuexi. *Guojiao zhi you*, 61(1),46-52. (in Chinese)】
- 游仕偉(2000)。E世代出版一多媒體的結晶,超連結的閱讀。出版學刊,3,4-7。【Yu, Shih-Wei (2000). E shidai chuban: Duomeiti de jiejing, chaolianjie de yuedu. *Chuban Xuekan*, 3, 4-7. (in Chinese)】
- 游森期、余民寧(2006)。網路問卷與傳統問卷之比較:多樣本均等性方法學之應用。 測驗學刊,53(1),103-127。【Yu, Sen-Chi, & Yu, Min-Ning (2006). Comparison of internet and paper-and-pencil questionnaires in Taiwan using multi-sample invariance

approach. *Psychological Testing*, 53(1), 103-127. (in Chinese)

- 鄭宇君(2013)。從數位學習到新素養:電子書閱讀器對高中生社群的可能影響。新聞 學研究,114,127-163。【Cheng,Yu-Chung (2013). Digital learning and new literacies: Potential influences of e-readers on high school students. *Mass Communication Research*, 114,127-163. (in Chinese)】
- Arbuckle, J. L. (2011). IBM<sup>®</sup> SPSS<sup>®</sup> Amos<sup>™</sup> 20 user's guide. Chicago, IL: IBM.
- Byrne, B. M. (1994). Structural equation modeling with EQS and EQS/Windows: Basic concepts, applications, and programming. Thousand Oaks, CA: Sage.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233-255. doi:10.1207/ S15328007SEM0902\_5
- Cheung, K. C., & Sit, P. S. (2008). Electronic reading assessment: The PISA approach for the international comparison and reading comprehension. *Journal of Educational Research and Development*, 4(4), 19-39.
- Clyde, L. A. (2005). Electronic books. Teacher Librarian, 32(5), 45-47.
- Coiro, J. (2006). *Exploring changes to reading comprehension on the Internet: Paradoxes and possibilities for diverse adolescent readers* (Unpublished doctoral dissertation). University of Connecticut, Storrs, CT.
- Coiro, J. (2011). Predicting reading comprehension on the Internet: Contributions of offline reading skills, online reading skills, and prior knowledge. *Journal of Literacy Research*, 43(4), 352-392. doi:10.1177/1086296X11421979
- Coiro J., & Dobler, E. (2011). Exploring the online reading comprehension strategies used by sixth-grade skilled readers to search for and locate information on the internet. *Reading Research Quarterly*, 42(2), 214-257. doi:10.1598/RRQ.42.2.2
- Drasgow, F., & Kanfer, R. (1985). Equivalence of psychological measurement in heterogeneous populations. *Journal of Applied Psychology*, 70(4), 662-680.
- Feather, J., & Sturges, P. (Eds.) (1997). International encyclopaedia of information and library science (2nd ed.). London, UK: Routledge.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. doi:10.2307/3151312
- Goldman, S. R., Braasch, J. L. G., Wiley, J., Graesser, A. C., & Brodowinska, K. (2012). Comprehending and learning from internet sources: Processing patterns of better and poorer learners. *Reading Research Quarterly*, 47(4), 356-381. doi:10.1002/RRQ.027
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Upper Saddle River, NJ: Pearson Education.
- Henry, L. A. (2006). Searching for an answer: The critical role of new literacies while reading on the internet. *The Reading Teacher*, 59, 614-627. doi:10.1598/RT.59.7.1
- Henry, L. A., Castek, J., O'Byrne, W. I., & Zawilinski, L. (2012). Using peer collaboration to support online reading, writing, and communication: An empowerment model for struggling readers. *Reading & Writing Quarterly*, 28(3), 279-306.
- Hu, L., & Bentler, P. M. (1999). Cut-off criteria for the fit indexes in covariance structure

analysis: Conventional criteria versus newalternatives. *Structural Equation Modeling*, 6(1), 1-55. doi:10.1080/10705519909540118

- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York, NY: Guilford Press.
- Kurniawan, S. H., & Zaphiris, P. (2001). Reading online or on paper: Which is faster? In Proceedings of the 9th International Conference on Human Computer Interaction (pp. 220-222). Mahwah, NJ: Lawrence Erlbaum Associates.
- Leu, D. J. (2007). *Expanding the reading literacy framework of PISA 2009 to include online reading comprehension*. Princeton, NJ: Educational Testing Services.
- Leu, D. J., Kinzer, C. K., Coiro, J., & Cammack, D. (2004). Toward a theory of new literacies emerging from the Internet and other information and communication technologies. In R. B. Ruddell & N. Unrau (Eds.), *Theoretical models and processes of reading* (5th ed., pp. 1568-1611). Newark, DE: International Reading Association.
- Liu, A. (2013). Transliteracies projects: Research in the technology, social, and cultural practices of online reading. Retrieved from http://transliteracies.english.ucsb.edu/category/research-project
- Meredith, W. (1993). Measurement invariance, factor analysis and factorial invariance. *Psychometrika*, 58(4), 525-543. doi:10.1007/BF02294825
- Milfont, T. L., & Fischer, R. (2010). Testing measurement invariance across groups: Applications in cross cultural research. *International Journal of Psychological Research*, 3(1), 111-121.
- Organisation for Economic Co-operation and Development. (2009). Assessing science, reading and mathematics literacy: A framework for PISA 2009. Paris, France: Author.
- Prensky, M. (2001). Digital natives, digital immigrants part 1. On the Horizon, 9(5), 1-6. doi:10.1108/10748120110424816
- Zawilinski, L. (2009). HOT blogging: A framework for blogging to promote higher order thinking. *Reading Teacher*, 62(8), 650-661. doi:10.1598/RT.62.8.3
- Zenotz, V. (2012). Awareness development for online reading. *Language Awareness*, 21(1/2), 85-100. doi:10.1080/09658416.2011.639893
- Zhang, S., & Duke, N. K. (2008). Strategies for internet reading with different reading purposes: A descriptive study of twelve good internet readers. *Journal of Literacy Research*, 40(1), 128-162. doi:10.1080/10862960802070491

Chao-Hsiang Hung ORCID 0000-0002-3876-4124 Po-Lin Chen ORCID 0000-0003-4677-4709 Min-Ning Yu ORCID 0000-0002-6284-8571 totimesting summary



## Evaluating Learning Effectiveness of an Information Law Course in a Blended Learning Environment Based on the Kirkpatrick Model

#### Nai-Cheng Chang<sup>a\*</sup> Jason Tien Chou<sup>b</sup>

#### Abstract

The purpose of this study was to apply the Kirkpatrick four-level model (reaction, learning, behavior, result) to evaluate the learning effectiveness of those students who studied the general education digital materials of "Information Law" in a blended learning environment. The study used a mixed-method approach, including a mainly quantitative online questionnaire, followed by semi-structured interviews. The results demonstrated that the students had a high overall satisfaction towards the course (reaction level), positive learning outcomes (learning level), and a positive behavior transfer after learning, which could occur either immediately or after a period of time (behavior level). The students had high efficiency and a positive contribution to their organizations and the information society after learning information law (result level). Based on the Kirkpatrick model, the results provided favorable evidence for the students' learning effectiveness and the course's value.

Keywords: Information law, Information literacy, Kirkpatrick model, Blended learning, E-Learning, General education

#### SUMMARY

With the application of information technology and the growing importance of the Internet, substantive and profound concepts of information literacy have been developed. Among these, the Information Law materials and curriculums have highlighted their importance. Education on Information Law has therefore become a crucial element for understanding information society and the technology industry, as well as for being a good modern digital citizen. The courses of information literacy for college students in Taiwan are mostly offered as general education courses, and the teaching style has been developed towards incorporating traditional teaching methods with an e-learning platform environment.

<sup>&</sup>lt;sup>a</sup> Associate Professor, General Education Center, Tatung University, Taipei, Taiwan

<sup>&</sup>lt;sup>b</sup> Associate Professor, Graduate Institute of Science and Technology Law, National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan

<sup>\*</sup> Principal author for all correspondence. E-mail: ncchang@ttu.edu.tw

Currently, tools of assessing the effectiveness of e-learning hardly discuss learner behavior change after learning; also, they often ignore the social impact of learners behavior change to the institutions. The Kirkpatrick four-level (reaction, learning, behavior, result) framework is one of the most dominant schemas for evaluating the effectiveness of training programs. The Kirkpatrick model was chosen for its simplicity in its structure. In terms of learning outcomes, the reaction level in the Kirkpatrick model is to evaluate whether the learners are satisfied with the instruction; the learning level is to evaluate what knowledge has learned and what skills have developed or improved after learning; the behavior level is to evaluate what learners' attitudes and skills have changed as a result of the course; and the result level is to evaluate the institutional changes/student outcomes in terms of costs, and quality and quantity improvements in instructions. The purpose of this study is to present findings of learning effectiveness of the digital information literacy materials "Information Law", initiated by the Ministry of Education (MoE) for higher education in Taiwan, using the Kirkpatrick four stage framework.

#### **Research Design and Implementation**

The study population consisted of 220 students in Tatung University (Taiwan) who took the Information Law course from the 2013 Fall to 2015 Spring semesters (two academic years). The course evaluation was conducted in four semesters and produced a total of 212 (96% of the study population) online questionnaires which were used to evaluate the level 1 thru level 4 in the Kirkpatrick model. The study used a mixed-method approach, including a mainly quantitative online questionnaire, followed by ten semi-structured interviews with students who took the course between 2012 fall semester and the 2014 fall semesters in order to evaluate level 3 and level 4. Moreover, empirical data collected from the course tasks and self-evaluation was used to evaluate level 2.

The online questionnaire was mainly based on the questionnaires design of numerous real world case studies that implemented the Kirkpatrick model (2006); also, the researcher referred to the design of questionnaire in Johnston (2010) and researcher's earlier research results (Chang, 2014). The interviews were carried out face-to-face from November 2013 to June 2015 with 10 respondents who were randomly selected. Kirkpatrick suggested the evaluation of behavior (level 3) and results (level 4) required at least three to six months after the training course. However, the researchers extended the time to 24 months because the researchers wished to observe if the improved performance of students had been sustained.

#### **Results and Discussion**

#### 1. Student satisfaction in the reaction level

In reaction level of the Kirkpatrick model, results of the percentages

favorable (strongly agree and agree) to the course were between 84% and 94%. This demonstrated favorable evidences of course effectiveness and its value. Two students who were not able to cope well with the pace of e-learning left the course in the middle of the semester. Five students earned a failing grade due to the absence of group assignment discussions. Students with low motivation and willpower or poor study habits to succeed in a self-study course would fall behind.

#### 2. Student learning effectiveness in the learning level

The survey showed that before taking the course, about 70% students had less than 50% familiarity with course materials. After completing the course, in learning level, results of the favorable percentages were between 90% and 94%. Furthermore, qualitative data collected from a variety of sources supported the findings from the questionnaire that most students had learned the knowledge, developed skills and had changed attitudes. The research found that a blendedlearning approach could be an ideal method in teaching and learning Information Law. The research also found that most students had substantial media literacy; they had no difficulty using the Learning Management System (LMS), except that more than 80 percent of the students thought Facebook was rather a friendlier platform than LMS for collaborative learning.

#### 3. Student behavior transfer after learning in the behavior level

The behavior level is to see whether the knowledge, skills and attitudes learned in the course transferred to study and daily life. Measuring behavior is complex. Behavior may change over short intervals. Nevertheless, the methodologies used in this study were reasonable assessments of the student behaviors. It was interesting to see how the behavior changes of the interviewees in 3-24 months after the course. These were consistent with the responses found from the questionnaire. It was understandable that students would always immediately or afterward transfer the knowledge, skills and attitudes learned to study and daily life whenever there is need. In behavior level, results of the favorable percentages are between 93% and 94%. Students who took the Information Law course have permission from LMS to access digital course materials before graduation whenever necessary. This is the advantage of e-learning with re-useable digital materials that might not be available in conventional class instruction.

## 4. Student contribution to their organizations and the information society after learning in the result level

Lee (2008) thought that it was difficult to evaluate the result level; yet, the results of this level would be significant to the institutions and the society. The results would be able to infer the economic benefits of the course, and to assess whether the course was worth the investment. In the level 4, results of

the percentages favorable were between 90% and 93%. The results showed that the course accomplished the course objectives which indicated improved quality, productivity and profit. Furthermore, students reported many benefits of the course to their study and daily life, and that they would recommend it to their friends. At the same time, they thought it should be continuously offered to students each semester.

The quantitative and qualitative evidence from four levels demonstrated the positive course value and the reinforcement was provided to the Tatung University and the MoE. One recognized way to demonstrate value is the Return of Expectation (ROE). Furthermore, this study could inspire more online teaching and learning activities and more uses of LMS platforms and in return, could demonstrate reasonable Return on Investment (ROI) to the University in terms of cost evaluation versus potential benefits. The MoE, a stakeholder as well, initiated and promoted the information law digital learning materials. The outcomes of this study also demonstrate a reasonable ROE and ROI for the MoE.

## Conclusions

The research suggested that the Kirkpatrick model to be a workable instrument to measure effectiveness of an Information Law course and to evaluate if the knowledge gained have been maintained and made useful for further study and life-long learning. This study has demonstrated innovative teaching and learning of Information Law which could enhance digital teaching ability and learning effectiveness.

The total results of the favorable percentages were between 84% and 94%. The quantitative and qualitative evidence from four levels demonstrated that overall students were satisfied with the design and delivery of the Information Law course in the e-learning environment (reaction level); students had positive learning effectiveness of the course (learning level); students had positive behavior transfer after learning (behavior level); students had positive contribution to their organizations and the information society after learning (result level).

The New World Kirkpatrick Model is an upgrade of the Kirkpatrick model, it further clarifies the meanings of the four levels. New elements in the upgraded model include engagement, relevance, confidence, commitment, reinforces, encourage, reward, monitor and so on. We suggest that future research could include these new elements to further examine the learning effectiveness of the Information Law course in an e-learning environment.

It is foreseeable that innovation and use of information technology, such as 3D printing, cloud computing, big data repository, help in the creation of human well-being. They could also bring new risks and problems, and must take precautions in advance to develop or revise laws and regulations to cope with. Thus, instructors should always update the content and bring students the latest Information Law knowledge of the information society. In addition, we are facing a new realm of the theory and practice of teaching and learning, for example, MOOCs and flipped classroom. Therefore, the instructors should continue to experiment more innovative teaching methods for the Information Law courses.

The educators need to pay attention to the negative impact of information technology on the students. The study suggests that in addition to building the rule of law through various outreach activities, extensive Information Law education is the most fundamental way in order to achieve excellence in digital citizenship.

#### ROMANIZED & TRANSLATED REFERENCE FOR ORIGINAL TEXT

- Paliwala, A.、施慧玲(2005)。法律e化教學之發展與應用:Iolfs 教學軟體之經驗分享。 國立中正大學法學集刊,19,201-246。【Paliwala, A., & Shee, Amy H. L. (2005). The development and application of e-learning in law: Some experiences from Iolis. *National Chung Chen University Law Journal*, 19, 201-246. (in Chinese)】
- 方瑀紳、李隆盛(2014)。臺灣數位學習的成效與研究: 2000-2011年間國內外研究文獻的回顧與綜整。教育資料與圖書館學, 51(特刊), 27-56。doi:10.6120/ JoEMLS.2014.51S/0634.RV.CM [Fang, Yu-Shen, & Lee, Lung-Sheng (2014). The effectiveness and studies of e-learning in Taiwan: A review and synthesis of 2000-2011 research literature. Journal of Educational Media & Library Sciences, 51(S), 27-56. doi:10.6120/JoEMLS.2014.51S/0634.RV.CM (in Chinese)]
- 吳茂昆(2002)。因應知識經濟世代之科技發展政策。國家政策季刊,1(1),167-182。【Wu, Maw-Kuen (2002). The Science and Technology Development Policy in a Knowledge-based Economy Era. National Policy Quarterly, 1(1), 167-182. (in Chinese)】
- 李隆盛(2008)。向企業學習:克伯屈的四層次評鑑。評鑑雙月刊,13,45-48。【Lee, Lung-Sheng Steven (2008). Xiang qiye xuexi: Donald Kirkpatrick de si ceng ci pingjian. *Evaluation Bimonthly*, 13, 45-48. (in Chinese)】
- 李隆盛、黃同圳(編)(2000)。人力資源發展。台北市:師大書苑。【Lee, Lung-Sheng Steven, & Huang, Tung-Chun (Eds.) (2000). *Renli ziyuan fazhan*. Taipei: Shtabook. (in Chinese)】
- 周天(2011)。網路時代我國數位出版產業面臨的著作權挑戰。檢察新論,10,2-19。 【Chou, Jason Tien (2011). Wanglu shidai woguo shuwei chuban chanye mianlin de zhuzuoquan tiaozhan. *Taiwan Prosecutor Review*, 10, 2-19. (in Chinese)】
- 周天、戴豪君、李科逸、方翊人、郭佳玫、綦冠婷、···林育廷(2002)。網路法律高手。 台北市:書泉。【Chou, Jason Tien, Tai, Hao-Chun, Li, Ko-I, Fang, I-Jen, Guo, Jia-Mei, Chi, Guan-Ting, ... Lin, Yu-Ting (2002). *Wanglu falu gaoshou*. Taipei: Shuquan. (in Chinese)】
- 周天、戴豪君、林育廷、李科逸、方翊人、洪麗玲、…蔡美智(2000)。數位科技與法 律。台北市:書泉。【Chou, Jason Tien, Tai, Hao-Chun, Lin, Yu-Ting, Li, Ko-I, Fang, I-Jen, Hong, Li-Ling, ... Tsai, Mei-Chih (2002). *Shuwei keji yu falu*. Taipei: Shuquan. (in Chinese)】

- 周倩、陳茵嵐、蔡政宏(2010)。培育網路世代的優質數位公民。研習資訊,27(5),13-21。【Chou, Chien, Chen, Yin-Lan, & Tsai, Cheng-Hung (2010). Peiyu wanglu shidai de youzhi shuwei gongmin. *Inservice Education Bulletin*, 27(5), 13-21. (in Chinese)】
- 林品村(2005)。國小學生資訊倫理與相關法律課程教學之行動研究(未出版之碩士論 文)。國立臺南大學資訊教育研究所,台南市。【Lin, Pin-Tsun (2005). An action research of implementing the curriculum of information ethics and information-related law in elementary school (Unpublished master's thesis). Graduate Institute of Information and Computer Education, National University of Tainan, Tainan. (in Chinese)】
- 林菁(2009)。資訊素養融入大學生主題探究之研究。教育資料與圖書館學,46(2), 233-266。【Chen, Lin Ching (2009). A study on integrating information literacy into undergraduates' inquiry learning. *Journal of Educational Media & Library Sciences*, 46(2), 233-266. (in Chinese)】
- 林進財、陳瑞全、陳啟斌、歐陽玉萍(2007)。E-learning學習績效運用模糊法評估。資 訊管理學報,14(2),247-271。【Lin, Chin-Tsai, Chen, Jui-Chuan, Chen, Chie-Bein, & Ou Yang, Yu-Ping. (2007). Fuzzy integral for e-learning performance evaluation. *Journal* of Information Management, 14(2), 247-271. (in Chinese)】
- 邱弘昇、趙貞怡(2012)。應用網路實況平臺進行自主學習之學習成效研究。資訊傳播研究,2(2),59-75。【Chiou, Hong-Sheng, & Chao, Jen Yi (2012). Learning effect of self-learners who use online live-casting platform. *Journal of Information Communication*, 2(2),59-75. (in Chinese)】
- 徐振雄(2011)。資訊網路法導論(二版)。台北市:藍海文化。【Hsu, Chen-Hsiung (2011). Zixun wanglu fa daolun (2nd ed.). Taipei: Lanhai. (in Chinese)】
- 徐振雄(2012)。從科技與倫理的跨域對話談道德的基本認知:以「網路法與網路倫理」課程為例。止善,13,191-218。【Hsu, Chen-Hsiung (2012). Interdisciplinary dialogue between technological law and professional ethic: An example from the course "internet law and ethic". Zhishan, 13, 191-218. (in Chinese)】
- 財團法人台灣網路資訊中心(2015)。「台灣無線網路使用調查」結果公布,熟齡上網正 夯,行動連網民眾滿意。檢索自http://www.twnic.net.tw/NEWS4/137.pdf【Taiwan Network Information Center. (2015). "Taiwan wuxian wanglu shiyong diaocha" jie guo gongbu, Shouling shangwang zheng hang, xingdong lianwang minzhong manyi. Retrieved from http://www.twnic.net.tw/NEWS4/137.pdf (in Chinese)】
- 國立交通大學科技法律研究所(2015)。國立交通大學科技法律研究所。檢索自http:// www.itl.nctu.edu.tw/【Institute of Technology Law, National Chiao Tung University. (2015). Institute of Technology Law, National Chiao Tung University. Retrieved from http://www.itl.nctu.edu.tw/ (in Chinese)】
- 張如瑩(2010)。大學校院資訊素養通識課程規劃研究(未出版之碩士論文)。國立政治大 學圖書資訊與檔案學研究所,台北市。【Chang, Ju Ying (2010). A study of designing information literacy courses for university general education. (Unpublished master's thesis). Graduate Institute of Library, Information & Archival Studies, National Chengchi University, Taipei. (in Chinese)】
- 張迺貞(2010)。數位學習應用於圖書館利用教育:以數位學習教材「圖書資訊應用」 為例。大同大學通識教育年報,6,187-204。【Chang, Naicheng (2010). Applying

e-learning in library instruction: The e-learning core curriculum course"the utilization of library and information". *Tatung Journal of General Education*, *6*, 187-204. (in Chinese)

- 張迺貞(2014)。運用「資訊法律」數位教材融入通識教育數位學習環境。大同大學通 識教育年報,10,115-139。【Chang, Naicheng (2014). Implementing digital material "information law" into general education in an e-learning environment. *Tatung Journal of General Education*, 10, 115-139. (in Chinese)】
- 張瑞星、周天、程法彰(2008)。科技與法律。台北市:元照。【Chang, Ruey-Hsing, Chou, Jason Tien, & Cheng, Fa-Chang (2008). *Keji yu falu*. Taipei: Angle. (in Chinese)】
- 教育部(2015)。教育部大學院校課程資源網。檢索自http://ucourse-tvc.yuntech.edu. tw/web\_nu/search\_general.aspx【Ministry of Education. (2015). Course information. Retrieved from http://ucourse-tvc.yuntech.edu.tw/web\_nu/search\_general.aspx (in Chinese)】
- 許梅芳(2011)。國小學童社群網站使用行為與資訊法律認知之研究(未出版之碩士論 文)。國立臺中教育大學區域與社會發展學系,台中市。【Hsu, Mei Fang (2011). *Study on social network using behavior and recognition of information law of elementary school students* (Unpublished master's thesis). Department of Regional and Social Development, National Taichung University of Education, Taichung. (in Chinese)】
- 郭振昌(2012)。柯氏(Kirkpatrick)訓練評估模式的修正與反省。台灣勞工季刊,29, 115-124。【Guo, Cheng-Chang (2012). Kirkpatrick xunlian pinggu moshi de xiuzheng yu fanxing. *Taiwan laogong jikan*, 29, 115-124. (in Chinese)】
- 陳人傑、郭佳玫、黃大洲、朱世霓、吳兆琰、林煒鎔、…郭戎晉(2005)。數位法律 時代。台北市:書泉。【Chen, Jen-Chieh, Kuo, Chia-Mei, Huang, Ta-Chou, Chu, Shih-Ni, Wu, Chao-Yen, ... Guo, Rong-Jin (2005). *Shuwei falu shidai*. Taipei: Shuquan. (in Chinese)】
- 陳怡吟(2010)。網路法律認知與態度相關性之研究:以台中縣東勢鎮國中生為例(未 出版之碩士論文)。國立臺灣師範大學政治學研究所在職進修碩士班,台北市。 【Chen, Yi-Yin (2010). The study on corelation between students' cognition and attitudes toward cyberlaw lssues: Taking junior high stuednts in Dongshi Town, Taichung County for example (Unpublished master's thesis). Graduate Institute of Political Science, National Taiwan Normal University, Taipei. (in Chinese)】
- 陳櫻琴、葉玟妤、錢世傑、黃于玉(2004)。資訊法律(二版)。台北市:華立。【Chen, Yin Chin Inge, Yeh, Wen-Yu, Chien, Shih-Chieh, & Huang, Yu-Yu (2004). *Zixun falu* (2nd ed.). Taipei: WahLee. (in Chinese)】
- 黃玉雯(2011)。大專院校通識課程使用數位教材之學習成效探討:以資訊法律課程為 例(未出版之碩士論文)。世新大學資訊管理學研究所,台北市。【Huang, Yu-wen (2011). College and university general education courses use digital teaching materials of learning: An example of information law courses (Unpublished master's thesis). Institute of Information Management, Shih Hsin University, Taipei. (in Chinese)】
- 黃俊傑(2004)。全球化時代大學通識教育的新挑戰。高雄市:中華民國通識教育學會。 【Huang, Chun-Chieh (2004). *Quanqiuhua shidai daxue tongshi jiaoyu de xintiaozhan*. Kaohsiung: Chinese Association of General Education. (in Chinese)】

楊智傑(2013)。資訊法(四版)。台北市:五南。【Yang, Chih-Chieh (2013). Zixun fa (4th

ed.). Taipei: WuNan. (in Chinese)

- 網路資訊法律實務(2015)。檢索自http://homepage.ttu.edu.tw/blanca/doc/G4290course Outline.htm【Wanglu zixun falu shiwu. (2015). Retrieved from http://homepage.ttu.edu.tw/ blanca/doc/G4290courseOutline.htm (in Chinese)】
- 劉靜怡(1998)。網路社會規範模式初探。國立臺灣大學法學論叢,28(1),1-45。【Liu, Ching-I (1988). Wanglu shehui guifan moshi chutan. *National Taiwan University Law Journal*, 28(1), 1-45. (in Chinese)】
- 戴錫瑩、孫躍東、李岩(2009)。基於Kirkpatrick評估模式的網路學習績效評價模式設計。中國遠程教育,2009(1),45-48。【Dai, Xi-Ying, Sun, Yue-Dong, & Li, Yan (2009). Design of Kiekpatrick-based evaluation of online distance learning performance. *Distance Education in China*, 2009(1),45-48. (in Chinese)】
- 謝文英(2001)。通識教育:理論與實務。台北市:五南。【Hsieh, Wen-Ying (2001). *Tongshi jiaoyu: Lilun yu shiwu*. Taipei: WuNan. (in Chinese)】
- Allen, M. (2003). The lessons of e-learning. Optimize Magazine, 26, 51.
- American Society of Training and Development. (2006). American Society of Training and Development's annual review of trends in workplace learning and performance. Alexandria, VA: Author.
- American Society of Training and Development. (2013). Education programs: E-learning/ Online earning. Retrieved from http://www.astd.org/Education/Programs/All?filter=ed\_ subject%3aE-Learning%2fOnline+Learning
- Beniger, J. R. (1986). The control revolution: Technological and economic origins of the information society. Cambridge, MA: Harvard University Press.
- Black, S. K. (2002). *Telecommunications law in the Internet age*. San Francisco, CA: Morgan Kaufmann.
- Cavazos, E. A., & Morin, G. (1994). Cyberspace and law: Your rights and duties in the on-line world. Cambridge, MA: MIT Press.
- Chang, N., & Chen, H. (2014, August). Motivational analysis of digital information literacy materials in a blended e-learning environment. Poster session presented at the World Library and Information Congress: 80th IFLA General Conference and Assembly, Lyon, France.
- Chang, N., & Chen, L. (2014). Evaluating the learning effectiveness of an online information literacy class based on the Kirkpatrick framework. *Libri: International Journal of Libraries and Information Services*, 64(3), 211-223. doi:0.1515/libri-2014-0016
- Chrysafiadi, K., & Virvou, M. (2013). PeRSIVA: An empirical evaluation method of a student model of an intelligent e-learning environment for computer programming. *Computers & Education*, 68, 322-333. doi:10.1016/j.compedu.2013.05.020
- Drucker, P. F. (1967). The effective executive. New York, NY: Harper & Row.
- Galloway, D. L. (2005). Evaluating distance delivery and e-learning: Is Kirkpatrick's model relevant? *Performance Improvement*, 44(4), 21-27. doi:10.1002/pfi.4140440407
- Gharechedaghi, N. N., Fartash, A., & Ghotbi, A. (2012). Evaluating the effectiveness of e-learning courses based on the Kirkpatrick model. *Journal of Basic and Applied Scientific Research*, 2(6), 5636-5643.

Hamtini, T. M. (2008). Evaluating e-learning programs: An adaptation of Kirkpatrick's model to accommodate e-learning environments. *Journal of Computer Science*, *4*(8), 693-698.

Horton, W. (2001). Evaluating e-learning. Alexandria, VA: ASTD.

International Federation of Library Associations and Institutions. (2014). IFLA media and information literacy recommendations. Retrieved from http://www.ifla.org/publications/ ifla-media-and-information-literacy-recommendations

IT Law Wiki. (2014). IT law wiki. Retrieved from http://itlaw.wikia.com

- Jankowich, A. E. (2005). Property and democracy in virtual worlds. Boston University Journal of Science and Technology Law, 11(2). Retrieved from http://www.bu.edu/law/central/jd/ organizations/journals/scitech/volume112/JankowichArticleWEB.pdf
- Johnston, N. (2010). Is an online learning module an effective way to develop information literacy skills? *Australian Academic & Research Libraries*, *41*(3), 207-218. doi:10.1080/00048623.2010.10721464
- Kirkpatrick Partners. (2015). The new world Kirkpatrick model. http://www.kirkpatrickpartners. com/OurPhilosophy/TheNewWorldKirkpatrickModel/ tabid/303/
- Kirkpatrick, D. L. (Ed.) (1975). Evaluating training programs: A collection of articles from the Journal of the American Society for Training and Development. Madison, WI: ASTD.
- Kirkpatrick, D. L. (Ed.) (1998). Another look at evaluating training programs: Fifty articles from training & development and technical training: Magazines cover the essentials of evaluation and return-on-investment. Alexandria, VA: ASTD.
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels* (3rd ed.). San Francisco, CA: Berrett-Koehler.
- Kling, R. (2007). What is social informatics and why does it matter? *Information Society*, 23(4), 205-220. doi:10.1080/01972240701441556
- Lau, J. (2006). Guidelines on information literacy for lifelong learning. Veracruz, Mexico: International Federation of Library Associations and Institutions. Retrieved from http:// archive.ifla.org/VII/s42/pub/IL-Guidelines2006.pdf
- Lavender, D. T., Omoni, G., Lee, K., Wakasiaki, S., Campbell, M., Watiti, J., Mathai, M. (2013). A pilot quasi-experimental study to determine the feasibility of implementing a partograph e-learning tool for student midwife training in Nairobi. *Midwifery*, 29(8), 876-884. doi:10.1016/j.midw.2012.10.003
- Lessig, L. (1999). The law of the horse: What cyberlaw might teach. *Harvard Law Review*, 113, 501-546. Retrieved from https://cyber.law.harvard.edu/works/lessig/finalhls.pdf
- Lloyd, I. J. (2008). *Information technology law* (5th ed.). New York, NY: Oxford University Press.
- Machlup, F. (1962). *The production and distribution of knowledge in the United States*. Princeton, NJ: Princeton University Press.
- New York University School of Law. (2015). Information Law Institute. Retrieved from http:// www.law.nyu.edu/centers/ili
- Nimmer, R. T. (2004). Information law (Vols. 1-2). St. Paul, MN: West.
- Nora, S., & Minc, A. (1980). *The computerization of society: A report to the president of France*. Cambridge, MA: MIT Press.

- Oxford Internet Institute University of Oxford. (2015). Oxford Internet Institute. Retrieved from http://www.oii.ox.ac.uk
- Phillips, J., Phillips, P., & Zuniga, L. (2000). Evaluating the effectiveness and the return on investment of e-learning. Alexandria, VA: ASTD.
- Powell, W. W., & Snellman, K. (2004). The knowledge economy. Annual Review of Sociology, 30(1), 199-220. doi:10.1146/annurev.soc.29.010202.100037
- President & Fellows of Harvard College. (2015). Program in general education. Retrieved from http://www.generaleducation.fas.harvard.edu/icb/icb.do
- Reeves, T. C., & Hedberg, J. G. (2003). *Interactive learning systems evaluation*. Englewood Cliffs, NJ: Educational Technology.
- Ruiz, J. G., Mintzer, M. J., & Leipzig, R. M. (2006). The impact of e-learning in medical education. Academic Medicine, 81(3), 207-212.
- Scott, M. D. (2007). Scott on information technology law (3rd ed.). Austin, TX: Aspen.
- Small, R. V., Zakaria, N., & El-Figuigui, H. (2004). Motivational aspects of information literacy skills instruction in community college libraries. *College & Research Libraries*, 65(2), 96-121. doi:10.5860/crl.65.2.96
- Sommer, J. H. (2000). Against cyberlaw. Berkeley Technology Law Journal, 15(3), 1145-1232. doi:10.15779/Z38910H
- Sookman, B. B. (2009). Computer, Internet, and electronic commerce terms: Judicial, legislative and technical definitions. Toronto, ON: Carswell.
- Standler, R. B. (1999). What is computer law? Retrieved from http://www.rbs2.com/cdefn.htm
- Stanford University. (2015). Undergraduate degrees and programs. Retrieved from http:// exploredegrees.stanford.edu/undergraduatedegreesandprograms/#gerstex
- United States Office Personnel Management. (2011). Field guide to training evaluation: Demonstrating the value of training at every level. Retrieved from http://www.opm.gov/ policy-data-oversight/training-and-development/reference-materials/training\_evaluation. pdf
- Walsh, A. (2009). Information literacy assessment: Where do we start? Journal of Librarianship and Information Science, 41(1), 19-28. doi:10.1177/0961000608099896
- Webster, F. (2006). Theories of the information society (3rd ed.). London, UK: Routledge.
- Werner, J. M., & DeSimone, R. L. (2009). *Human resource development* (5th ed.). Mason, OH: South-Western Cengage Learning.
- Yin, R. K. (2014). Case study research: Design and methods (5th ed.). Los Angeles, CA: Sage.

Nai-Cheng Chang **ORCID** 0000-0003-1698-6946 Jason Tien Chou **ORCID** 0000-0001-9049-6924



## Preliminary Analyses of Transmedia Adaptations of Pictorial Narratives and Aesthetic Pole Interpretations: Reflections on Theory

Yu-Chai Lai

#### Abstract

Transmedia narratives are a key topic of communication research. Transmedia adaptations occur when a narrator transposes an original work by using various media platforms. Considering pictorial turn, this study employed the intermediality of an animated work that was adapted from an award-winning picture book as an example to propose an analysis for theory building. After examining the literature on transmedia narratives, intermediality, and aesthetic communication, this study proposed analyses for the dimensions of transmedia adaptations of pictorial narratives and aesthetic pole interpretations. Focusing on the three layers of the artistic pole, aesthetic pole, and interactions and effects, this study cited the cases of award-winning picture books and adapted animated works as the basis for reflecting on aesthetic communication. The artistic pole of transmedia adaptation was used as an example of how a narrator employs intermediality by citing the pictures, plot, or art forms from an original work to reinvent structures and then adapts them according to intermediality. If the aesthetic pole views the adapted animated work after reading the picture book or forms an expectation of the adaptation because of intermediality, then when the audience watches the adapted animated work, their imagination could be stimulated by the intermediality (i.e., picture book graphics and scene depictions). For transmedia narrative interaction, the aesthetic pole must "fill blanks" or "negate" to continue to view the adaptation. For filling blanks, because of intermediality, the aesthetic pole must construct an "intracompositional intermediality" to connect with the visual and audio links of the same work or construct "extracompositional intermedialty" to associate the original work with the transmedia adaptation. For negation, when viewing the adaptation (i.e., presentation of picture book graphics, added music, or theme song), the aesthetic pole must gradually adjust his or her expectations to engage with the transmedia universes.

*Keywords*: Intermediality, Aesthetic communication, Transmedia narrative, Pictorial narrative, Picturebook

#### SUMMARY

Transmedia storytellers resort to distinguished types and multi-modalities to re-interpret works according to natures of different media (Grishakova &

Associate Professor, Department of Journalism, MingChuan University, Taipei, Taiwan E-mail: raven.claw@msa.hinet.net

Ryan, 2010; Kress, 2010; Toolan, 2010). Since media plays an important role, transmedia narrative studies have focused on investigating what narrative resources the media can provide for guiding transmedia storytellers' interpretation process, as well as audience's comprehension and responses (Jones, 2009; Kress, 2010). Aesthetic communication process can be categorized as the artistic pole, the aesthetic pole and interaction and effects (Iser, 1971, 1972, 1978). Aesthetic communication plays an important role as reader-response criticism mentioned the subjectivity and activity of readers (Iser, 1978). From 1990, scholars want to elaborate the aesthetic communication model by the pictorial turn. The article discusses pictorial narrative and tries to elaborate the aesthetic communication model by visual texts.

Transmedia narratives include transpositions from one platform to the multiplatforms (Jenkins, 2006; Robillard, 2010). Transmedia storytellers want to expand contents by different genres to construct story networks or story universes (Jenkins, 2006). Some scholars of transmedia narratology also mentioned the contexts of convergence culture and re-visited the role of "media" (Evans, 1998; Grishakova, 2010).

A study integrating theories of transmedia narratives and aesthetic responses, would help investigate the transposition process and consideration at the artistic pole, as well as the transmedia participation at the aesthetic pole.

This study is a theoretical proposal of analyzing theoretical constructs for discussing transmedia narratives and aesthetic communication. The study takes into consideration of the settings of animation and movies adapted from picture books, as well as the pictorial return, thus based on animation adapted from picture books, the author tries to analyze the interpretation process at both the artistic pole and the aesthetic pole in transmedia visual narratives. This study also involves preliminary observation of examples, such as analyzing picture books and adapted animation with both artistic quality and intermediality. The in-depth interview approach involving 30 participants is integrated with the theoretical proposal for applying theories in text analysis and in-depth interviews.

## **1.**Adaption consideration at the artistic pole in transmedia visual narratives—using the intermediality to extend story networks

Adaptors can consider the different natures of transmedia platforms and distinguished multimodality, and transpose picture books into animation according to the different natures of communication technologies. Transmedia storytellers can also adapt according to typed languages and audience's expectations toward narratives. They can also add personal interpretation, intermediality and aesthetic quality at the artistic pole, as the foundation for adapting works. When engaging in transmedia transposition for visual narratives, adaptors can choose key

fragments based on story themes, and consider condensing, extending, enlarging or actualizing these fragments. When adapting picture books into animation, adaptors need to consider the intermodality of animation, and re-create according to the different natures of communication tools and software. When adaptors extend story networks, they need to take into consideration of the plots, codes, compositions and other manifest features of the original works, and connect story versions from different platforms through intermediality. Adaptors also need to invoke audience's association of original works through intermediality. Adaptors can refer to original works' images and texts, and transpose the original works' frames into consecutive images and narratives.

# 2. The horizon and five sense experiences at the aesthetic pole of transmedia transposition of visual narratives—taking intermediality into consideration

The audience at the aesthetic pole would form narrative expectations from viewing the text and image presentation and focusing on visual elements. That is, audience would form expectations for manifest features (such as images, composition and character features), or associate the plot development of adapted version based on original works' plots. Audience can incorporate previous experiences of viewing works, refer to previous intermediality, and invoke five senses association.

#### 3. Interaction and effects at the aesthetic pole of transmedia transposition of visual narratives—the focus of discussion would be "filling blanks" and "negativity" triggered by intermediality

(1) Process of filling blanks

Based on personal life experiences, the audience fills blanks after reading the stories. They can fill the blanks of texts and modify things not detailed in adapted version based on typed knowledge; they can combine visual elements to form specified physical features, and organize the sequences of text and images into a meaningful system (Prince, 1982; Thomas, 2010).

Transmedia storyteller can represent characters, settings and time/space background, based on clues in text and images of original works. They have to attend to the effect of "matching on action" if similar characters and settings are extracted from original works; they can use the composition relation in single frame to indicate the importance of each visual elements or items; they can use sequenced frames to indicate narrative sequences, for the audience to associate the cause and effect relations (Doloughan, 2010; Herman, 2002; Lewis, 2001; Pratt, 2009).

When the audience view the transmedia picture books and adapted animation, they can connect visual elements through intermediality. They can interpret the cause and effect relationship, animation transformation and time course, based on features such as characters, actions, settings, sound effects of the same stories. They can thus enjoy multiple-dimension experiences by incorporating audio and visual elements.

The audience can also form the intermediality by viewing other works and using their typed knowledge. They can modify the relations between adapted animation and original picture books, or refer to the clues in original works.

(2) Negativity and intermediality—the focus of investigation would be audio elements

Picture books are mute media, but audience can develop audio association for texts and images through intermediality. When audience are viewing transmedia animation, they have to overthrow previous association toward sounds, and then they can communicate with adapted texts and extend transmedia participation. Audience can rely on conventional sound effects (such as sounds of water ripples, waves, and fish bubbling) and typed languages as the starting point of intermediality, and evaluate if audio and visual elements match with each other. If audio elements of adapted works can invoke audience's intermedia interpretation, audience can more easily develop negativity and adjust previous imagination, and enter transmedia universes.

### ROMANIZED & TRANSLATED REFERENCE FOR ORIGINAL TEXT

- Amount, J., & Marie, M. (1996)。當代電影分析方法論(吳珮慈譯)。台北市:遠流。(原 著出版於1988年)【Amount, J., & Marie, M. (1996). L'analyse des films (Pei-Tzu Wu, Trans.). Taipei: Ylib. (Original work published 1988) (in Chinese)】
- Deleuze, G. (2009)。法蘭西斯·培根: 感官感覺的邏輯(陳蕉譯)。台北市: 國立編 譯館。(原著出版於2002年)【Deleuze, G. (2009). *Francis Bacon: Logique de la sensation* (Chiao Chen, Trans.). Taipei: National Translation and Compilation Center. (Original work published 1988) (in Chinese)】
- Flick, U.(2007)。質性研究導論(李政賢、廖志恆、林靜如譯)。台北市:五南。(原著 出版於 2002年)【Flick, U. (2007). An introduction to qualitative research (Cheng-Hsien Li, Chih-Heng Liao, Ching-Ju Lin, Trans.). Taipei: Wu Nan. (Original work published 2002) (in Chinese)】
- 久石讓(2008)。感動,如此創造:日本電影配樂大師久石讓的音樂夢(何啟宏譯)。台 北市:麥田。(原著出版於2006年)【Joe Hisaishi (2008). *Kandō o tsukure masu ka?* (Chi-Hung Ho, Trans.). Taipei: Rye Field. (Original work published 2006) (in Japanese)】
- 王昭華(2005)。無字圖畫書視覺與風格表現之研究一兼論其與動畫形式之關係(未出版之碩士論文)。國立彰化師範大學藝術教育研究所,彰化市。【Wang, Chao-Hua (2005). A research on the visual and stylistic expression of wordless picture books and its relations with the animation form (Unpublished master's thesis). Graduate Institute of Art Education, National Changhua University, Changhua. (in Chinese)】

- 王紅霞(2002)。電影聲音風格的比較一拯救大兵瑞恩與細細的紅線。在姚國強、孫欣(編),審美空間延伸與拓展一電影聲音藝術理論(頁324-333)。北京:中國電影。【Wang, Hongxia (2002). Dianying shengyin fengge de bijiao: Saving Private Ryan yu The Thin Red Line. In Guoqiang Yao & Xin Sun (Eds.), Shenmei kongjian yanshen yu tuozhan: Dianying shengyin yishu lilun (pp. 324-333). Beijing: China Film Press. (in Chinese)】
- 石安伶、李政忠(2014)。雙重消費、多重愉悅:小說改編電影之互文/互媒愉悅經驗。新聞學研究,118,1-53。【Shih, An-Ling, & Lee, Cheng-Chung (2014). Double consumption, multiple pleasure: intertextual & intermedial pleasures of novel-based films. *Mass Communication Research*, 118, 1-53. (in Chinese)】
- 石昌杰(2009年7月)。從繪本到動畫—以微笑的魚為例。在劉永皓(主持),幾米繪 本、電影研究及當代文化探討研討會,台北市。【Shih, Chang-Jay (2009, July). Cong huiben dao donghua: Yi A Fish that Smiled at Me wei li. In Yung-Hao Liu (Chair), Jimmy huiben, dianying yanjiu ji dangdai wenhua tantao yantao hui, Taipei, Taiwan. (in Chinese)】
- 伊彬(2009)。插畫與電視廣告之實證美學:世代間的美感和偏好。台北市: Airiti Press。【I, Bin (2009). Empirical aesthetics of illustration and TV commercials: Aesthetic judgment and preference between generations. Taipei: Airiti Press. (in Chinese)】
- 吳嘉苓(2012)。訪談法。在瞿海源、畢恆達、劉長萱、楊國樞(編),社會及行為科 學研究法(二):質性研究法(頁33-60)。台北市:東華。【Wu, Chia-Ling (2012). Fangtanfa. In Hei-Yuan Chiu, Herng-Dar Bih, Michelle Liou, & Kuo-Shu Yang (Eds.), Shehui ji xingwei kexue yanjiufa II: Zhixing yanjiufa. Taipei: Tung Hua. (in Chinese)】
- 杜書瀛(1998)。審美活動與審美活動範疇。在文藝美學原理(頁1-25)。北京:社會科學 文獻。【Du, Shuying (1998). Shenmei huodong yu shenmei huodong fanchou. In *Wenyi meixue yuanli* (pp. 1-25). Beijing: Social Sciences Academic Press. (in Chinese)】
- 谷本誠剛 (Seigo, T.)、灰島佳里 (Kari, H.) (編) (2011)。如何幫孩子選繪本:28部世界 經典繪本深入導讀 (歐凱寧譯)。台北市:貓頭鷹。(原著出版於2006年) 【Seigo, T., & Kari, H. (Eds). (2011). Ruhe bang haizi xuan huiben: 28 bu shijie jingdian huiben shenru daodu (Kai-Ning Ou, Trans.). Taipei: Owl. (in Chinese) 】
- 段亦倫(2006年3月)。微笑的魚導演座談會。在台北影藝學院座談會,台北市。【Tuan, I-Lun (2006, March). A Fish that Smiled at Me daoyan zuotanhui. In Taiwan Film Arts Institute zuotanhui, Taipei. (in Chinese)】
- 洪于茹(2008)。幾米圖像創作品跨音樂舞台劇之再創作研究(未出版之碩士論文)。國 立臺灣藝術大學應用媒體藝術研究所,新北市。【Hung, Yu-Ju (2008). A study on re-creation of Jimmy Liao's illustration works transformed to musicals (Unpublished master's thesis). Graduate School of Applied Media Arts, National Taiwan University of Arts, New Taipei City. (in Chinese)】
- 張岳(2002)。美術片聲音元素解構—淺談動畫片的聲音元素及其運用。在姚國強、孫 欣(編),審美空間延伸與拓展—電影聲音藝術理論(頁150-168)。北京:中國電 影。【Zhang, Yue (2002). Meishupian shengyin yuansu jiegou: Qiantan donghuapian de shengyin yuansu ji qi yunyong. In Guoqiang Yao & Xin Sun (Eds.), *Shenmei kongjian* yanshen yu tuozhan: Dianying shengyin yishu lilun (pp. 324-333). Beijing: China Film

Press. (in Chinese)

- 許南明、富瀾、崔君衍(編)(2005)。電影藝術詞典。北京:中國電影。【Xu, Nanming, Fu, Lan, & Cui, Junyan (Eds.) (2005). *Dianying yishu cidian*. Beijing: China Film Press. (in Chinese)】
- 幾米(2003)。微笑的魚。台北市:大塊文化。【Liao, Jimmy (2005). A fish that smiled at me. Taipei: Locus. (in Chinese)】
- 幾米(2014)。故事團團轉。台北市:大塊文化。【Liao, Jimmy (2014). Never ending story. Taipei: Locus. (in Chinese)】
- 黃儀冠(2012)。從文字書寫到影像傳播—臺灣「文學電影」之跨媒介改為。台北市:學 生書局。【Huang, Yi-Kuan (2012). Cong wenzi shuxie dao yingxiang chuanbo: Taiwan "wenxue dianying" zhi kuameijie gaibian. Taipei: Studentbook. (in Chinese)】
- 楊恩寰(1993)。審美心理學。台北市:五南。【Yang, En-Huan (1993). Shenmei xinlixue. Taipei: Wu Nan. (in Chinese)】
- 楊錫彬(2015)。3D電腦動畫理論。台北市:五南。【Yang, Xi-Bin (2015). 3D diannao donghua lilun. Taipei: Wu Nan. (in Chinese)】
- 趙映雪、李紫蓉、鄭榮珍(1993)。共賞扉頁間。台北市:上誼。【Zhao, Ying-Xue, Li, Zi-Rong, & Zheng, Rong-Zhen (1993). *Gongshang feiye jian*. Taipei: Hsin-Yi. (in Chinese)】
- 劉永皓(2008)。繪本、電影、影像的再書寫之探討:以幾米的三本繪本地下鐵、向左 走、向右走及微笑的魚的改編電影之研究(NSC 97-2410-H-128-034-)。台北市: 世新大學廣播與電視電影學系。【Liu, Yong-Hao (2008). Huiben, dianying, yingxiang de zai shuxie zhi tantao: Yi Jimmy Liao de san ben huiben Sound of Colors, Turn Left, Turn Right, A Fish that Smiled at Me de gaibian dianying zhi yanjiu (NSC 97-2410-H-128-034-). Taipei: Department of Radio, Television and Film, Shih Hsin University. (in Chinese)】
- 劉永皓(2009年7月)。盲目的注視一分析地下鐵的繪本與電影。在張鳳麟(主持),幾 米繪本、電影研究及當代文化探討研討會,台北市。【Liu, Yong-Hao (2009, July). Mangmu de zhushi: Fenxi Sound of Colors de huiben yu dianying. In Feng-Lin Chang (Chair), Jimmy Liao huiben, dianying yanjiu ji dangdai wenhua tantao yantaohui, Taipei. (in Chinese)】
- 劉明銀(2008)。改為:從文學到影像的審美轉換。北京:中國電影。【Liu, Ming-Yin (2008). Gaibian: Cong wenxue dao yingxiang de shenmei zhuanhuan. Beijing: China Film Press. (in Chinese)】
- 蔣慧貞(2008)。幾米品牌邁向全球化現象之研究(未出版之碩士論文)。南華大學出版 與文化事業管理研究所,嘉義縣。【Chiang, Hui-Chen (2008). Jimmyspa has made it to the world and phenomenon to investigate (Unpublished master's thesis). Chuban yu wenhua shiye guanli yanjiusuo, Nanhua University, Chiayi. (in Chinese)】
- 韓叢耀(2005)。圖像傳播學。台北市:威仕曼。【Han, Cong-Yao (2005). *Image communication*. Taipei: Wiseman. (in Chinese)】
- Adams, P. (2003). There was an old lady who swallowed a fly. New York, NY: Child's Play.
- Allen, G. (2000). Intertextuality. New York, NY: Routledge.

- Arnheim, R. (1974). *Art and visual perception: A psychology of the creative eye*. Berkeley, CA: University of California Press.
- Becker, A. (2013). The journey. New York, NY: Random House.
- Beddows, E. (2012). Consuming transmedia: How audiences engage with narrative across multiple story modes (Unpublished doctoral dissertation). Swinburne University of Technology, Melbourne, Australia.
- Benton, M. (1999). Readers, texts, contexts: Reader-response criticism. In P. Hunt (Ed.). Understanding children's literature (pp. 81-99). New York, NY: Routledge.
- Beronä, D. A. (2001). Pictures speak in comics without words. In R. Varnum & C. T. Gibbons (Eds.), *The language of comics: Word and image* (pp. 19-39). Jackson, MI: University Press of Mississippi.
- Bordwell, D. (1985). Narration in the fiction film. Madison, WI: The University of Wisconsin Press.
- Bordwell, D., & Thompson, K. (2010). Film art: An introduction. New York, NY: McGraw-Hill.
- Brenner, R. (2011). Comics and graphic novels. In S. A. Wolf, K. Coats, P. Enciso, & C. A. Jenkins (Eds.), *Handbook of research on children's and young adult literature* (pp. 256-274). New York, NY: Routledge.
- Briggs, R. (1973). Father Christmas. London, UK: Hamish Hamilton.
- Briggs, R. (1978). The snowman. New York, NY: Random House.
- Bruhn, S. (2010). Penrose, 'seeing is believing': Intentionality, mediation and comprehension in the arts. In L. Elleström (Ed.), *Media borders, multimodality and intermediality* (pp. 137-149). New York, NY: Palgrave Macmillan.
- Carroll, N. (2001). *Beyond aesthetics: Philosophical essays*. New York, NY: Cambridge University Press.
- Channel 4 News. (2012, December 19). Jon snow meets the snowman [Video file]. Retrieved from http://www.youtube.com/watch?v=ZdC57YQ32Ls
- Christopher, S. (2012, December 21). Raymond Briggs Father Christmas [Video file]. Retrieved from http://www.youtube.com/watch?v=ld3paIPdztE
- Cupchik, C., & László, J. (1992). Introduction. In C. Cupchik & J. László (Eds.), *Emerging visions of the aesthetic process: Psychology, semiology, and philosophy* (pp. 1-12). Cambridge, UK: Cambridge University Press.
- Dena, C. (2010). Beyond multimedia, narrative, and game: The contributions of multimodality and polymorphic fictions. In R. Page (Ed.), *New perspectives on narrative and multimodality* (pp. 183-201). London, UK: Routledge.
- Doloughan, F. J. (2010). Mutimodal storytelling: Performance and inscription in the narration of art history. In R. Page (Ed.), *New perspectives on narrative and multimodality* (pp. 14-30). London, UK: Routledge.
- Dorfman, L., Martindale, C., & Petrov, V. (Eds.) (2007). *Aesthetics and innovation*. Newcastle, UK: Cambridge Scholars.
- Dredge, S. (2013, December 15). The 50 best apps of 2013. Retrieved from http://www. theguardian.com/technology/2013/dec/15/50-best-apps-2013-iphone-android-observer
- Elleman, B. (1986). Picture book art: Evaluation. Booklist, 8(2), 1548.

- Elleström, E. (2010). The modalities of media: A model for understanding intermedial relations. In L. Elleström (Ed.), *Media borders, multimodality and intermediality* (pp. 11-48). New York, NY: Palgrave Macmillan.
- Engulund, A. (2010). Intermedial topography and metaphorical interaction. In L. Elleström (Ed.), *Media borders, multimodality and intermediality* (pp. 69-80). New York, NY: Palgrave Macmillan.
- Ensslin, A. (2010). Respiratory narrative: Multimodality and cybernetic corporeality in "physiocybertext." In R. Page (Ed.), *New perspectives on narrative and multimodality* (pp. 155-165). London, UK: Routledge.
- Evans, J. (1998). Introduction. In J. Evans (Ed.), *What's in the picture? Responding to illustrations in picture books* (pp. xiii-xviii). London, UK: Paul Chapman.
- Ewert, J. (2004). Art Spiegelman's Maus and the graphic narrative. In M. Ryan (Ed.), *Narrative across media* (pp. 178-193). Lincoln, NE: University of Nebraska Press.
- Field, A. E. (1952). Hollywood, U.S.A: From script to screen. New York, NY: Vantage Press.
- Fokkema, D. W., & Kunne-Ibsch, E. (1977). Theories of literature in the twentieth century: Structuralism, Marxism, aesthetics of reception, semiotics. New York, NY: St. Martin's Press.
- Gibbons, A. (2010). The narrative worlds and multimodal figures of *House of Leaves*: "-find your own words; I have no more." In M. Grishakova & M. Ryan (Eds.), *Intermediality* and storytelling (pp. 285-311). New York, NY: De Gruyter.
- Grishakova, M. (2010). Intermedial metarepresentation. In M. Grishakova & M. Ryan (Eds.), Intermediality and storytelling (pp. 312-331). New York, NY: De Gruyter.
- Grishakova, M., & Ryan, M. (2010). Editors' preface. In M. Grishakova & M. Ryan (Eds.), *Intermediality and storytelling* (pp. 1-7). New York, NY: De Gruyter.
- Herman, D. (2002). Story logic: Problems and possibilities of narrative. Lincoln, NB: University of Nebraska Press.
- Herman, D. (2004). Toward a transmedial narratology. In M. Ryan (Ed.), Narrative across media (pp. 46-75). Lincoln, NE: University of Nebraska Press.
- Herman, D. (2010). Word-image/utterance-gesture: Case studies in multimodal storytelling. In R. Page (Ed.), *New perspectives on narrative and multimodality* (pp. 78-98). London, UK: Routledge.
- Herman, D., & Page, R. (2010). Coda/prelude: Eighteen questions for the study of narrative and multimodality. In R. Page (Ed.), *New perspectives on narrative and multimodality* (pp. 217-220). London, UK: Routledge.
- Holthuis, S. (2010). Intertexuality and meaning constitution. In J. S. Petöfi & T. Olivi (Eds.), Approaches to poetry: Some aspects of textuality, intertexuality and intermediality (pp. 77-93). New York, NY: Palgrave Macmillan.
- Hutcheon, M., & Hutcheon, L. (2010). Opera: Forever and always multimodal. In R. Page (Ed.), New perspectives on narrative and multimodality (pp. 65-77). London, UK: Routledge.
- Hutchins, P. (1971). Rosie's walk. New York, NY: Macmillan.
- Ingarden, R. (1973). *The cognition of the literary work of art* (R. A. Crowley & K. R. Olson, Trans.). Evanston, IL: Northwestern University Press. (Original work published 1968)

Iseminger, G. (2004). The aesthetic function of art. Ithaca, NY: Cornell University Press.

- Iser, W. (1971). Indeterminacy and the reader's response in prose fiction. In J. H. Miller (Ed.), Aspects of narrative: Selected papers from the English institute (pp. 1-45). New York, NY: Columbia University Press.
- Iser, W. (1972). The implied reader: Patterns of communication in prose fiction from Bunyan to Beckett. Baltimore, MD: Johns Hopkins University Press.
- Iser, W. (1978). *The act of reading: A theory of aesthetic response*. Baltimore, MD: Johns Hopkins University Press.
- Israel, S. M. (2010). Inter-action movies: Multi-protagonist films and relationism. In M. Grishakova & M. Ryan (Eds.), *Intermediality and storytelling* (pp.122-146). New York, NY: De Gruyter.
- Janet, E. (2011). Raymond Briggs: Controversially blurring boundaries. Bookbird, 49(4), 49-61.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York, NY: New York University Press.
- Jones, M. (2009). Found in translation: Structural and cognitive aspects of the adaptation of comic art to film. Saarbrücken, Germany: VDM Verlag Dr. Müller.
- Joyce, W. (2012). *The fantastic flying books of Mr. Morris Lessmore*. New York, NY: Atheneum Books for Young Readers.
- Kafalenos, E. (2004). Overview of the music and narrative field. In M. Ryan (Ed.), Narrative across media: The languages of storytelling (pp. 275-282). Lincoln, NE: University of Nebraska Press.
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. London, UK: Routledge.
- Kuskin, W. (2010). Vulgar metaphysicians: William S. Burroughs, Alan Moore, Art Spiegelman, and the medium of the book. In M. Grishakova & M. Ryan (Eds.), *Intermediality and storytelling* (pp. 49-77). New York, NY: De Gruyter.
- Lampert, N. (2012). Walkies in the air! Raymond Briggs is back and talking about his iconic Snowman more than ever before (even though it took a bit of persuading). Retrieved from http://www.dailymail.co.uk/femail/article-2251633/Walkies-air-Raymond-Briggs-talkingiconic-Snowman-before.html
- László, J. (1992). The psychology of literature: A social-cognitive approach. In C. Cupchik & J. László (Eds.), *Emerging visions of the aesthetic process: Psychology, semiology, and philosophy* (pp. 210-226). Cambridge, UK: Cambridge University Press.
- Lehtimäki, M. (2010). The failure of art: Problems of verbal and visual representation in *Let* us now praise famous men. In M. Grishakova & M. Ryan (Eds.), *Intermediality and* storytelling (pp. 183-207). New York, NY: De Gruyter.
- Levinson, J. (1996). The pleasures of aesthetics. Ithaca, NY: Cornell University Press.
- Lewis, D. (2001). *Reading contemporary picturebooks: Picturing text*. London, UK: Routledge Falmer.
- Ljungberg, C. (2010). Intermediality strategies in multimedia art. In L. Elleström (Ed.), *Media borders, multimodality and intermediality* (pp.81-95). New York, NY: Palgrave Macmillan.

- Lothe, J. (2000). Narrative in fiction and film: An introduction. Oxford, UK: Oxford University Press.
- Marcus, L. S. (2012). Show me a story!: Why picture books matter: Conversations with 21 of the world's most celebrated illustrators. Somerville, MA: Candlewick Press.
- McHale, B. (2010). Narrativity and segmentivity, or, poetry in the gutter. In M. Grishakova & M. Ryan (Eds.), *Intermediality and storytelling* (pp. 27-48). New York, NY: De Gruyter.
- Minai, A. T. (1993). Aesthetics, mind, and nature: A communication approach to the unity of matter and consciousness. Westport, CT: Praeger.
- Mitchell, W. J. T. (1994). Picture theory: Essays on verbal and visual representation. Chicago, IL: University of Chicago Press.
- Nanay, B. (2009). Narrative pictures. *The Journal of Aesthetics and Art Criticism*, 67(1), 119-129. doi:10.1111/j.1540-6245.2008.01340.x
- Nekrylova, N. V. (2007). Objective and subjective components of aesthetic experience. In L. Dorfman, C. Martindale, & V. Petrov (Eds.), *Aesthetics and innovation* (pp. 21-32). Newcastle, UK: Cambridge Scholars.
- nickis4kids. (2011, December 28). The making of the snowman (1982) Raymond Briggs [Video file]. Retrieved from http://www.youtube.com/watch?v=hIrbQ\_9LSLU
- Nikolajeva, M. (2005). *Aesthetic approaches to children's literature: An introduction*. Oxford, UK: Scarecrow Press.
- Nikolajeva, M. (2010). Interpretative codes and implied readers of children's picturebooks. In T. Colomer, B. Kümmerling-Meibauer, & C. Silva-Díaz (Eds.), *New directions in picturebook research* (pp. 27-40). New York, NY: Routledge.
- Nikolajeva, M., & Scott, C. (2006). How picturebooks work. New York, NY: Routledge.
- Nodelman, P. (1988). Words about pictures: The narrative art of children's picture books. Athens, Greece: University of Georgia Press.
- Nodelman, P., & Reimer, M. (2003). *The pleasures of children's literature* (3rd ed.). Boston, MA: Allyn and Bacon.
- Nørgaard, N, A. (2010). "I contain multitudes": Narrative multimodality and the book that bleeds. In R. Page (Ed.), *New perspectives on narrative and multimodality* (pp. 78-98). London, UK: Routledge.
- Painter, C., Martin, J. R., & Unsworth, L. (2013). Reading visual narratives: Image analysis of children's picture books. Sheffield, UK: Equinox.
- Panofsky, E. (1982). Meaning in the visual arts. Chicago, IL: University of Chicago Press.
- Pantaleo, S. (2004). Exploring grade 1 students' textual connections. Journal of research in childhood education, 18(3), 211-224. doi:10.1080/02568540409595036
- Pantaleo, S. (2009). *Exploring student response to contemporary picturebooks*. Toronto, Canada: University of Toronto Press.
- Paquin, N. (1992). The frame as a key to visual perception. In C. Cupchik & J. László (Eds.), *Emerging visions of the aesthetic process: Psychology, semiology, and philosophy* (pp. 37-47). Cambridge, UK: Cambridge University Press.
- Parsons, M. J. (1989). *How we understand art: A cognitive developmental account of aesthetic experience*. Cambridge, UK: Cambridge University Press.

Pratt, H. J. (2009). Narrative in comics. *The Journal of Aesthetics and Art Criticism*, 67(1), 107-117. doi:10.1111/j.1540-6245.2008.01339.x

Prince, G. (1982). Narratology: The form and functioning of narrative. New York, NY: Mouton.

- Rabinowitz, P. (2004). Music, genre, and narrative theory. In M. Ryan (Ed.), *Narrative across media* (pp.305-327). Lincoln, NE: University of Nebraska Press.
- Rajewsky, I. O. (2010). Border talks: The problematic status of media borders in the current debate about intermediality. In L. Elleström (Ed.), *Media borders, multimodality and intermediality* (pp. 51-68). New York, NY: Palgrave Macmillan.
- Robillard, V. (2010). Beyond definition: A pragmatic approach to intermediality. In L. Elleström (Ed.), *Media borders, multimodality and intermediality* (pp. 150-162). New York, NY: Palgrave Macmillan.
- Royce, T., & Bowcher, W. (Eds.) (2007). *New directions in the analysis of multimodal discourse*. London, UK: Lawrence Erlbaum Associates.
- Ryan, M.-L. (2004a). Introduction. In *Narrative across media* (pp. 1-39). Lincoln, NE: University of Nebraska Press.
- Ryan, M.-L. (2004b). Still pictures. In *Narrative across media* (pp. 139-144). Lincoln, NE: University of Nebraska Press.
- Saint-Martin, F. (1992). Aesthetics and visual semiotics. In C. Cupchik & J. László (Eds.), Emerging visions of the aesthetic process: Psychology, semiology, and philosophy (pp. 48-63). Cambridge, UK: Cambridge University.
- Salway, A. (2010). The computer-based analysis of narrative and multimodality. In R. Page (Ed.), New perspectives on narrative and multimodality (pp. 50-64). London, UK: Routledge.
- Sandgren, H. (2010). The intermediality of field guides: Notes towards a theory. In L. Elleström (Ed.), Media borders, multimodality and intermediality (pp. 111-123). New York, NY: Palgrave Macmillan.
- Sándor, K. (2010). Photo/graphic traces in Dubravka Ugrešić's The Museum of Unconditional Surrender. In L. Elleström (Ed.), Media borders, multimodality and intermediality (pp. 187-198). New York, NY: Palgrave Macmillan.
- Schmidt, S. (1992). Why literature is not enough; or literary studies as media studies. In C. Cupchik & J. László (Eds.), *Emerging visions of the aesthetic process: Psychology, semiology, and philosophy* (pp. 227-243). Cambridge, UK: Cambridge University.
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social science* (3rd ed.). New York, NY: Teachers College Press.
- Selznick, B. (2011). *The Hugo movie companion: A behind the scenes look at how a beloved book became a major motion picture*. New York, NY: Scholastic Press.
- Sipe, L. R. (2011). The art of the picturebook. In S. A. Wolf, K. Coats, P. Enciso, & C. A. Jenkins (Eds.), *Handbook of research on children's and young adult literature* (pp. 238-251). New York, NY: Routledge.
- Stam, R. (2005). Literature through film: Realism, magic and the art of adaptation. Malden, MA: Blackwell.
- Steig, W. (2005). Sylvester and the magic pebble. New York, NY: Simon & Schuster Books for Young Readers.

- Surrell, J. (2004). Screenplay by Disney: Tips and techniques to bring magic to your moviemaking. New York, NY: Disney Edition.
- Tarasti, E. (2004). Music as a narrative art. In M.-L. Ryan (Ed.), *Narrative across media* (pp. 283-303). Lincoln, NE: University of Nebraska Press.

Taylor, R. (1996). Encyclopedia of animation techniques. Philadelphia, PA: Running Press.

- The Academic Group. (2013, August 16). Teachers TV: Raymond Briggs [Video file]. Retrieved from http://www.youtube.com/watch?v=LthJi7Hw1Xo
- Thomas, B. (2010). Gains and losses? Writing it all down: Fanfiction and multimodality. In R. Page (Ed.), New perspectives on narrative and multimodality (pp. 142-154). London, UK: Routledge.
- Toolan, M. (2010). Electronic multimodal narratives and literary form. In R. Page (Ed.), *New perspectives on narrative and multimodality* (pp. 127-141). London, UK: Routledge.
- Townsend, J. R. (1996). Written for children: An outline of English-language children's literature (6th American ed.). Lanham, MD: Scarecrow Press.
- Wolf, W. (2005). Intermediality. In D. Herman, M. Jahn, & M. Ryan (Eds). The Routledge encyclopedia of narrative theory (pp. 252-256). London, UK: Routledge.
- Young, P. (2008). Film genre theory and contemporary media: Description, interpretation, intermediality. In R. Kolker (Ed.), *The Oxford handbook of film and media studies* (pp. 224-259). New York, NY: Oxford University Press.

Yolen, J. (1987). Owl moon. New York, NY: Philomel.

Yu-Chai Lai **ORCID** 0000-0002-4517-4077

totimesting summary

# 誌 謝: JoEMLS 52卷 評閱者名單

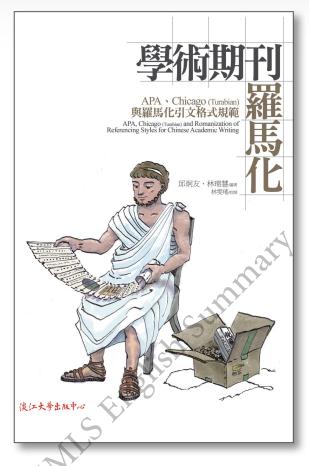
## Acknowledgement: JoEMLS Reviewers for Volume 52

(Alphabetically)

Cheng-Chang (Sam) Pan

(按姓名筆劃排序)							
王美玉	王健華	吳慧敏	李元萱	阮明淑	周典芳	周 倩	周婉湘
周惠文	岳修平	林巧敏	林劭貞	林育慈	林奇秀	林奇賢	林怡君
林信志	林珊如	林 菁	林雯瑤	林頌堅	林維真	邱子恒	邱炯友
邱銘心	柯皓仁	唐牧群	徐式寬	徐慧娟	張志強	張珈進	張郁蔚
張基成	張慧銖	張瓊穂	梁朝雲	陳世娟	陳志銘	陳亞寧	陳冠年
陳冠至	陳昭秀	陳昭珍	陳書梅	陳海泓	陳慶帆	陳鏗任	曾元顯
黃元鶴	黃明居	黃昭謀	楊美華	楊智傑	楊曉雯	葉乃靜	廖又生
劉旨峰	歐石燕	蔡天怡	蔡家文	蕭顯勝	賴玲玲	賴苑玲	謝建成
謝寶煖	嚴貞		~	Sr			

JOENALS ENGLIS



# 規範中文化與引文羅馬化 一 邁向國際化必經之路

本書除提供規範之中英文建議之外,更提供中文與英文範例,幫助讀者 快速上手應用。本書堪稱目前華文領域最為完整詳實之 APA 與 Chicago 格 式中文化格式規範專書,更是第一本周延探討中文引文羅馬化的專書,絕對 值得期刊主編、資料庫製作者與讀者隨時參閱。

# 期刊編輯與投稿者非讀不可的一本書, 請勿錯過本次優惠:平裝本 168 元!

訂購資訊:淡江大學出版中心 電 話:(02)8631-8661 傳 真:(02)8631-8660 E-mail: tkupress@www2.tku.edu.tw

# JoEMLS 註釋 (Notes) 暨參考文獻 (References) 羅馬化英譯說明

2015年1月31日修訂

- 本刊針對部分國外西文專業資料庫之引文索引建檔與中文辨讀之需求,凡屬中文 稿件之英文摘錄末,特別增列中文羅馬化拼音之「註釋」(或「參考文獻」)一式。
- 作者(含團體作者)、機構名稱(出版者)、地名(出版地):依事實與習慣為英譯, 如無法查證時,中國大陸地區作者以漢語拼音處理,台灣以威妥瑪拼音(Wade-Giles system)處理。
- 3. 出版品、篇名:採用(登載於原刊名、篇名等之正式英譯)照錄原則;若原刊文 無英譯,則由本刊依漢語拼音音譯著錄之。
  e.g.南京大學學報 Journal of Nanjing University
  e.g.中國科學引文數據庫 Chinese Science Citation Database
  e.g.玉山國家公園解說志工工作滿足之研究 Yushan National Park jieshuo zhigong gongzuo manzu zhi yanjiu
- e.g. 教育資料與圖書館學 Journal of Educational Media and Library Sciences
- 4. 混用狀況:地名、機構、人名與其他事實描述,交錯共同構成篇名之一部分時, 為避免冗長拼音難以辨讀,可將該名詞中之「地名、機構、人名」依事實與習慣 英譯,其餘字詞則由本刊補以漢語拼音處理。 e.g.「中國科學院與湯姆森科技資訊集團聯手推出中國科學引文索引」

"Chinese Academy of Sciences yu Thomson Scientific Lianshou Tuichu Chinese Science Citation Database"

- 5. 本刊文章註釋(Notes)或參考文獻(References)羅馬化英譯規則,仍遵循Chicago (Turabian)或APA之精神及原則,進行必要且相對應之編排處理。此羅馬化作業 屬權宜措施,不可取代原有正式之引文規範。
- 6. 羅馬化範例:

範例1-註釋(Notes)

林信成、陳瑩潔、游忠諺,「Wiki協作系統應用於數位典藏之內容加值與知 識匯集」,教育資料與圖書館學 43卷,3期(2006):285-307。【Sinn-Cheng Lin, Ying-Chieh Chen, and Chung-Yen Yu, "Application of Wiki Collaboration System for Value Adding and Knowledge Aggregation in a Digital Archive Project," *Journal of Educational Media & Library Sciences 43*, no. 3 (2006): 285-307. (in Chinese)】 範例2 - 參考文獻(References)

林雯瑤、邱炯友(2012)。教育資料與圖書館學四十年之書目計量分析。教 育資料與圖書館學,49(3),297-314。【Lin, Wen-Yau Cathy, & Chiu, Jeong-Yeou (2012) A bibliometric study of the *Journal of Educational Media & Library Sciences*, 1970-2010. *Journal of Educational Media & Library Sciences*, 49(3), 297-314. (in Chinese)】

### About Romanized & Translated Notes/References for Original Text

The main purpose of Romanized and Translated Notes (or References) at the end of English Summary is to assist Western database indexers in identifying and indexing Chinese citations. This Romanization system for transliterating Chinese cannot be a substitute for those original notes or references listed with the Chinese manuscript. The effect of Chinese Romanization for citation remains to be seen. totimesting summary

totimesting summary

- 一、本刊秉持學術規範與同儕評閱精神,舉凡圖書館學、資訊科學與科技、書業與出版研究等, 以及符合圖書資訊學應用發展之教學科技與資訊傳播論述。均所歡迎,惟恕不刊登非本人著 作之全譯稿。
- 二、 賜稿須為作者本人之首次發表,且未曾部份或全部刊登(或現未投稿)於國內外其他刊物, 亦未於網路上公開傳播。此外,保證無侵害他人著作權或損及學術倫理之情事。
- 三、作者同意其投稿之文章經本刊收錄後,即授權本刊、淡江大學覺生紀念圖書館、淡江大學資訊 與圖書館學系,為學術與教學等非營利使用,進行重製、公開傳輸或其他為發行目的之利用。
- 四、作者同意其投稿之文章經本刊收錄後,無償授權本刊以Open Access以及非專屬授權之方式, 再授權予國家圖書館用於「遠距圖書服務系統」或再授權予其他資料庫業者收錄於各該資料庫 中,並得為重製、公開傳輸、授權用戶下載、列印等行為。為符合資料庫之需求,並得進 行格式之變更。
- 五、本刊發表文章之著作權屬作者本人,除上述約定外,第三者轉載須取得作者同意,並須註明 原載本刊卷期、頁數。
- 六、 賜稿中英文不拘。本刊收錄研究論文(Research Article)字數以二萬字內為宜,但短文論述 (Brief Communication)須不少於4,000字,賜稿應以呈現IMRAD(前言、研究方法設計、結 果發現、結論建議)格式為佳。回顧評論(Review Article)、觀察報告(Observation Report)、 書評(Book Review)字數約為8,000字以上。給主編的信則以評論與回應本刊所登文稿或揭示 新進重要著作與發現為旨趣,以1,500字為度。
- 七、圖書資訊學域因具科際整合之實,為尊重人文社會學研究之差異性,故採芝加哥Note格式 (Chicago-Turabian Style)或美國心理學會Author-date格式(APA format),敬請擇一遵守,賜 稿註釋或參考資料格式務請明確詳實,相關引文格式來函備索或參見本刊網頁。
- 八、賜稿請利用本刊「線上投稿暨評閱服務系統(ScholarOne Manuscripts)」俾利作業處理與完整 建檔。特殊情況,得以電腦列印紙本稿件兩份,請務必另附全文Word電子檔郵寄。內容應 包括中英文題名、中英文摘要(三百字為原則)、中英文關鍵詞(各6個以內)、圖與表合計不 超過12個為原則,並請附作者中英文之姓名、職銜、服務機關與所屬部門、電子郵址。
- 九、賜稿為多人共同著作時,請以排序第一作者為「最主要作者」;並得指定同一人或另一人為稿件聯繫與學術交流之「通訊作者」。
- 十、本刊實施稿件雙盲同儕評閱制度,作者於本刊要求稿件修訂期限內,務必完成修訂稿回擲, 逾期者將被視為退稿;逾期修訂稿可視同新遞稿件,由本刊重啟初始評閱流程。
- 十一、中文賜稿獲本刊通知接受將予刊登之時,必須再行繳交 English Summary(英文摘錄)一份含 適當引註,始予刊登。其方案如下:
  - (1) 中文作者自行摘錄翻譯篇幅1,200字至1,500字之English Summary(圖表與參考資料 不計),再由本刊進行英文潤修,此為收費服務(English page charge),每篇酌收費用 NT\$1,200元(一般作者)/800元(學生為第一作者);或是
  - (2) 中文作者提供1,500字之中文摘錄,而委由本刊代為翻譯,採收費服務方式,每篇酌收 費用NT\$2,500元(一般作者)/1,500元(學生為第一作者)。
- 十二、本刊將主動為您提供English Summary末之中文引用文獻的羅馬拼音暨翻譯服務,以利部分 西文專業資料庫之引文索引建檔與中文辨讀之需求。
- 十三、作者必須信實對應本文,精簡呈現其所刊載之English Summary,並負起相關文責,俾利外 語讀者之參考與引用。
- 十四、本刊接受書評專文,亦歡迎書評書籍之推薦。
- 十五、賜稿刊登恕無稿酬。惟謹贈該期本刊五份予通訊作者,其餘作者獲贈複本數酌減。作者亦可透過本刊網頁或DOAJ之Open Access機制取得PDF版全文。

- 或寄:教育資料與圖書館學 主編收
- 地址:淡江大學資訊與圖書館學系(台灣新北市淡水區英專路151號)
- 聯絡電話:(02)26215656轉2382 傳真:(02)2620-9931
- JoEMLS 總編輯室 joemls@www2.tku.edu.tw
- 台灣與其他地區 joyo@mail.tku.edu.tw(邱炯友 主編)

賜稿請利用 ScholarOne Manuscripts (https://mc.manuscriptcentral.com/joemls)

### Notes for Contributors

- 1. The JoEMLS is a fully peer-reviewed and Open Access quarterly sponsored and published by the Tamkang University Press, Taipei, Taiwan.
- 2. It is a condition of publication that all or part of manuscript submitted to the *JoEMLS* has not been published and will not be simultaneously submitted or published elsewhere.
- 3. The Editors welcome submissions of manuscripts mainly on topics related to library science, information science and technology, the book trade and publishing. The other library related fields such as instructional technology and information communication are also accepted.
- 4. Contributions are accepted on the strict understanding that the author is responsible for the accuracy of all contents of the published materials. Publication does not necessarily imply that these are the opinions of the Editorial Board or Editors, nor does the Board or Editors accept any liability for the accuracy of such comment, report and other technical and factual information.
- 5. The authors of any submissions to this JoEMLS hereby agree that if any submission being accepted by the Journal, then the JoEMLS, Tamkang University Library, and Department of Information & Library Science (DILS) shall be authorized to duplicate, publicly transmit by the Internet, and publish by any other means for the purpose of non-profit use such as study and education etc.
- 6. The authors of any submissions to the *JoEMLS* hereby agree that if any submission being accepted by the Journal, then the JoEMLS shall be authorized to grant a non-exclusive license to National Central Library for collecting such a submission into the Remote Electronic Access/Delivery System (READncl System), or grant other database providers sublicense to collect such a submission into their databases, and to duplicate, publicly transmit by the Internet, downloaded, and printed by authorized users of those providers. In addition, the format of submissions may be changed in order to meet the requirements of each database.
- 7. Manuscript requirements:
  - (1) Submissions should go through the online system, however articles submitted as email attachments in one of the following preferred formats, Word or Rich Text Format, are acceptable.
  - (2) Three types of contributions are considered for publication: full & regular research article in IMRAD format should be between 6,000 and 12,000 words in length, brief communication of approximately 4,000 words or less, and observation report which tends to be a review article of more than 5,000 words.
  - (3) Letters to the Editor should not exceed 1,500 words in length and may be: comments or criticisms of articles recently published in the JoEMLS; and preliminary announcements of original work of importance warranting immediate publications.
  - (4) Both Chinese (if available) and English titles should be provided.
  - (5) All manuscripts should be accompanied by an abstract of 300 words approximately. Up to six keywords should be provided, and should not exceed 12 tables and figures.
  - (6) A brief autobiographical note should be supplied including full name, post & title, affiliation, e-mail address, and full international contact details.
  - (7) Referencing style (notes or references): Authors should follow one of the forms, the Chicago style (Turabian Manual) or the APA format.
- 8. For Book Review column, the JoEMLS is looking for book recommendations as well as individuals willing to review them, you may contact the editor.
- 9. It is the author's responsibility to obtain written permission to quote or reproduce material that has appeared in another publication. This includes both copyright and ownership rights, e.g. photographs, illustrations, and data.
- 10. First Author should be the equivalent of the Principal Author. The Principal Author must clearly specify who are the Corresponding Author and co-authors in proper sequence.
- 11. Revision should be returned to the editor within 4 months for further peer review process. Revision behind the period could be rejected or treated as a new manuscript by the Journal.
- 12. Corresponding Author will receive 5 free copies of the JoEMLS. Free copies given to the other co-authors are less than the amount. Additional copies can be purchased at a nominal cost from the Department of Information and Library Science, Tamkang University, Taipei, Taiwan. However, authors can find online full-text of PDF format via Open Access mechanism on the websites of JoEMLS and DOAJ.
- 13. Submissions of manuscripts in either Chinese or English and editorial correspondence please use the Online Submission & Peer Review Service (ScholarOne- JoEMLS) at http://joemls.dils.tku.edu.tw/, https://mc.manuscriptcentral.com/joemls, or mail to the editor:

Professor Jeong-Yeou Chiu, Department of Information and Library Science, Tamkang University, Taipei, Taiwan. Email: joyo@mail.tku.edu.tw

#### **About English Summary**

A brief English Summary is a supplement to Chinese article. Authors who contribute to the JoEMLS in Chinese language would need to supply English Summaries themselves. Such English Summary will carry a disclaimer: "This English Summary is provided by the author(s) or translated by the JoEMLS editors, and the author(s) have certified or verified that the translation faithfully represents the Chinese version of their own in the journal. It is for convenience of the English users and can be used for reference and citation."

#### 訂閱資訊(Subscription)

Address changes, subscriptions and purchase of back issues, exchanges should be addressed to: Journal of Educational Media & Library Sciences, Department of Information and Library Science, Tamkang University. Address: 151, Ying-chuan Rd., Tamsui, Taipei 25137, Taiwan

Tel.: +886 2 2621 5656 ext.2382

Fax: +886 2 2620 9931

E-mail: joemls@www2.tku.edu.tw

A crossed cheque should be made payable to "TAMKANG UNIVERSITY'

一年新臺幣1,200元(台灣地區) Annual subscription (payable in advance)US\$80.00(outside Taiwan) 國外航空郵費另加(Additional charge for airmail outside Taiwan)

US\$15.00 (per year) for America, Europe, Australia & Africa US\$8.00 (per year) for Japan, Korea, Thailand & the Philippines

US\$6.00 (per year) for Hong Kong & Macao 訂関本刊,請以匯款郵局(局號2441285,帳號0388761,戶名:教育資 料與圖書館學)或劃線支票,戶名抬頭請填寫《教育資料與圖書館學》 匯寄訂費・謝謝・

本刊網頁:http://joemls.tku.edu.tw



