(上留白4公分、以下各行均須置中)

國立清華大學竹師教育學院博士班博士論文研究計畫書(字型為18之楷書、1.5倍行高)

Doctoral Program (Ph.D.) in Education Sciences

College of Education(字型為14之Times New Roman、1.5倍行高)

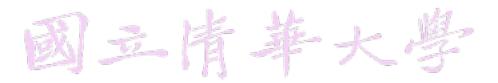
National Tsing Hua University(字型為16之Times New Roman、1.5 倍行高)

Doctoral Dissertation Proposal (字型為16之Times New Roman、15倍行高)

(中文題目) (字型為18之楷書、1.5倍行高)
(Title) (字型為18之Times New Roman、1.5倍行高)

〇〇〇 (撰者中文姓名) (字型為18之楷書、1.5倍行高)

○○○ (Name of Author) (字型為18之Times New Roman、1.5倍行高)



高)

中華民國 000 年 0 月 (字型為18之楷書、1.5倍行高)
(Month) 0000(Year)(字型為18之Times New Roman、1.5倍行高)
(下留白3公分)

### Formatting and Length / 格式與篇幅

- 1. 不超過 25 頁(不含參考文獻、圖表與附錄)/ Up to 25 pages (excluding bibliography, figures, and appendices).
- 2. 頁邊界 / Page Margins
  - 。 中文: 上下左右各 2-2.5 公分。
  - o English: Set all margins (top, bottom, left, right) to 2–2.5 cm.
- 3. 字型與字級 / Font & Size
  - 0 中文:
    - 正文中文使用「標楷體」或「細明體」12 pt。
    - 英文使用 Times New Roman 12 pt。
  - o English:
    - For Chinese text, use BiauKai (標楷體) or PMingLiU (細明體) at 12 pt.
    - For English text, use Times New Roman 12 pt.
- 4. 行距 / Line Spacing
  - o 中文:全文採用 1.5 倍行距。
  - o English: Use 1.5× line spacing throughout the document.
- 5. 標題層次 / Heading Levels
  - 。 中文:
    - 1. 第一層標題 (例如「1. 中文摘要」) 使用黑體或粗體 14 pt, 左對齊。
    - 2. 第二層標題 (例如「3.1 研究背景」) 使用黑體或粗體 12 pt, 左對齊。
    - 3. 段落首行縮排 1 個字或 1 厘米。
  - o English:
    - 1. Level-1 headings (e.g., "1. Chinese Abstract") in bold, 14 pt, left-aligned.
    - 2. Level-2 headings (e.g., "3.1 Background") in bold, 12 pt, left-aligned.
    - 3. Indent the first line of each paragraph by one character (約 1 cm).
- 6. 編號與對齊 / Numbering & Alignment
  - o 中文:各節編號(如「1.」、「2.」、「3.」)須統一格式,中英文對應時保留一行間距以利閱讀。
  - English: Use consistent numbering (e.g., "1.," "2.," "3.") for each section. Leave one blank line between Chinese and English entries for readability.
- 7. 頁碼 / Page Numbering
  - o 中文: 自「中文摘要」開始編頁, 封面不列頁碼。頁碼置於頁面右下角。
  - English: Begin page numbering from the "Chinese Abstract" page; do not number the cover page. Place page numbers at the bottom right.
- 8. 文內引用格式 / In-text Citation Style
  - o 中文:採用「(作者,年份)」格式。例如「(王大明,2020)」。
  - o English: Use "(Author, Year)" style. For example, "(Wang, 2020)."
- 9. 圖表格式 / Figures & Tables
  - 0 中文:
    - 1. 解析度: 圖檔解析度至少 300 dpi。
    - 2. 圖標題: 置於圖下方, 格式為「圖 1. 標題」。
    - 3. 表標題: 置於表上方, 格式為「表 1. 標題」。
    - 4. 圖內文字:確保字體大小至少 10 pt, 以便閱讀。
    - 5. 文中引用: 首次引用時標示「見圖 1」或「見表 1」。

- o English:
  - 1. **Resolution**: All figure files must be at least 300 dpi.
  - 2. **Figure Captions**: Place captions below figures, formatted as "Fig. 1. Caption."
  - 3. **Table Titles**: Place titles above tables, formatted as "Table 1. Title."
  - 4. **In-figure Text**: Use font size no smaller than 10 pt to ensure readability.
  - 5. **Referencing**: Upon first mention, refer to figures/tables as "see Fig. 1" or "see Table 1."

#### 10. 段落與空白 / Paragraphs & Whitespace

- 中文:同一節內不要空過多空行,段落之間用首行縮排取代空行。如需強調節次,可留一行間距。
- English: Avoid excessive blank lines within the same section; use first-line indentation rather than blank lines to separate paragraphs. Leave one blank line when transitioning between major sections.

#### 11. 頁首與頁尾 / Headers & Footers

- 。 中文:
  - 封面與摘要頁不放置頁首。
  - 正文可在頁首放置短文件名稱(如「博士研究計畫」),並於頁尾居右 放置頁碼。
- English:
  - Do not include headers on the cover or abstract pages.
  - In the main text, headers may include a short document title (e.g., "PhD Research Proposal"), and page numbers should appear at the bottom right.

#### 12. 文件格式 / File Format 📜

- o 中文:建議以 Word 檔 (.doc 或 .docx) 提交,避免使用複雜巨集或專屬排版。
- o English: Submit as a Microsoft Word file (.doc or .docx). Avoid complex macros or nonstandard formatting.

#### 13. 圖表檔案附加 / Supplementary Figure & Table Files

- 。 中文: 如需另存圖檔, 請另附高解析度 JPEG 或 TIFF, 並於文中註明檔名 (例如「圖 1 圖檔: Fig1.tif」)。
- o English: If providing separate figure files, attach high-resolution JPEG or TIFF images and reference the file name in the text (e.g., "Figure 1 file: Fig1.tif").

### 14. 參考文獻管理 / Reference Management

- 0 中文:
  - 建議使用 EndNote、Mendeley、Zotero 等文獻管理軟體,以統一引用 格式。
  - 參考文獻格式需與申請單位或期刊要求一致(一般採 APA 6th 或 7th)。
- o English:
  - It is recommended to use reference managers such as EndNote, Mendeley, or Zotero for consistent citation formatting.
  - Ensure that reference style complies with agency or journal requirements (commonly APA 6th or APA 7th).

#### 15. 版本控制 / Version Control

。中文:建議在檔名中加上版本號與日期(例如「博士計畫書 v1.0 20250606.docx」),以便追蹤與回溯。  English: Include version numbers and date in the file name (e.g., "PhD\_Proposal\_v1.0\_20250606.docx") to facilitate tracking and revision history.

### 16. 印刷格式 / Print-ready Considerations

- 。 中文: 若需列印實體版本, 建議採用 A4 紙張、單面列印, 並於左側裝訂 (至少 2 孔)。
- o English: For print-ready versions, use A4 paper size, single-sided printing, and bind on the left (e.g., 2-hole punch).



# AI 工具使用聲明 / AI Tool Usage Disclaimer

本研究計畫書之初稿及文字編輯過程中,或許參考與應用過生成式人工智慧 (Generative AI) 輔助工具 (如 ChatGPT、Bard 等)以加快文稿撰寫及校對效率。然所有內容最終皆由計畫主持人/學生本人進行審閱、補充並自行承擔學術責任,確保下列事項:

- AI 輔助僅限於初步草稿生成或語句潤飾, 未取代研究者專業判斷。
- 所有引用、實驗方法與數據皆由研究團隊自行設計與撰寫, 未因 AI 工具建議而改變研究倫理或方法流程。
- 若使用 AI 工具產生之文字, 已逐字檢核, 並刪除任何不符合學術誠信之內容, 且未 侵害第三方智慧財產權。

During the drafting and editing of this research proposal, generative AI tools (e.g., ChatGPT, Bard) may have been utilized to accelerate initial text generation and proofreading. However, all content was ultimately reviewed, supplemented, and endorsed by the principal investigator/student to ensure that:

- AI assistance was limited to preliminary draft generation and stylistic refinement, and did not replace the researcher's professional judgment.
- All citations, experimental protocols, and data were developed and written independently by the research team, without modification of ethical or methodological standards due to AI suggestions.
- Any AI-generated text has been thoroughly checked for accuracy, with all instances of non-academic or infringing content removed to uphold academic integrity and avoid infringement of third-party intellectual property.

NATIONAL TSING HUA UNIVERSITY

# Ethics and Safety Declaration 倫理與安全聲明

- \* Please indicate whether the following experiments are involved (check all that apply)
- ※本計畫是否有進行下列實驗: (請勾選下列任一項)
  - () Human experiments / Human specimens 人體實驗 / 人體檢體
  - () Human embryos / Human embryonic stem cells 人類胚胎 / 人類胚胎幹細胞
  - () Recombinant DNA experiments 基因重組實驗
  - () Genetically modified organism (GMO) field trials 基因轉殖田間試驗
  - () Biosafety level II or higher infectious biological materials 第二級以上感染性生物材料
  - () Animal experiments 動物實驗
  - () Others 其他:



### 研究倫理聲明

本研究計畫書擬定之研究內容若涉及下列事項, 已承諾並將依相關規範辦理:

- 1. 人體受試者(Human Subjects)
- 研究開始前,將向所屬機構之倫理審查委員會(IRB)提出申請,取得正式核准文件與同意書範本。
- 受試者招募與知情同意程序將嚴格遵循「生命科學與生物醫學研究法」及「人體研究 倫理審查準則」之規範。
- 個人隱私與資料保密: 受試者之個人識別資訊僅限研究團隊使用, 並採匿名化/編碼處理, 確保不外洩。
- 2. 動物實驗 (Animal Experiments)
- 若需進行動物實驗,將事先向機構動物照顧與使用委員會(IACUC)提出申請,並依「動物保護法」及「動物實驗規範」辦理。
- 動物飼養與實驗程序將遵守「3R 原則」(Reduction、Refinement、Replacement),減少動物痛苦與數量。
- 3.研究資料之管理與安全(Data Management and Security)
- 所有研究資料包含影像、行為資料、問卷等,將妥善保存於受機構資訊安全控管之伺服器/硬碟,並限制僅授權人員存取。
- 於研究結束後,將依指定期限及規定銷毀或歸檔,若有後續二次分析需求,將再次申請審查。
- 4. 利益衝突聲明 (Conflict of Interest)
- 本計畫主持人/研究團隊保證並無與本研究主題相關之財務或非財務利益衝突。如日 後有重大變動,將主動揭露並採取迴避措施。
- 5. 研究倫理教育訓練
- 研究團隊成員均已完成「研究倫理與誠信」及「人體/動物倫理審查」相關教育訓練,並定期參加機構辦理之研習活動,以持續維護研究品質與誠信。

### **Research Ethics Statement**

The proposed research activities will adhere to the following ethical guidelines and regulatory requirements:

#### 1. Human Subjects

- Prior to commencing any study involving human participants, approval will be sought from the Institutional Review Board (IRB) of the applicant's institution, and a copy of the IRB approval letter and informed consent form will be obtained.
- The recruitment of participants and informed consent procedures will strictly follow the "Human Subjects Research Act" and the "Ethical Guidelines for Human Subjects Research."
- Confidentiality and data protection: Participants' personally identifiable information will be accessible only to the research team and will be de-identified/encoded to ensure privacy.

#### 2. Animal Experiments

- If animal experiments are required, an application will be submitted to the Institutional Animal Care and Use Committee (IACUC) in accordance with the "Animal Protection Act" and related regulations.
- All animal care and experimental procedures will follow the "3Rs" principle (Reduction, Refinement, Replacement) to minimize animal distress and usage.

#### 3. Data Management and Security

- All research data—including imaging, behavioral measures, and questionnaires—will be securely stored on the institution's protected servers/hard drives, with access limited to authorized personnel only.
- Upon study completion, data will be destroyed or archived as required; any secondary analyses will require a new ethics review.

#### 4. Conflict of Interest Declaration

- The principal investigator/research team declares no financial or non-financial conflicts of interest related to this research. Should any significant conflicts arise, they will be disclosed and appropriate recusal measures taken.

#### 5. Research Ethics Training

- All research team members have completed education and training in "Responsible Conduct of Research" and "Human/Animal Subject Protection," and will continue to participate in institutional workshops to ensure ongoing compliance and research integrity.

# 中文摘要 (500 字以內; 自訂關鍵詞)

請就本計畫要點作五百字以內之概述,並依本計畫性質自訂關鍵詞 (Summarize the key points of the proposal in 500 Chinese characters or fewer. Include relevant keywords.)



# English Abstract (define keywords) < 500 words

Provide a concise summary in English. Include keywords relevant to the proposal. 請依本計畫性質自訂關鍵詞,摘要以英文撰寫。



### 研究計畫內容(以中文或英文撰寫):

### 1. Background and Significance 計畫背景與重要性

Clearly explain the background, objectives, and significance of this research.

Review the relevant national and international literature and cite key references.

詳述本研究計畫之背景、目的、重要性及國內外有關本計畫之研究情況、重要參考文獻之評述。



# 2. Specific Aims 具體計畫目標

List the concrete objectives of the proposed research. 請列出本研究計畫的具體目標。



### 3. Research Question(s) 研究問題 / 研究假說

• After having outlined your subject area, articulate the primary (and secondary) research question(s) that will guide your research. A good research question (or hypothesis) is clear, concise, and concrete. It will be a golden thread running throughout the thesis, leading to the conclusion(s) and final proposal(s)/answer(s).

在勾勒研究領域後,清晰說明主要(以及次要)研究問題/假說。良好的研究問題(或假說)必須明確、簡潔、具體,並如同貫穿全文的「金線」,引導整個論文發展至結論與最後建議/解答。



### 4. Chapter Outline and Timeline 章節大綱與進度時程

• Your proposal should include a preliminary chapter outline and timeline for the proposed research project. The chapter outline sketches the structure of your thesis by providing a list of chapter headings with a short explanation of the content of each chapter. The chapter outline should reflect your anticipated development of the thesis, building up to the conclusion.

計畫書應包含初步章節大綱與研究時程。章節大綱需列出擬定之各章章名, 並對每章內容做簡要說明, 以勾勒論文架構, 逐步鋪陳至結論。



# 5. Research Design and Methodology 研究策略架構圖、材料與方法

- Provide a flowchart or conceptual framework (if applicable)
- Explain the chosen research methods and rationale
- Describe expected difficulties and solutions
- Detail use of key equipment or facilities

#### 請詳述:

- 1. 計畫採用之研究方法與原因
- 2. 預計可能遭遇之困難及解決途徑
- 3. 重要儀器之配合使用情形



# 6. Preliminary Results 初步結果

Present any relevant pilot data or preliminary findings. 提供任何與本研究有關的初步數據或結果。



### 7. Discussion 討論

Interpret initial findings and discuss their potential implications. 針對初步結果進行討論,說明其可能的意義。



# 8. References 參考文獻

List all cited sources using a consistent academic citation style. 請列出所有引用之文獻,並使用一致的學術格式(例如 APA、Vancouver 等)。



# 9. Appendices 附錄

Include any additional materials that support the proposal. 請附上與本計畫相關的補充資料。

