102 年度「教學評量專題研究」教學綱要

余民寧　教授

一、基礎理論與教科書

古典測驗理論（**classical test theory, CTT**）

　　-- 余民寧（2011）。**教育測驗與評量：成就測驗與教學評量**（第三版）。台北：心理。

試題反應理論（**Item response theory, IRT**）

　　-- 余民寧（2009）。**試題反應理論（IRT）及其應用**。台北：心理。

二、討論主題

0.紙筆測驗(評量)

1.實作評量

2.（數位化）檔案評量

3. 問題導向學習評量

4. 圖形（概念圖、心智圖）評量

5.知識結構評量(認知診斷評量)

6.證照認證評量、標準設定

7.（電腦化）適性（測驗）評量

8.學生評鑑教學

9. 評量方法學

10. 各專題

三、上課日期表（每週四 9:10～12:00AM）地點：

週次	日期	研討內容及進度	負責報告人
1	2/20	導論	余老師上課
2	2/27	紙筆測驗(評量)	余老師上課
3	3/6	實作評量−口試評量	報告人1
4	3/13	實作評量−寫作評量	報告人2
5	3/20	實作評量−素養評量	報告人3
6	3/27	（數位化）檔案評量	報告人4
7	4/3	春假(停課一天)	無
8	4/10	問題導向學習評量	報告人5
9	4/17	圖形評量−概念構圖	報告人6
10	4/24	圖形評量−心智圖	報告人7
11	5/1	知識結構評量	余老師上課
12	5/8	認知診斷評量	報告人8
13	5/15	證照認證評量	報告人9
14	5/22	標準設定	報告人10
15	5/29	電腦化適性測驗（評量）	報告人11
16	6/5	學生評鑑教學	報告人12
17	6/12	評量方法學	余老師上課
18	6/19	交報告	無

各種教學評量主題

1.實作評量—口試評量

Christ, T. J., Monaghen, B. D., & Zopluoglu, C. (2013). Curriculum-based measurement of oral reading: Evaluation of growth estimates derived with pre-post assessment methods. *Assessment for Effective Intervention, 38*(3), 139-153. (EJ1000291)

Hunley, S. A., Davies, S. C., & Miller, C. R. (2013). The relationship between curriculum-based measures in oral reading fluency and high-stakes tests for seventh grade students. *Research in Middle Level Education, 36*(5), online paper. (EJ995732)

Iannone, P., & Simpson, A. (2012). Oral assessment in mathematics: Implementation and outcomes. *Teaching Mathematics and Its Applications: An International Journal of the IMA, 31*(4), 179-190. (EJ985791)

Huxham, M., Campbell, F., & Westwood, J. (2012). Oral versus written assessments: A test of student performance and attitudes. *Assessment & Evaluation in Higher Education, 37*(1), 125-136. (EJ950336)

De Grez, L., Valcke, M., & Roozen, I. (2012). How effective are self- and peer assessment of oral presentation skills compared with teachers' assessments? *Active Learning in Higher Education, 13*(2), 129-142. (EJ972240)

Murray, M. S., Munger, K. A., & Clonan, S. M. (2012). Assessment as a strategy to increase oral reading fluency. *Intervention in School and Clinic, 47*(3), 144-151. (EJ949780)

2.實作評量—寫作評量

Lee, I., & Coniam, D. (2013). Introducing assessment for learning for EFL writing in an assessment of learning examination-driven system in Hong Kong. *Journal of Second Language Writing, 22*(1), 34-50. (EJ998432)

Parker, D. C., Burns, M. K., & McMaster, K. L. (2012). Extending curriculum-based assessment to early writing. *Learning Disabilities Research & Practice, 27*(1), 33-43. (EJ956682)

Lee, J. (2013). Can writing attitudes and learning behavior overcome gender difference in writing? Evidence from NAEP. *Written Communication, 30*(2), 164-193. (EJ999572)

Lam, R. (2013). Two portfolio systems: EFL students' perceptions of writing ability, text improvement, and feedback. *Assessing Writing, 18*(2), 132-153. (EJ998375)

Wolfersberger, M. (2013). Refining the construct of classroom-based writing-from-readings assessment: The role of task

representation. *Language Assessment Quarterly, 10*(1), 49-72. (EJ995992)

Peterson, S. S., McClay, J., & Main, K. (2011). An analysis of large-scale writing assessments in Canada (Grades 5-8). *Alberta Journal of Educational Research, 57*(4), 424-445. (EJ958649)

3.實作評量—素養評量

Cohen, D. J., White, S., & Cohen, S. B. (2012). Mind the gap: The black-white literacy gap in the National Assessment of Adult Literacy and its implications . *Journal of Literacy Research, 44*(2), 123-148. (EJ964858)

Travis, T. (2011). From the classroom to the boardroom: The impact of information literacy instruction on workplace research skills. *Education Libraries, 34*(2), 19-31. (EJ961221)

Pandya, J. Z. (2012). Unpacking Pandora's Box: Issues in the assessment of English learners' literacy skill development in multimodal classrooms. *Journal of Adolescent & Adult Literacy, 56*(3), 181-185. (EJ984567)

Popham, W. J. (2011). Assessment literacy overlooked: A teacher educator's confession. Teacher Educator, 46(4), 265-273. (EJ947244)

Christ, T., Arya, P., & Chiu, M. M. (2012). Collaborative peer video analysis: Insights about literacy assessment and instruction. *Journal of Literacy Research, 44*(2), 171-199. (EJ964854)

Li, J., & Chun, C. K. (2012). Effects of learning strategies on student reading literacy performance. *Reading Matrix: An International Online Journal, 12*(1), 30-38. (EJ994900)

4.（數位化）檔案評量

Bairral, M. A., & dos Santos, R. T. (2012). E-portfolio improving learning in mathematics pre-service teacher. *Digital Education Review, 21*, 1-12. (EJ972712)

Luchoomun, D., McLuckie, J., & van Wesel, M. (2010). Collaborative **e**-learning: E-portfolios for assessment, teaching and learning. *Electronic Journal of **e**-Learning, 8*(1), 21-30. (EJ880096)

Tuksinvarajarn, A., & Todd, R. W. (2009). The e-pet: Enhancing motivation in e-portfolios. *English Teaching Forum, 47*(1), 22-25. (EJ923726)

Zawacki-Richter, O., Hanft, A., & Baecker, E. M. (2011). Validation of competencies in e-portfolios: A qualitative analysis.

International Review of Research in Open and Distance Learning, 12(1), 42-60. (EJ913867)

Baturay, M. H., & Daloglu, A. (2010). E-portfolio assessment in an online English language course. *Computer Assisted Language Learning, 23*(5), 413-428. (EJ905321)

O'Sullivan, A. J., Harris, P., & Hughes, C. S. (2012). Linking assessment to undergraduate student capabilities through portfolio examination. *Assessment & Evaluation in Higher Education, 37*(3), 379-391. (EJ962237)

5.問題導向學習評量

Trauth-Nare, A., & Buck, G. (2011). Assessment "for" learning: Using formative assessment in problem- and project-based learning. *Science Teacher, 78*(1), 34-39. (EJ912499)

Chang, C.-C., & Tseng, K.-H. (2011). Using a web-based portfolio assessment system to elevate project-based learning performances. *Interactive Learning Environments, 19*(3), 211-230. (EJ925009)

Gulbahar, Y., & Tinmaz, H. (2006). Implementing project-based learning and e-portfolio assessment in an undergraduate course. *Journal of Research on Technology in Education, 38*(3), 309-327. (EJ728907)

McGrath, D. (2003). Rubrics, portfolios, and tests, Oh My! Assessing understanding in project-based learning. *Learning & Leading with Technology, 30*(8), 42-45. (EJ668392)

Hargis, J. (2007). Teaching project-based assessment in 12 days in a developing country. *Journal on Excellence in College Teaching, 18*(3), 129-142. (EJ901640)

Hosseinzadeh, N., & Hesamzadeh, M. R. (2012). Application of project-based learning (PBL) to the teaching of electrical power systems engineering. *IEEE Transactions on Education, 55*(4), 495-501. (EJ995697)

6.圖形評量—概念構圖

Rye, J., Landenberger, R., & Warner, T. A. (2013). Incorporating concept mapping in project-based learning: Lessons from Watershed investigations. *Journal of Science Education and Technology, 22*(3), 379-392. (EJ1002922)

Rosas, S. R., & Kane, M. (2012). Quality and rigor of the concept mapping methodology: A pooled study analysis. *Evaluation and Program Planning, 35*(2), 236-245. (EJ953623)

Liu, P.-L. (2011). A study on the use of computerized concept mapping to assist ESL learners' writing. *Computers & Education,*

57(4), 2548-2558. (EJ940355)

Tseng, K.-H., Chang, C.-C., & Lou, S.-J. (2012). How concept‑mapping perception navigates student knowledge transfer performance. *Educational Technology & Society, 15*(1), 102-115. (EJ979453)

Cai, Z. G., Pickering, M. J., & Branigan, H. P. (2012). Mapping concepts to syntax: Evidence from structural priming in Mandarin Chinese. *Journal of Memory and Language, 66*(4), 833-849. (EJ970275)

Stewart, M. (2012). Joined up thinking? Evaluating the use of concept‑mapping to develop complex system learning. *Assessment & Evaluation in Higher Education, 37*(3), 349-368. (EJ962236)

7.圖形評量—心智圖

Davies, M. (2011). Concept mapping, mind mapping and argument mapping: What are the differences and do they matter? *Higher Education: The International Journal of Higher Education and Educational Planning, 62*(3), 279-301. (EJ936166)

Abi-El-Mona, I., & Adb-El-Khalick, F. (2008). The influence of mind mapping on eighth graders' science achievement. *School Science and Mathematics, 108*(7), 298-312. (EJ847121)

Serig, D. (2011). Research review. *Teaching Artist Journal, 9*(4), 249-257. (EJ948111)

Goodnough, K., & Long, R. (2002). Mind mapping: A graphic organizer for the pedagogical toolbox. *Science Scope, 25*(8), 20-24. (EJ789648)

Wheeldon, J. (2010). Mapping mixed methods research: Methods, measures, and meaning. *Journal of Mixed Methods Research, 4*(2), 87-102. (EJ878067)

Brinkmann, A. (2003). Mind mapping as a tool in mathematics education. *Mathematics Teacher, 96*(2), 96-101. (EJ668653)

8.認知診斷評量

Nichols, P. D. (1994). A framework for developing cognitively diagnostic assessments. *Review of Educational Research, 64*(4), 575-603. (EJ500532)

de la Torre, Jimmy. A cognitive diagnosis model for cognitively based multiple-choice options. *Applied Psychological Measurement, 33*(3), 163-183. (EJ836370)

Rupp, A. A., & Templin, J. (2008). The effects of Q-matrix misspecification on parameter estimates and classification accuracy in

the DINA model. *Educational and Psychological Measurement, 68*(1), 78-96. (EJ782123)

Sawaki, Y., Kim, H.-J., & Gentile, C. (2009). Q-matrix construction: Defining the link between constructs and test items in large-scale reading and listening comprehension assessments**.** *Language Assessment Quarterly, 6*(3), 190-209. (EJ866997)

Lee, Y.-S., de la Torre, J., & Park, Y. S. (2012). Relationships between cognitive diagnosis, CTT, and IRT indices: An empirical investigation. *Asia Pacific Education Review, 13*(2), 333-345. (EJ969366)

Lee, Y.-W., & Sawaki, Y. (2009). Cognitive diagnosis approaches to language assessment: An overview. *Language Assessment Quarterly, 6*(3), 172-189. (EJ866996)

9.證照認證評量

Puhan, G., Sinharay, S., & Haberman, S. (2010). The utility of augmented subscores in a licensure exam: An evaluation of methods using empirical data. *Applied Measurement in Education, 23*(3), 266-285. (EJ893359)

Goldhaber, D., Hansen, M. (2010). Race, gender, and teacher testing: How informative a tool is teacher licensure testing? *American Educational Research Journal, 47*(1), 218-251. (EJ883788)

Wang, N., Schnipke, D., & Witt, E. A. (2005). Use of knowledge, skill, and ability statements in developing licensure and certification examinations. *Educational Measurement: Issues and Practice, 24*(1), 15-22. (EJ718248)

Stotsky, S. (2009). Licensure tests for special education teachers: How well they assess knowledge of reading instruction and mathematics. *Journal of Learning Disabilities, 42*(5), 464-474. (EJ851435)

Li, F., Cohen, A., & Shen, L. (2012). Investigating the effect of item position in computer-based tests. *Journal of Educational Measurement, 49*(4), 362-379. (EJ988904)

LaDuca, A. (1994). Validation of professional licensure examinations: Professions theory, test design, and construct validity. *Evaluation and the Health Professions, 17*(2), 178-97. (EJ488820)

10.標準設定

Cravens, X. C., Goldring, E. B., & Porter, A. C. (2013). Setting proficiency standards for school leadership assessment: An examination of cut score decision making. *Educational Administration Quarterly, 49*(1), 124-160. (EJ995856)

McClarty, K. L., Way, W. D., & Porter, A. C. (2013). Evidence-based standard setting: Establishing a validity framework for cut

scores. *Educational Researcher, 42*(2), 78-88. (EJ996991)

Lim, G. S., Geranpayeh, A., & Khalifa, H. (2013). Standard setting to an international reference framework: Implications for theory and practice. *International Journal of Testing, 13*(1), 32-49. (EJ995384)

Engelhard, G. Jr. (2011). Evaluating the bookmark judgments of standard-setting panelists. *Educational and Psychological Measurement, 71*(6), 909-924. (EJ948042)

Geisinger, K. F., & McCormick, C. M. (2010). Adopting cut scores: Post-standard-setting panel considerations for decision makers. *Educational Measurement: Issues and Practice, 29*(1), 38-44. (EJ876928)

Nichols, P., Twing, J., & Mueller, C. D. (2010). Standard-setting methods as measurement processes. *Educational Measurement: Issues and Practice, 29*(1), 14-24. (EJ876931)

11.電腦化適性測驗（評量）

Thompson, N. A., & Weiss, D. J. (2011). A framework for the development of computerized adaptive tests. *Practical Assessment, Research & Evaluation, 16*(1), (EJ933695)

Fritts, B. E., & Marszalek, J. M. (2010). Computerized adaptive testing, anxiety levels, and gender differences. *Social Psychology of Education: An International Journal, 13*(3), 441-458. (EJ896744)

Tian, J.-Q., Miao, D.-M., & Zhu, X. (2007). An introduction to the computerized adaptive testing. *Online Submission, US-China Education Review, 4*(1), 72-81. (ED497385)

Davey, T. (2011). A guide to computer adaptive testing systems. *Council of Chief State School Officers*. (ED543317)

Kingsbury, G. G., & Hauser, C. (2004). Computerized adaptive testing and "No Child Left Behind." *Northwest Evaluation Association, Paper presented at the Annual Meeting of the American Educational Research Association* (San Diego, CA, 2004). (ED491245)

Weiss, D. J. (2004). Computerized adaptive testing for effective and efficient measurement in counseling and education. *Measurement and Evaluation in Counseling and Development, 37*(2), 70. (EJ699181)

12.學生評鑑教學

Vonderwell, S. K., & Boboc, M. (2013). Promoting formative assessment in online teaching and learning. *TechTrends: Linking*

Research and Practice to Improve Learning, 57(4), 22-27. (EJ1004282)

Boman, J. S. (2013). Graduate student teaching development: Evaluating the effectiveness of training in relation to graduate student characteristics. *Canadian Journal of Higher Education, 43*(1), 100-114. (EJ1007032)

Goldhaber, D., Liddle, S., & Theobald, R. (2013). The gateway to the profession: Assessing teacher preparation programs based on student achievement. *Economics of Education Review, 34*, 29-44. (EJ1007289)

Plake, B. S., Huff, K., & Reshetar, R. (2010). Evidence-centered assessment design as a foundation for achievement-level descriptor development and for standard setting. *Applied Measurement in Education, 23*(4), 342-357.

Davies, M., Hirschberg, J., Lye, J., & Johnston, C. (2010). A systematic analysis of quality of teaching surveys. *Assessment and Evaluation in Higher Education, 35(1)*, 87-100.

Handley, K., & Williams, L. (2011). From copying to learning: Using exemplars to engage students with assessment. *Assessment and Evaluation in Higher Education, 36(1)*, 95- 108.