

## Curriculum Vitae

### Yao-Ting Sung

Department of Educational Psychology and Counseling,

Professor and Vice President,

National Taiwan Normal University

162, Heping E. Road, Sec. 1, Taipei 10610, Taiwan, R.O.C.

Tel: 886-2-7734-1008 Fax: 886-2-2369-8261 E-mail: sungtc@ntnu.edu.tw

### Education

Institution	Nation	Discipline	Degree	Period
The University of Pittsburgh	USA	Learning Research and Development Center	Postdoctoral	Aug. 2002 ~ Feb. 2004
National Taiwan Normal University	ROC	Department of Educational Psychology and Counseling	Ph.D.	Sep. 1994 ~ Mar. 2000
National Taiwan Normal University	ROC	Department of Educational Psychology and Counseling	M.Ed.	Sep. 1990 ~ Jun. 1992

### Academic Employment

Organization	Department	Title	Period
National Taiwan Normal University (NTNU)	Higher Education Sprout Project Office	Dean	Jan. 2018 ~ present
National Taiwan Normal University		Vice President	Aug. 2015 ~ present
National Taiwan Normal University	Department of Educational Psychology and Counseling	NTNU Chair Professor	Jan. 2015 ~ present
National Center for Educational Assessment		Board Member & Director	Sep. 2013 ~ present
National Taiwan Normal University	Aim for the Top University Project Office	Dean	Apr. 2011 ~ Dec. 2017

National Taiwan Normal University	Office of Research and Development	Chief Officer	Feb. 2010 ~ Jul. 2012
National Taiwan Normal University	Department of Educational Psychology and Counseling	Research Chair Professor	Feb. 2009 ~ Dec. 2014
National Taiwan Normal University	Research Center for Psychology and Educational Testing	Director	Aug. 2006 ~ present
National Taiwan Normal University	Department of Educational Psychology and Counseling	Professor	Aug. 2006 ~ Jan. 2009

### Research Interest

1. Educational psychology	2. Psychological and educational testing	3. Computer assisted learning
4. Computer assisted testing and assessment	5. Mixed methodology	6. Career information analysis and application
7. Chinese text analysis		

### Academic Service

- Editor in Chief, *Psychological Testing* (TSSCI), 2014 ~2018
- Editor in Chief, *Journal of Research in Educational Sciences* (Scopus, ESCI, TSSCI), 2006 ~2016
- Co-Editor, *Chinese Language Learning Sciences book series* (Springer/Nature), 2016 ~
- Co-Editor, *Learning Sciences for Higher Education book series* (Springer/Nature), 2019~
- Editorial board member, *British Journal of Educational Technology* (SSCI), 2016~
- Editorial board member, *Teachers College Record* (SSCI), 2018~
- Editorial board member, *Sinophone and Taiwan Studies book series* (Springer/Nature), 2018~
- Conference Chair, the 5th International Workshop on Advanced Learning Sciences (IWALS 2017), 2017
- Conference Chair, Mandarin Learning Platform Workshop, 2015
- Conference Chair, the 3<sup>rd</sup> International Workshop on Advanced Learning Sciences (IWALS 2015), 2015
- Chair, Publishing in the Digital Age: A Freelancer's Guide Workshop, 2015
- Conference Chair, Forum of Monitoring the Quality of Educational Achievement, 2015
- Conference Chair, International Workshop on Learning Analytics, Technology Adoption, and Language Learning in the Big-Data Era (LATALL 2015), 2015

- Conference Chair, the 2<sup>nd</sup> Workshop on the Analysis of Linguistic Features (WoALF 2015), 2015
- Conference Chair, the 10<sup>th</sup> Taiwan E-Learning Forum (TWELF 2014), 2014
- Conference Chair, the 2<sup>nd</sup> International Workshop on Advanced Learning Sciences (IWALS), 2014
- Conference Chair, E-learning: Advanced Issues and Methodology Workshop, 2014
- Conference Chair, the 1<sup>st</sup> Workshop on the Analysis of Linguistic Features (WoALF 2014), 2014
- Organizer, Academic Writing & Publishing: Springer Author Workshop, 2014
- Conference Chair, the 2<sup>nd</sup> International Conference on Standard-based Assessment, 2013
- Program Chair, the 21<sup>st</sup> Conference of the International Association of Chinese Linguistics (IACL 2013), 2013
- Conference Chair, Workshop on Setting Cutscores, 2013
- Conference Chair, the 1<sup>st</sup> International Conference on Standard-based Assessment, 2012
- Conference Chair, Explanation Session on the User Manual of Junior High School Adaptive Counseling and Testing Tools, 2012
- Conference Chair, International Conference on Career Guidance in School, 2011
- Conference Chair, the 3<sup>rd</sup> International Conference on Learning, Instruction, and Assessment: Career Development, 2010
- Co-Chair, Program Committee, Global Chinese Conference of Computers in Education, 2009
- Member, Program Committee, Mandarin e-Learning Workshop, 2009
- Conference Chair, E-Learning: Current Issues and Methodology (Advanced), 2009
- Consulting Committee, Steering Committee for the Test of Proficiency-Huayu (SC-TOP)
- Consulting Committee, National Academy for Educational Research, ROC
- Reviewing Committee, Education System, Ministry of Education, ROC
- Question Bank Improvement Steering Committee, Ministry of Examination, ROC
- Information Steering Committee, Ministry of Examination, ROC
- 12-Year National Basic Education Planning Team, Ministry of Education, ROC
- Topic Setting/Paper Grading/Reviewer, Educational Administration Civil Service Exams, Examination Yuan of ROC
- Organizer, Topic Outline Setting Team for Educational Administration Civil Service Exams, Examination Yuan of ROC

## Honors and Awards

- 64th Annual Academic Awards, the Ministry of Education, Taiwan, 2020
- Taiwan Corporate Sustainability Awards (TCSA), 2020
- First place of the AI Application in Education Contest, China Technical Consultants Inc. Foundation, 2019

- University of Pittsburgh Learning Research and Development Center, Distinguished International Alumnus Award, 2018
- Alumni Engagement Innovation Fund (AEIF), Bureau of Educational and Cultural Affairs, USA, 2017–2018
- Outstanding Research Award, Ministry of Science and Technology (formerly National Science Council), 2015–2017
- Ministry of Education grant for Flexible Wage Project: University and College Talent Obtainment and Retention, 2010–2013
- Outstanding Research Award, National Science Council, 2006, 2010–2012
- Class B Research Award, National Science Council, 2005 – 2006
- Ta-You Wu Memorial Award, National Science Council, 2002–2005
- Postdoctoral Research Scholarship of the Foundation for Scholarly Exchange, Fulbright Taiwan
- Ministry of Education Postdoctoral Program Scholarship, 2002–2004
- Award for Supervision of Undergraduate Independent Research, National Science Council, 2002
- Class A Research Award, National Science Council, 2001

## Testing and Assessment Tools

### National Tests

- Comprehensive Assessment Program for Junior High School Students
- The Basic Competence Test for Junior High School Students
- The Test of Proficiency – Huayu: Computerized Test Version
- Assessment Standard for Junior High School Students Learning Achievements

### Career Path Tests

- Personality Test for Financial Talents
- Situational Test for Teachers
- Personality Test for Teachers
- Work-value Test for Teachers
- Computerized Career Testing: Aptitude Test for Junior High School Students
- Computerized Career Testing: Situational Career Interest Test for Junior High School Students
- Career Information System
- Computerized Career Testing: Aptitude Test for High School Students
- Computerized Career Testing: Situational Career Interest Test for High School Students
- Work Value Assembly for High School Students
- Work Value Assembly for University Students

### Cognitive Diagnostic Tests

- Certification and Diagnosis of Mathematics Competence Test for Junior High School/Elementary School Students
- Certification and Diagnosis of English Competence Test for Junior High School/Elementary School Students

- Certification and Diagnosis of Chinese Competence Test for Junior High School/Elementary School Students
- Computerized Creative Association-with-Figure Test (C-CRAFT)

#### **Psychological Tests for School Learning and Adjustment**

- Examination Stress Scale (ExamSS) for High School Students
- Measurement of Coping with Examination Stress
- Measurement of Reading motivation

#### **Tests/Tools for Chinese Language Competence or Chinese Text Readability**

- Chinese Readability Index Explorer
- Chinese Speech Proficiency Test
- Automated Chinese Essay Scoring
- Chinese Writing Corpora
- Chinese Characters Scale
- Chinese Vocabulary Scale

### **Selected Publications (After 2012)**

- Sung, Y.-T., Cheng, H.-H., Tseng, H.-C., Chang, K.-E., & Lin, S.-Y. (2022). Construction and validation of a computerized creativity assessment tool with automated scoring based on deep-learning techniques. *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication. <https://doi.org/10.1037/aca0000450> (SSCI)
- Hu, T.-C., Sung, Y.-T., Liang, H.-H., Chang, T.-J., & Chou, Y.-T. (2022). Relative Roles of Grammar Knowledge and Vocabulary in the Reading Comprehension of EFL Elementary-School Learners: Direct, Mediating, and Form/Meaning-Distinct Effects. *Frontiers in Psychology*. Published online 2022 Jun 21. (doi:10.3389/fpsyg.2022.827007)(corresponding author)
- Chen, C. C., Sung, Y. T., Chang, C. F., & Tseng, H. C. (2020). Examining the differences of readability leveling of Chinese popular science books for elementary school children by experts and by the CRIE system. *Journal of Library and Information Studies*, 18(1), 45-67.
- Hong, J. F., Peng, C. Y., Tseng, H. C., & Sung, Y. T. (2020). Linguistic feature analysis of CEFR labeling reliability and validity in language textbooks. *Journal of Technology and Chinese Language Teaching*, 11(1), 57-83.
- Liu, I., & Sung, Y. T. (2020). Inspection and proposal for evaluating secondary school teacher students' content knowledge and pedagogical content knowledge. *Journal of Research in Educational Sciences*, 65(2), 167.
- Liao, C.-N., Chang, K.-E., Huang, Y.-C., & Sung, Y.-T. (2020). Electronic storybook design, kindergartners' visual attention, and print awareness: An eye-tracking investigation. *Computers & Education*, 144. 103703. (SSCI)
- Yang, J. M., Sung, Y. T., & Chang, K. E. (2020). Use of meta-analysis to uncover the critical

- issues of mobile inquiry-based learning. *Journal of Educational Computing Research*, 58(4), 715-746. (SSCI)
- Zhang, J., Huang, Y. T., Liu, T. C., Sung, Y. T., & Chang, K. E. (2020). Augmented reality worksheets in field trip learning. *Interactive Learning Environments*, 1-18. (SSCI)
- Chang, K.-E., Zhang, J., Huang, Y.-S., Liu, T.-C., & Sung, Y.-T. (2019). (Online first). Applying augmented reality in physical education on motor skills learning. *Interactive Learning Environments*. (SSCI)
- Chang, T.-H., & Sung, Y.-T. (2019). Automated Chinese Essay Scoring Based on Multilevel Linguistic Features. In *Computational and Corpus Approaches to Chinese Language Learning* (pp. 253–269). Springer, Singapore.
- Chao, T.-Y., Sung, Y.-T., & Huang, J.-L. (2019). (Online first). Construction of the situational judgment tests for teachers. *Asia-Pacific Journal of Teacher Education*. (SSCI)
- Hsieh, S.-S., Tsai, J.-R., Chang, S.-H., Ho, J.-Y., Chen, J.-F., Chen, P.-H., Sung, Y.-T., & Hung, T.-M. (2019). The subject-dependent, cumulative, and recency association of aerobic fitness with academic performance in Taiwanese junior high school students. *BMC Pediatrics*, 19:25. (SCIE)
- Lin, S.-Y., Chen, H.-C., Chang, T.-H., Lee, W.-E., & Sung, Y.-T. (2019). (Online first). CLAD: A corpus-derived Chinese Lexical Association Database. *Behavior Research Methods*. (SSCI)
- Sung, Y.-T., Chang, Y.-T., Cheng, T.-Y., & Tien, H.-L. (2019). Development and validation of a work values scale for assessing high school students: A mixed method approach. *European Journal of Psychological Assessment*, 35(4), 526–543. (SSCI)
- Sung, Y.-T., Lee, H.-L., & Yang, J.-M. (2019). The quality of experimental designs in mobile learning research: A systemic review and self-improvement tool. *Educational Research Review*, 28, 100279. (SSCI)
- Tseng, H.-C., Chen, B., Chang, T.-H., & Sung, Y.-T. (2019). Integrating LSA-based hierarchical conceptual space and machine learning methods for leveling the readability of domain-specific texts. *Natural Language Engineering*, 25(3), 331–361. (SSCI; SCIE)
- Hsieh, S.-S., Tsai, J.-R., Chang, S.-H., Cheng, C.-H., Sung, Y.-T., & Hung, T.-M. (2018). The relations between 3-year changes in physical fitness and academic performance in nationally representative sample of junior high school students. *Scientific Reports*, 8: 15978. (SCIE)
- Hsu, F.-Y., Lee, H.-M., Chang, T.-H., & Sung, Y.-T. (2018). Automated estimation of item difficulty for multiple-choice tests: An application of word embedding techniques. *Information Processing and Management*, 54(6), 969–984. (SCIE)

- Sung, Y. T., & Wu, J. S. (2018). The Visual Analogue Scale for Rating, Ranking and Paired-Comparison (VAS-RRP): A new technique for psychological measurement. *Behavior Research Methods*, *50*(4), 1694–1715.
- Chen, J.-L., Tseng, H.-C., Sung, Y.-T., Lin, C.-L., & Ke, H.-W. (2017). Text analysis and readability of Chinese teaching materials for CSL learners. *International Journal of Chinese Language Education*, *1*, 39–71.
- Hsiung, H.-Y., Chang, Y.-L., Chen, H.-C., & Sung, Y.-T. (2017). Effect of stroke-order learning and handwriting exercises on recognizing and writing Chinese characters by Chinese as a foreign language learners. *Computers in Human Behavior*, *74*, 303–310. (SSCI)
- Lan, Y.-J., Chen, N.-S., & Sung, Y.-T. (2017). Guest editorial: Learning analytics in technology enhanced language learning. *Journal of Educational Technology & Society*, *20*(2), 158–160. (SSCI)
- Li, H.-Y., Yang, J.-M., & Sung, Y.-T. (2017). Quality evaluation and analysis of the current situation of digital learning experiments: Taking action learning as an example. *Journal of Research in Education Sciences*, *61*(2), 31–60.
- Sung, Y.-T., Cheng, Y.-W., & Hsueh, J.-H. (2017). Identifying the career-interest profiles of junior-high-school students through latent profile analysis. *Journal of Psychology*, *151*(3), 229–246. (SSCI)
- Sung, Y.-T., Yang, J.-M., & Lee, H.-Y. (2017). The effects of mobile-computer-supported collaborative learning: Meta-analysis and critical synthesis. *Review of Educational Research*, *87*(4), 768–805. (SSCI)
- Chao, K.-H., Chang, K.-E., Lan, C.-H., Kinshuk, & Sung, Y.-T. (2016). Integration of mobile AR technology in performance assessment. *Educational Technology & Society*, *19*(4), 239–251. (SSCI)
- Chao, T.-Y., Huang, C.-L., Sung, Y.-T., Kuo, H.-N., & Hsu, M.-H. (2016). Compilation of the teacher situation judgment test. *Journal of Research in Education Sciences*, *61*(2), 85–117.
- Hong, J.-F., Sung, Y.-T., Tseng, H.-C., Chang, K.-E., & Chen, J.-L. (2016). A multilevel analysis of the linguistic features affecting Chinese text readability. *Taiwan Journal of Chinese as a Second Language*, *13*, 95–126. (THCI core)
- Hou, H.-T., Yu, T.-F., Wu, Y.-X., Sung, Y.-T., & Chang, K.-E. (2016). Development and evaluation of a web map mind tool environment with the theory of spatial thinking and project-based learning strategy. *British Journal of Educational Technology*, *47*(2), 390–402. (SSCI)
- Lan, Y.-J., Kan, Y.-H., Sung, Y.-T., & Chang, K.-E. (2016). Oral-performance language tasks for

- CSL beginners in Second Life. *Language Learning & Technology*, 20(3), 60–79. (SSCI)
- Sung, Y.-T., Cha, J.-H., Tu, J.-Y., Wu, M.-D., & Lin, W.-C. (2016). Investigating the processing of relative clauses in Mandarin Chinese: Evidence from eye-movement data. *Journal of Psycholinguistic Research*, 45(5), 1089–1113. (SSCI)
- Sung, Y.-T., Chao, T.-Y., & Tseng, F.-L. (2016). Reexamining the relationship between test anxiety and learning achievement: An individual-differences perspective. *Contemporary Educational Psychology*, 46, 241–252. (SSCI)
- Sung, Y.-T., Chang, K.-E., & Liu, T.-C. (2016). The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis. *Computers & Education*, 94, 252–275. (SSCI)
- Sung, Y.-T., Cheng, Y.-W., & Wu, J.-S. (2016). Constructing a situation-based career interest assessment for junior-high-school students and examining their interest structure. *Journal of Career Assessment*, 24(2), 347–365. (SSCI)
- Sung, Y.-T., Liao, C.-N., Chang, T.-H., Chen, C.-L., & Chang, K.-E. (2016). The effect of online summary assessment and feedback system on the summary writing on 6th graders: The LSA-based technique. *Computers & Education*, 95, 1–18. (SSCI)
- Sung, Y.-T., Tu, J.-Y., Cha, J.-H., & Wu, M.-D. (2016). Processing preference toward object-extracted relative clauses in Mandarin Chinese by L1 and L2 speakers: An eye-tracking study. *Frontiers in Psychology (Language Science Section)*, 7: 4. (SSCI)
- Tang, J.-T., Sung, Y.-T., & Chang, K.-E. (2016). Action research on the development of Chinese communication in a virtual community. *Computer Assisted Language Learning*, 29(5), 942–967. (SSCI)
- Chang, T.-H., Sung, Y.-T., & Hong, J.-F. (2015). Automatically detecting syntactic errors in sentences written by learners of Chinese as a foreign language. *International Journal of Computational Linguistics and Chinese Language Processing*, 20(1), 49–64. (THCI)
- Chang, Y.-L., Hou, H.-T., Pan, C.-Y., Sung, Y.-T., & Chang, K.-E. (2015). Apply an augmented reality in a mobile guidance to increase sense of place for heritage places. *Educational Technology & Society*, 18(2), 166–178. (SSCI)
- Chen, J.-L., Tsai, H.-T., Sung, Y.-T., & Lee, Y.-H. (2015). A study of the adaptive leveling structure of Chinese texts. *Journal of Research in Education Sciences*, 60(1), 1–32. (TSSCI)
- Lan, Y.-J., Sung, Y.-T., Cheng, C.-C., & Chang, K.-E. (2015). Computer-supported cooperative prewriting for enhancing young EFL learners' writing performance. *Language Learning*



*& Technology*, 19(2), 134–155. (SSCI)

Sung, Y.-T., & Chao, T.-Y. (2015). Construction of the examination stress scale for adolescent students. *Measurement and Evaluation in Counseling and Development*, 48(1), 44–58. (SSCI)

Sung, Y.-T., Chang, K.-E., & Yang, J.-M. (2015). How effective are mobile devices for language learning and teaching? A meta-analysis. *Educational Research Review*, 16, 68–84. (SSCI)

Sung, Y.-T., Chen, J.-L., Cha, J.-H., Tseng, H.-C., Chang, T.-H., & Chang, K.-E. (2015). Constructing and validating readability models: the method of integrating multilevel linguistic features with machine learning. *Behavior Research Methods*, 47(2), 340–354. (SSCI)

Sung, Y.-T., Lin, W.-C., Dyson, S.-B., Chang, K.-E., & Chen, Y.-C. (2015). Leveling L2 texts through readability: Combining multilevel linguistic features with the CEFR. *The Modern Language Journal*, 99(2), 371–391. (SSCI)

Sung, Y.-T., Shih, P.-C., & Chang, K.-E. (2015). The effects of 3D-representation instruction on composite-solid surface-area learning for elementary school students. *Instructional Science*, 43(1), 115–145. (SSCI)

Sung, Y.-T., Wu, M.-D., Chen, C.-K., & Chang, K.-E. (2015). Examining the online reading behavior and performance of fifth-graders: evidence from eye-movement data. *Frontiers in Psychology*, 6: 665. (SSCI)

Chang, K.-E., Chang, C.-T., Hou, H.-T., Sung, Y.-T., Chao, H.-L., & Lee, C.-M. (2014). Development and behavioral pattern analysis of a mobile guide system with augmented reality for painting appreciation instruction in an art museum. *Computers & Education*, 71, 185–197. (SSCI)

Chang, K.-E., Wu, L.-J., Lai, S.-C., & Sung, Y.-T. (2014). Using mobile devices to enhance the interactive learning for spatial geometry. *Interactive Learning Environments*, 24(4), 916–934. (SSCI)

Chang, T.-H., Liu, C.-L., Su, S.-Y., & Sung, Y.-T. (2014). Integrating various features to grade students' writings based on improved multivariate Bernoulli model. *Information: An International Interdisciplinary Journal*, 17(1), 45–52.

Chao, T.-Y., Sung, Y.-T., & Wang, Y.-L. (2014). Compilation and Application of the Examination Stress Response Scale for Middle School Students. *Psychological Testing*, 61(2), 283–310.

- Cheng, Y.-W., Chen, B.-H., Sung, Y.-T., Chen, H.-H., & Hsiao, M.-T. (2014). A study of the establishment of computerized adaptive career aptitude tests. *Bulletin of Educational Psychology*, *46*(2), 271–288. (TSSCI)
- Hou, H.-T., Wu, S.-Y., Lin, P.-C., Sung, Y.-T., Lin, J.-W., & Chang, K.-E. (2014). A blended mobile learning environment for museum learning. *Educational Technology & Society*, *17*(2), 207–218. (SSCI)
- Sung, Y.-T., Chou, Y.-T., & Tseng, F.-L. (2014). Reform of the entrance examination and assessment of the national 12-year basic education. *Journal of Research in Education Sciences*, *59*(1), 1–32. (TSSCI)
- Sung, Y.-T., Tseng, F.-L., Kuo, N.-P., Chang, T.-Y., & Chiou, J.-M. (2014). Evaluating the effects of programs for reducing achievement gaps: a case study in Taiwan. *Asia Pacific Education Review*, *15*(1), 99–113. (SSCI)
- Sung, Y.-T., Huang, L.-Y., Tseng, F.-L., & Chang, K.-E. (2014). The aspects and ability groups in which little fish perform worse than big fish: examining the big-fish-little-pond effect in the context of school tracking. *Contemporary Educational Psychology*, *39*(3), 220–232. (SSCI)
- Tseng, C.-C., Chen, C.-H., Chen, H.-C., Sung, Y.-T., & Chang, K.-E. (2014). Verification of dual factors theory with eye movements during a matchstick arithmetic insight problem. *Thinking Skills and Creativity*, *13*, 129–140. (SSCI)
- Zhang, J., Sung, Y.-T., Hou, H.-T., & Chang, K.-E. (2014). The development and evaluation of an augmented reality-based armillary sphere for astronomical observation instruction. *Computers & Education*, *73*, 178–188. (SSCI)
- Chen, H.-C., Hsu, C.-C., Chang, L.-Y., Lin, Y.-C., Chang, K.-E., & Sung, Y. T. (2013). Using a radical-derived character e-Learning platform to increase learner knowledge of Chinese characters. *Language Learning & Technology*, *17*(1), 89–106. (SSCI)
- Chen, Y.-L., Pan, P.-R., Sung, Y.-T., & Chang, K.-E. (2013). Correcting misconceptions on electronics: Effects of a simulation-based learning environment backed by a conceptual change model. *Educational Technology & Society*, *16*(2), 212–227.
- Cheng, C.-C. J., Wang, W.-L., Sung, Y.-T., Wang, Y.-C., Su, S.-Y., & Li, C.-Y. (2013). Effect modification by parental education on the associations of birth order and gender with learning achievement in adolescents. *Child: Care, Health and Development*, *139*(6), 894–902. (SSCI)
- Lan, Y.-J., Sung, Y.-T., & Chang, K.-E. (2013). From particular to popular: Facilitating EFL mobile-supported cooperative reading. *Language Learning & Technology*, *17*(3), 23–38. (SSCI)

- Lee, R.-W., Sung, Y.-T., & Tzeng, J.-L. (2013). Examining the efficiency of learning technology on game's task-specific and task-general effects from the perspective of cognitive neuroscience. *Journal of Neuroscience and Neuroengineering*, 2(3), 287–295. (SSCI)
- Sung, Y.-T., Chao, T.-Y., Wang, Y.-L., Huang, L.-Y., Chen, C.-J., & Tseng, F.-L. (2013). The development of examination stress for junior high school students. *Psychological Testing*, 60(2), 291–318. (TSSCI)
- Sung, Y.-T., Chen, J.-L., Lee, Y.-S., Cha, J.-H., Tseng, H.-C., Lin, W.-C., Chang, T.-H., & Chang, K.-E. (2013). Investigating Chinese TEXT READABILITY: Linguistic features, modeling, and validation. *Chinese Journal of Psychology*, 55(1), 75–106. (TSSCI)
- Wang, T.-H., Lee, Y.-H., Tseng, F.-L., & Sung, Y.-T. (2013). The readability and validity of writing assessment of Basic Competence Test for Junior High School Students. *Psychological Testing*, 60(1), 151–184. (TSSCI)
- Chang, K.-E., Wu, L.-J., Weng, S.-E., & Sung, Y.-T. (2012). Embedding game-based problem-solving phase into problem-posing system for mathematics learning. *Computers & Education*, 58(2), 775–786. (SSCI)
- Sung, Y.-T., Huang, L.-Y., Kuo, N.-P., & Tseng, F.-L. (2012). Investigating the big-fish-little-pond and upward comparison effects using longitudinal learning achievement. *Chinese Journal of Psychology*, 54(3), 315–330. (TSSCI)
- Sung, Y.-T., Huang, H.-T., & Chen, H.-C. (2012). Content analysis of energy and climate change concepts in elementary and middle school science textbooks. *Chinese Journal of Textbook Research*, 5(2), 1–30.
- Sung, Y.-T., Tien, H.-L., & Cheng, Y.-W. (2012). Analysis of career development tests in secondary, high, and vocational high school. *Bulletin of Educational Psychology*, 43(4), 875–898. (TSSCI)
- Yu, W.-C., & Sung, Y.-T. (2012). The Multifacet of happiness. *Psychological Testing*, 59(3), 397–427. (TSSCI)

## Social Contributions

### I. Assisting in education policy-making

1. Leading a research team to undertake the launch and supervision of teacher education curriculum reform
2. Leading an expert think tank on Comprehensive Assessment Program for Junior High School Students (CAP) for the 12-Year Basic Education in Taiwan

Relevant media reports include the following:

- [中廣新聞網：國中會考試務人員今天入闈 宋曜廷建議學生看這兩年數學舊考題](#)
- [中時電子報：國中教育會考入闈 命題難易適中趣味化](#)
- [聯合報：考生別慌 明國中會考數學非選算錯也有分](#)
- [中央社：國中會考結束，考題三大趨勢已可見新課綱「素養」精神](#)
- [中央社：會考 3 大趨勢 基本題、生活題、跨科題增加](#)
- [自由時報：基本、圖表、跨領域 國中會考命題 3 大趨勢](#)
- [國語日報：新課綱導向 考題生活化、跨領域命題多](#)
- [人間福報：國中會考趨勢 重視素養能力](#)
- [聯合新聞網：會考成績今公布 英數 33%待加強](#)

## II. Assisting in education policy implementation: Supervising the Research Center for Psychological and Educational Testing (RCPET) at National Taiwan Normal University (NTNU)

1. Developing the Online Assessment Battery for Teacher Aptitude to enhance the quality of teacher training



### Online Assessment Battery for Teacher Aptitude

<https://taa.ntnu.edu.tw/>

2. Developing Adaptive Career Aptitude Test and Situation-Based Career Interest Test for adaptive talent development



## Career Testing System Junior High School Edition

<http://career.ntnu.edu.tw/junior/>

Both functions of the career testing system have been widely reported on by the media, shown below:

- [親子天下雜誌 20 期：高職選科系，新性向測驗幫助你](#)
- [中時電子報\\_親子\\_未來 Family 第 201802 期：台師大心測中心調查報告 高達 51% 的學生，興趣與天賦沒有交集](#)
- [青島新聞網：青島试点建生涯规划测评系统 帮做中高考抉择](#)
- [遠見：適性教育還很遠？過半國中生成興趣與天賦無交集](#)
- [風傳媒：台灣教育問題出在哪？一份針對 6 萬名國中生的研究，意外揭校園教育讓學生陷入 5 大困境](#)
- [台東鎮：青島试点中学生生涯规划测评系统 自愿报名](#)
- [青島新聞網：青島试点建生涯规划测评系统 帮做中高考抉择](#)
- [傳送門：海峡两岸青少年生涯规划学术论坛在我校举行](#)
- [每日頭條：青島實驗初級中學開展初中畢業生生涯規劃測評工作](#)
- [自由時報：近半國中生 不清楚自己興趣](#)
- [國語日報社：缺乏自我探索 半數國中生興趣不明](#)
- [公視：生涯發展評量 助國中生找未來方向](#)

### 3. Developing the National Middle School Student Learning Achievement Assessment Standards

**SBASA** • 國民中小學學生學習成就素養導向標準本位評量 •  
Standard-based Assessment of Student Achievement for Elementary and Junior High School Students

關於本計畫 評量標準 評量系統 專家人才庫 作業上傳 討論園地 線上報名 資料下載 回首頁



**MEMBER LOGIN**  
帳號:   
密碼:

**本計畫簡介**  
十二年國民基本教育實施後，為落實學力監控以作為未來訂定教育目標之參考依據，由教育部與100學區、縣級研發中心、小學學區共同研擬標準，提供與課程發展相關的評量說明，確立一套教師在平常課堂中即可使用的全面性評量標準和多元評量工具，讓教師和教學主管能更清楚學生的表現，有明確的標準，且鼓勵教師運用多元評量，培養學生學習的動機，以瞭解學生的學習成效，並評估適當的學力監控機制和精進教學策略，達到提昇學力、縮窄學習成就落差的目的。

**Q&A 常見問題**

**最新消息**  
■ 國民中小學學生學習成就素養導向標準本位評量研究發展計畫之「國語種子講師進修培訓研習班」已於107年11月9日(星期五)以多點方式實施，敬請踴躍參加並留意。  
■ 國民中學學生學習成就素養導向標準本位評量研究發展計畫之研習活動「國中種子講師培訓工作坊」  
■ 國語成績資料，請至「資料下載」專區下載。 [107-11-15]  
[107-11-07]

**國中種子講師名單**

Standards-based assessment of student achievement for elementary school students

<https://www.sbas.ntnu.edu.tw/SBASA/HomePage/index.aspx>

4. Developing diagnostic tools—Diagnosis and Certification of English Competence (DCEC) to assess elementary school English education outcome and provide recommendations for English education policy-making. Relevant media reports include the following:

- [中央社：北市小六生英語體檢 逾 2 成未達畢業應有能力](#)
- [教育廣播電臺：英語能力雙峰化 臺師大推「英語能力診斷及認證系統」 期待政府及早掌控小學端的英語實力](#)
- [NOWnews：北市小六生英語體檢 逾 2 成未達畢業應有能力](#)
- [聯合報：北市小六生檢測 英語文法僅 46%達應有能力](#)
- [香港新聞網：台北半數小六學生英語文法未達畢業程度](#)
- [自由時報：台師大調查小六英文能力逾半文法句型未達標](#)
- [大紀元：北市英語雙峰過半小 6 生程度有落差](#)
- [台灣醒報：小學生菜英文？ 調查過半未達水準](#)
- [聯合報：逾 5 成北市小六生英文文法未達畢業應有能力](#)
- [中央廣播電台：北市小六生英語檢測 逾半數文法未達標](#)
- [公視：北市 54%小六生 英文文法程度落後](#)
- [華視：小六英語體檢 文法句型逾半未達標](#)
- [ICRT：Taipei 6th-graders' English Not up to Snuff](#)
- [自由時報：小學教英文實施 20 年 檢測發現北市小六英文有點糟](#)
- [自由時報：學者：英語教育 應從閱讀故事學起](#)
- [Taiwan News：Many Taipei elementary students score low in English proficiency: NTNU Study by NTNU finds many elementary students in Taipei have low level of English proficiency](#)

5. Developing the Diagnostic Assessment of Chinese Competence and SmartReading platform to evaluate and cultivate high school students' reading competence



**SmartReading adaptive Chinese reading system**

<http://smartreading.net/>

Relevant media reports include the following:



- [中時電子報：師大慧讀系統 兩岸中小學選用](#)
- [中時電子報：怎麼替孩子選書？ 讓電腦幫你挑！](#)
- [自由時報電子報：師大開發「慧讀·會讀」系統 分析書本內容難度](#)
- [觀點傳媒：大數據結合國中小教科書 SmartReading 讓孩子適性閱讀](#)
- [蘋果日報網站：讓學生讀得下去！台師大推讀物難度分級系統](#)
- [國語日報新聞：臺師大研究大數據分析 兒童讀物標示適讀年齡 多數超齡](#)
- [教育廣場—大家談教育：認知x素養 數位閱讀關鍵 強化資訊判斷力](#)
- [人間福報：慧讀·會讀 幫孩子選對的書](#)

## 6. Assisting in rural education development

The actions taken including:

- (1) Developing adaptive English teaching materials and methods to boost learning motivation and efficacy in low-achieving students: Program of Adaptive Screening, Streaming, and Instruction for Omni-directional Nurturing (PASSION)



### **Program of Adaptive Screening, Streaming, and Instruction for Omni-directional Nurturing (PASSION-English) (<http://passiontw.net/usr/>)**

- (2) The PASSION rural education credit program: Establishing the Rural Education Credit Program at three universities
- (3) Cooperation with Keelung City Education Department: Assisting Keelung City to carry out the “2017 Smart Education Project”
- (4) The PASSION teaching team was recognized by the U.S. State Department’s seventh Alumni Engagement Innovation Fund (AEIF, 2017), becoming the only winning team from Taiwan amidst fierce competition (6.7% winning rate) from 125 countries

Below is a list of media reports on the PASSION project:

- [中央廣播電臺：台美合作 花蓮偏鄉國中生英語能力大躍進](#)
- [中央社：課輔弭平學習落差 偏鄉生能用英語點餐](#)
- [台灣醒報：AIT 攜手台師大 花蓮學子溜英文](#)

- [TVBS 新聞網：課輔弭平學習落差 偏鄉生能用英語點餐](#)
- [自由時報電子報：AIT 和台師大合推課輔 偏鄉學生可用英文點餐...](#)
- [udn 聯合新聞網：影 / 美國在台協會攜手台師大共同弭平學習成就落差](#)
- [芋傳媒 TaroNews：弭平學習落差台師大攜手 AIT 推英語扎根班](#)
- [台灣大紀元：師大攜手 AIT 課輔弭平偏鄉學習落差](#)
- [Yahoo 奇摩新聞：台師大團隊推偏鄉英語扎根班\(圖\)](#)
- [Yahoo 奇摩新聞：弭平學習成就落差成果發表會](#)
- [NOWnews/中央社：夢想出國踢足球 偏鄉學童燃起學英文熱情](#)
- [自由時報：本來菜英文... AIT 助課輔 偏鄉童英文大進步](#)
- [芋傳媒 TaroNews/中央社：偏鄉學童想出國踢球 燃起學英文熱情](#)
- [Yahoo 奇摩新聞：師大攜手 AIT 提升學童英文力 \(圖\)](#)
- [公視：加強偏鄉學童英語能力 扎根教學弭平落差](#)
- [新唐人亞太台：美國在台協會攜手臺師大 共同弭平學習成就落差](#)
- [台灣大紀元：台師大團隊弭平學習落差 偏鄉生能用英語點餐](#)
- [更生日報：課輔弭平學習落差 偏鄉生溜英語點餐](#)
- [udn 聯合新聞網/台灣醒報：AIT 攜手台師大 花蓮學子溜英文](#)
- [美國在台協會：學友連結創新基金 弭平英文學習成就差距](#)
- [TaiwanNews：Taiwan students jumpstart English level in 7 months](#)
- [Taipei Times：Program helps players chase dream](#)
- [Focus Taiwan News Channel：NTNU showcases success of English learning for low achievers program](#)
- [American Institute in Taiwan \(AIT\)：Bridging English Learning Gaps in Taiwan with Alumni Engagement Innovation Fund](#)
- [Eye on Taiwan 印象台灣：US State Department helps broaden remedial English teaching in Taiwan; outgoing AIT Director Moy honored](#)
- [新北市教育電子報：PASSION 扎根 3 步驟 點燃低成就生學習熱情](#)
- [公視：台師大首創偏鄉教育學程 同學赴偏鄉實習](#)
- [中央通訊社：撲克牌讓數學變有趣 台師大推偏鄉實習](#)
- [聯合新聞網：台師大首創偏鄉教育學分學程 待加強國中生學科大進步](#)
- [自由時報：台師大偏鄉教育學程 助花蓮國中生成績顯著進步](#)
- [中時電子報：全國首創 台師大打造偏鄉教育學分學程](#)
- [國立教育廣播電臺：台師大首創偏鄉教育學分學程 培育偏鄉優良師資](#)
- [Ettoday 新聞雲：台師大首創「偏鄉教育學分學程」 3 周後 8 成國中生愛上英文](#)
- [青年日報：臺師大首創偏鄉教育學程 3 週讓 8 成國中生愛上英文](#)
- [風傳媒：偏鄉老師流動率高達 3 倍！台師大推暑期營隊、遠距視訊課輔，盼助全台 13 萬偏鄉學生](#)
- [國語日報社：臺師大首創偏鄉教育學程 為國中生補救見效](#)
- [公視：臺師大代先開偏鄉教育學程 通去偏鄉實習](#)
- [GTV 八大電視：偏鄉缺師資 大學生赴花蓮教英文](#)

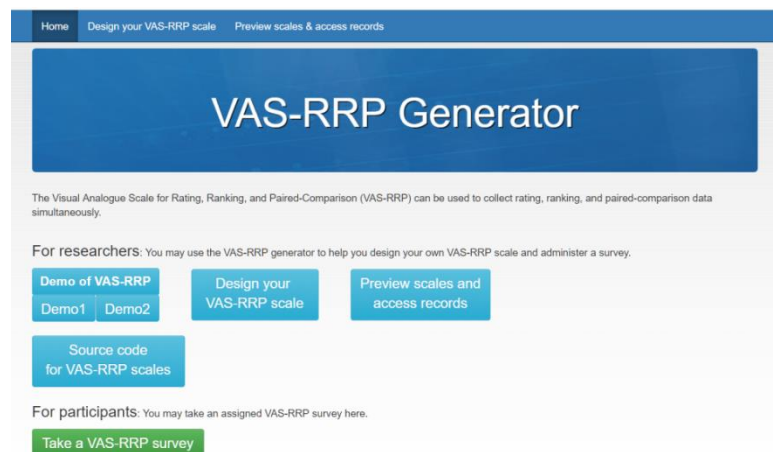


- [客家電視：台師大首創偏鄉教育學程 同學赴花蓮實習](#)
- [新浪新聞：台師大首創偏鄉教育學程 同學赴偏鄉實習](#)
- [PCHOME 新聞：台師大首創偏鄉教育學程 同學赴偏鄉實習](#)
- [阿猴新聞網：台師大偏鄉教育學程 助花蓮國中生成績顯著進步](#)
- [原民台：台師大首創偏鄉教育學程 學生展開實習](#)
- [經濟日報：撲克牌讓數學變有趣 台師大推偏鄉實習](#)
- [YAHOO 奇摩新聞\(台灣新生報\)：臺灣師範大學首創偏鄉教育學分學程](#)
- [工商時報：全國首創 台師大打造偏鄉教育學分學程](#)
- [MSN 新聞：撲克牌讓數學變有趣 台師大推偏鄉實習](#)
- [六度新聞：撲克牌让数学变有趣 台师大推偏乡实习](#)

### III. Developing teaching and assessment tools for use by researchers around the world

#### 1. Releasing psychological data analysis tools to the global psychology community

- ◆ The Visual Analogue Scale for Rating, Ranking, and Paired-Comparison (patented)



#### Visual Analogue Scale for Rating, Ranking, and Paired-Comparison (VAS-RRP) (<http://vasrrp.net>)

- ◆ The Chinese Readability Index Explorer (patented)



## Chinese Readability Index Explorer (CRIE)

(<http://www.chinesereadability.net/>)

- ◆ The Corpus-Derived Chinese Lexical Association Database

**Corpus-derived  
Chinese Lexical  
Association Dictionary  
(CLAD)**

**Free association  
based Chinese  
Lexical Association Norm  
(Chen Norm)**

Last updated on 23/07/2019

© copyright National Taiwan Normal University and the Authors, 2019. All Rights Reserved.

**Terms of Use:** Data generated from this website are available for non-commercial research purposes only. Any commercial use or distribution, publishing or exploitation of the Site or of anything on the Site is strictly prohibited without the express written prior permission of the applicable rights holder.

**Citation:** Any use of information in the web site should be accompanied by citing the article: Lin, S.-Y., Chen, H.-C., Chang, T.-H., Lee, W.-E., & Sung, Y.-T. (2019). (online first). CLAD: A corpus-derived Chinese Lexical Association Database. Behavior Research Methods. <https://doi.org/10.3758/s13428-019-01208-2>

For commercial license information and enquiry please contact us at [sy.lin@ntnu.edu.tw](mailto:sy.lin@ntnu.edu.tw)

## Corpus-Derived Chinese Lexical Association Database (CLAD)

(<http://www.chinesereadability.net/lexicalassociation/>)