

David Hung Wei Loong

Head Learning Sciences and Technologies (formerly termed Instructional Science)

Associate Professor

National Institute of Education

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The *Learning Sciences and Technologies* Academic Group (of which I am Head or Chair) is an interdisciplinary group which focuses on understanding learning in social-cultural contexts with the goal of designing and integrating learning environments and technologies. The group is concerned with the application of theory into practice and adopts a variety of methodologies, including reflection-in-action, action research, and design experiments, for the advancement of its research and teaching. We seek to provide a bridge between learning and instructional design, and between design both as a science and as an art. Our mission is to enable teachers to become designers for learning and teaching and a reflective community of practice.

Education

BSc. Carleton University (Ottawa, Canada) 1985

Masters of Computing (Monash University) 1993

PhD. in Information and Computer Science 1997

PhD Thesis: The social construction of Mathematical Meanings through Computer-Supported Collaborative Environments

PGDipTHE Nanyang Technological University 1998

Employment Experiences

Head Learning Sciences and Technologies (formerly termed Instructional Science) – National Institute of Education (1st July 2003 onwards)

Associate Professor – National Institute of Education, Nanyang Technological University (2002 onwards)

Assistant Professor – National Institute of Education (1999 to Dec 2001)

- SOE IT Coordinator & Education Cluster Sub-Dean

Lecturer, NTU – Nov 1996 – 31 Dec 1998 (Temporary lecturer from Nov 1996-Oct 1997)

Systems Analyst (Information Systems Officer) – Systems and Computer Organization (1986 to 1992) & *Computer-Assisted Instruction Coordinator* – MINDEF (1986-1987)

- Excellence Award received

Leadership Experiences

As head or chair of the Learning Sciences Academic Group, I had anticipated the landscape of research, academia, and the local context, and aligned the niches of the department accordingly. In this regard, I have initiated the following:

- changed in department name from Instructional Science (IS) to Learning Sciences and Technologies (LST) in order to reflect the interdisciplinary nature of Learning, Learning Environments, and Learning Technologies.
- Put in place structures in the AG such as Professional Development in order to align staff competencies to the Learning Sciences
- Manage a team of Instructional Systems members, Learning Sciences members, and Teacher Education members into an integrated team. No such parallel exist in the Asia-Pacific region. In the department current, I have staff ranging from full professors, associate professors, assistant professors, and also teaching fellows. To date, I have been able to synergize the team.
- I have also put in place new curriculum for both pre-service and in-service programmes at both the undergraduate and post-graduate levels in order to meet the changing landscape of ICT and the Learning Sciences. We are also currently engaged in a process of reviewing our programmes at all levels in order to see how we can customize them in more flexible ways and deliver our programmes to the schools. To date we have conceptualized an alternative Masters' programme with post-graduate modules which can be accredited to the Masters in the Learning Sciences and Technologies.
- To set up structures in the department to handle continuous Professional Development for staff throughout the year in order to articulate and work towards a common belief and identity for the group. The basic philosophy of putting PD structures in the AG is to make sure that senior faculty members have roles and skills which differ from junior faculty and mechanisms where they are enabled to exhibit these differences. The plans towards such steps have to be worked out in along-term strategy.

Research and Publication Experiences

Contributing Editor – *Educational Technology* (a world renowned platform for leading researchers and academics in ICT, cognition, learning, and e-learning to represent their thinking. Other contributing editors include: Prof. David Jonassen, David Merrill, J. Spiro, Brent Wilson, Thomas Reeves, etc.)

Associate Editor – *International Journal of Learning Technologies* (I was involved in organizing for the panel of reviewers, reviewing articles, and co-working with the editor in delivering the journal. I have reviewed articles from professors such as David Jonassen and Michael Roth).

Guest Editor

- *Educational Technology* (I successfully completed a special issue on ICT in the Asia-Pacific region)
- *Teaching and Learning* (I have been guest editor for a special issue in ICT and e-learning)
- *Educational Technology – Special issue on Learning Sciences and ICT* (year marked for 2005).

Journal Reviewer – I have been invited to review journal articles from *Education Media International*, *Teacher Education*, *Teaching and Learning*, *International Journal of Learning Technologies*, *Cognition and Instruction*.

Publications record over the last 7 years

- International Publications – 60
- Editorials of special issues and books -- 4
- International Book (handbook) Chapters – 4
- Book chapters -- 15
- Conference papers – 20
- Monographs – 2

Research Projects Involvement

- Project Success – co-investigator led by Dr. Chen Ai Yen (completed -- AcRF)
- MicroLessons – Co-investigator led by Dr. Philip Wong (completed -- EdRF)
- Scientific Inquiry through Collaborative Environments – Co-investigator (ongoing – led by Dr. Tan Seng Chee -- EdRF)
- Fostering Communities of Practice -- the Principal Investigator (CRPP)
- Conceptualization of ICT strategic research and the **Learning Sciences Lab** – projected US 7 million dollars (including research grants) over the next 5 years.

The Learning Sciences Lab (LSL) -- We recognized that the field of the Learning Sciences has gained significant currency in the United States where centers of Learning Sciences have been set up to the order of US\$5 million per year per center spread over the US. A similar Learning Sciences Lab in NIE with joint collaborations from the Ministry of Education has been conceived. To date, we have established international collaborations with eminent professors to be affiliated to this lab. The Learning Sciences Lab conceptualization began with the thrust of ICT strategic research thrust in Singapore for the support of the IT MasterPlan. To this end, there is also an alignment with MOE's ETD, R&D section with LSL.

Consultancy and Professional Experiences

Programme Committee for *International Conference for Computers in Education* (I have been invited as programme committee member for the last few years – **2001, 2002, and 2004**). I was also in the programme committee for *Wireless and Mobile Technologies in Education 2004* in Taiwan.

Reviewer of Journals – I am constantly asked to review articles from

- *International Journal for Learning Technologies*,
- *Teaching Education*,
- *Educational Media International*.

I am also identified as a reviewer for *Cognition and Instruction and Curriculum and Instruction*.

Educational Technology Division's (ETD) Honorary Consultant, Ministry of Education

Being an honorary consultant to ETD enables me to establish linkages with the Ministry of Education. As consultant, I am able to provide inputs into the IT MasterPlan process. I have right now initiated an alignment with ETD with respect to delivering in-service modules as part of professional development. My sense is that if we can co-develop and co-train in-service programmes, an additional gift to teachers would be the accreditation which NIE can provide. As a result there is an alignment between NIE, schools, and ETD.

Consultant and Instructional Design Trainer for Ministry of Defense (2002 onwards)

Consultant and Instructional Strategies Trainer for Ministry of Defense (2003 onwards)

Being a consultant and trainer to the Ministry of Defense enables me to understand the processes through which Military commanders are exposed to and how continuous training and education-learning can be part of the developmental trajectory of officers. It enables me to put many ISD concepts into practice and draw linkages between education and the military.

Keynote Addresses

- Teacher's of the year award keynote address – Year 2002
- Teacher's of the year award (3rd session) – Year 2001
- Temasek Polytechnic's Teaching seminar – Year 1999
- Presenting at the Oct-Nov Singapore-UK ICT conference on Learning Communities
- Invited presentation in iTopia on e-Pedagogies.
- Keynote address at 2nd regional symposium on new media and learning technologies. Singapore.

Teaching Experiences

Core Foundation Education Modules

- *Instructional Technology* for all levels of pre-service modules (PGDE, BA/Bsc, Dip Ed)
- Involved in continuous curricular changes with members of the curriculum committee

Elective Education Modules

- Multimedia Design
- Developed a PQRS framework for social discourse in multimedia design (published)

DDM Module – Leadership programmes for Heads of Department

- Elective module on IT integration in the schools
- Have been revisiting the curriculum from the MasterPlan I to the current status of MasterPlan II for ICT
- Have fostered a learning community within each batch of DDM participants

LEP Module – Leadership programmes for Principals and school leaders

- IT module for Leadership programme – Emphasis is on learning and Learning Environments through ICT
- Will be involved in a series of sessions on how learning occurs and how technology fits into the learning process.
- My greatest contribution to date in terms of teaching is to contribute to “how learning occurs” to such leadership programmes.

MA-IDT – Masters’ Modules

- Learning, Cognition, and Technologies – within this module, I prepare participants on the theories of learning and hopefully instill a constructivist epistemology. Participants usually comprise Masters and PhD students.

Supervision of Research Experiences

I have been involved in supervising PhD and Masters’ students for the last 7 years. Arising from such supervisions, I have put forth papers to prestigious journals such as *Journal of the Learning Sciences and Educational Technology Research and Development* (top journals) which requires significant degrees of work. Some of these papers are still under review. Many of the research work from Masters’ students have been published in journals such as *International Journal of E-Learning*. My research work in the Learning Sciences include conceptual and epistemological change, theoretical dimensions of situated cognition, keeping to the field of the neurosciences, social-cultural studies of the mind, and in the domain of mathematics learning. At this stage of my scholarship, I have a pretty good sense of what makes a good contribution to knowledge. In my travels abroad, I have encountered individuals who were surprised to meet me as they have read quite a few of my publications.

Collaboration Efforts

- Currently working with ETD on projects related to fostering communities of practice as part of HoD-ITs professional development.
- Currently collaborating with iDA (Infocomm Development Authority of Singapore) on R&D collaboration with MicroSoft (Vision for Life Long Learning in Singapore)
- Currently collaborating with CED-NTU on potential projects where Instructional Science can co-work on research.
- Currently placed on the steering committee in NTU on student feedback on teaching.
- Currently collaborating with Center for Pedagogy and Research (CRPP)
 - Initiating research projects on ICT, e.g., building learning communities
 - Bridging links between IS and CRPP
 - Forming study groups with Dean Allan Luke
 - Working closely on ICT projects with Prof. John Headberg.
- Linking up with industry players
 - Ask&Learn and
 - Ednovation
- Currently working at setting up a regional MicroSoft center for Learning Technologies
- Currently establishing connections with Future Systems Directorate and the SAF Center for Military Experimentations
 - Efforts are aimed at joint projects with ETD and LSL
- Currently establishing linkages with NTU's gaming center
- Linkages are being made to establish relationships with the US centers for the Learning Sciences.
- In Canada, we have collaborations with OSIE and McGill.

List of Research Publications

International Journal Publications (refereed)

1. Hung, D., Tan, S.C., Hedberg, J., & Koh, T.S. (in press). A framework for fostering a community of practice: scaffolding learners through an evolving continuum. *British Journal of Educational Technology*.
2. Tan, S.C., Hung, D., & So, K.L. (in press). Fostering scientific inquiry in schools through science research course and Computer-Supported Collaborative Learning (CSCL). *International Journal of Learning Technology*.
3. Hung, D., Looi, C.K., Koh, T.S. (in press). Situated Cognition and Communities of Practice: Differentiating between First-Person "Lived Experiences" and Third-Person Perspectives, *Educational Technology & Society*.
4. Hung, D., Tan, S.C., Cheung, W.S., & Hu, C. (2004). Supporting problem solving with case-stories learning scenario and video-based collaborative learning technology. *Educational Technology & Society*, 7(2), 120-128.
5. Hung, D., Cheah, H.M., Hu, C., Cheung, W.S. (2004). Engaged Learning: Making Learning an authentic experience. *Teaching and Learning*, 25(1), 1-17.
6. Teo, Y.H., Chai, C.S., Hung, D., Quek, C.L. (2004). Conceptualizing a framework for engaged learning in the context of IT MasterPlan II in Singapore. *Teaching and Learning*, 25(1), 31-47.
7. Tan, S.C., Hung, W.L., & Cheung, W.S. (2004). Engaged learning with E-Learning technology – A proposed model and case example. *Teaching and Learning*, 25(1), 61-77.
8. Ng, C. & Hung, D. (2003). Understanding Why and How Online Communities Work: Conceptualizing a Framework for Designing Online Learning Communities. *International Journal of e-learning*, 2(4), pp. 60-71.
9. Hung, D. (2003). Supporting Current Pedagogical Approaches with Neuroscience Research. *Journal of Interactive Learning Research*. 14(2), 129-155.
10. Hung, D. Tan, S.C., Wong, P., & Cheah, H.M. (2003). E-Pedagogies in the making: Case studies from the National Institute of Education. *Teaching and Learning*, 24(1), 1-14.
11. Koh, M., Hung, D., & Tan, J. (2003). Using the virtual institute of training and learning (VITAL) for online modules in biomechanics. *Teaching and Learning*, 24(1), 28-37.
12. Ng, P.T., Ng, F.S., Hung, D. (2003). Examining e-learning in schools through the organizational change model. *Teaching and Learning*, 24(1), 87-96.
13. Hung, D., Tan, S.C., Chong, D., Wong, P., Cheah, H.M., Teo, B.C. (2003). Projecting ICT developments in teaching and learning for the near future: Restructuring the landscape of teaching and learning interactions. *Teaching and Learning*, 24(1), 97-104.
14. Lim, C.P. & Hung, D. (2003). An Activity Theory approach to research of ICT Integration in Singapore schools. *Computers and Education*, 41(1), pp. 49-63.
15. Hung, D. (2002). Forging Links Between “Communities of Practice” and Schools Through Online Learning Communities: Implications for Appropriating and Negotiating Knowledge. *International Journal on e-Learning*, 1(2), 23-33

16. Hung, D. & Nichani, M. (2002). Differentiating between Communities of Practices (CoPs) and Quasi-Communities: Can CoPs exist Online? *International Journal on E-Learning*, 1(3), 23-29.
17. Hung, D. & Chen, D-T (2003). A Proposed framework for the Design of a CMC Learning Environment: Facilitating the Emergence of Authenticity. *Educational Media International*.
18. Hung, D. & Tan, S.C. (2004). Bridging between practice fields and real communities through instructional technology. *International Journal of Instructional Media*. 31(2), 1-8.
19. Chen, D. & Hung, W. L. (2002). Personalised Knowledge Representations: The Missing Half of Online Discussions, *British Journal Educational Technology*, 33(3), 279-290.
20. Hung, D., Chen, D-T, & Tan, S.C. (in press). How the Internet Facilitates Learning as Dialog: Design Considerations for Online Discussions. *International Journal of Instructional Media*.
21. Lim, C.P., Hung, D., Wong, P., & Hu C. (in press). The Pedagogical design of ICT integration in online learning: A case study. *International Journal of Instructional Media*.
22. Hung, D. & Nichani, M. (in press). Differentiating between Communities of Practices (CoPs) and Quasi-Communities: Can CoPs exist Online? *International Journal of E-learning*.1(3), 23-29.
23. Hung, D & Chen, D-T (2001) Distinguishing between Online and Face-to-Face Communities: How IT Makes the Difference, *Educational Technology*, 41, 6, 28-32.
24. Chen D-T & Hung, D. (2002). Two Kinds of Scaffolding: The Dialectical Process within the Authenticity-Generalizability (A-G) Continuum. *Journal of Educational Technology and Society*, 5(4), 148-153.
25. Hung, D. (2002) Theories of Learning and Computer-Mediated Instructional Technologies. *Educational Media International*, 38(4), 281-287.
26. Hung, D., & Chen, D-T. (2003). Learning within the context of communities of practices: A Re-conceptualization of tools, rules, and roles of the activity system. *Educational Media International*, 39(3/4), 247-255.
27. Hung, D. (2001). Conjectured ideas as mediating artefacts for the appropriation of mathematical meanings. *Journal of Mathematical Behavior*. 20(2), 247-262.
28. Hung, D. (2002). Neuronal Structuring, Learning, and Instructional Technologies: Scaffolding Students along Abstract-Concrete Thinking. *Teaching and Learning (International version)*, 22(2), 41-53.
29. Hung, W.L.D., Chen, D.V., and Cheung, W. S. (2003). "The PQRS of Coaching: Orchestrating Within the Zone of Group Proximal Development". *Journal of Southeast Asian Education*.3(1), 75-98.
30. Hung, D. (2002). Metaphorical Ideas as Mediating Artifacts for the Social Construction of Knowledge: Implications from the writings of Dewey and Vygotsky, *International Journal of Instructional Media*, 29(2), pp. 197-214.
31. Hung, D. & Nichani, M. (2002). Bringing communities of practice into schools: Implications for instructional technologies from Vygotskian perspectives, *International Journal of Instructional Media*, 29(2), pp. 197-214

32. Hung, D. & Chen, D-T. (2001). Situated Cognition, Vygotskian Thought, and Learning from the Communities of Practice Perspective: Implications for the Design of Web-based E-Learning. *Educational Media International*, 38(1), 3-12.
33. Hung, D. (2002). Situated cognition and problem-based learning: Implications for learning and instruction with technology. *Journal of Interactive Learning Research*, 13(4), 393-414.
34. Hung, D. (2002). Learning through video-based narratives within the cultural zone of proximal development (reprint). *International Journal of Instructional Media*. 29(1), 125-140.
35. Hung, D. (2001). Learning through video-based narratives within the cultural zone of proximal development. *International Journal of Instructional Media*. 28(4), 415-430.
36. Hung, D. (2000). Some insights into the generalizing of mathematical meanings. *Journal of Mathematical Behavior*, 19(1), 63-82.
37. Hung, D. (1999). Activity, Apprenticeship, and Epistemological Appropriation: Implications from the writings of Michael Polanyi. *Educational Psychologist*, 34(4), 193-205.
38. Chang, S.C. & Hung, D. (1999). Development of a thinking culture within the Singaporean University context. *Asia Pacific Journal of Education*, 19(2), 72-85.
39. Hung, D. & Chen D. (1999). Technologies for implementing social constructive approaches in instructional settings. *Journal of Technology and Teacher Education*, 7(3), 235-256.
40. Hung, D. (1998). Meanings, contexts, and mathematical thinking: The meaning–context model. *Journal of Mathematical Behavior*, 16(3), 311 to 344.
41. Hung, D. (1998). Epistemological change through peer apprenticeship learning: From rule-based to idea-based social constructivism. *International Journal of Computers for Mathematics Learning*, 3(1), 45-80.

Papers for Educational Technology as Contributing Editor

42. Cheah, H.M., Hung, D., Wong, P. (in press). Design-Artifacts in Learning: The Mediation of Emotions and Ideas for Innovation. *Educational Technology*.
43. Chen D-T., Hung, D. (2004). Augmentation in learning: Supports that do not fade away. *Educational Technology*, 44(4), 60-62.
44. Hung, D. & Looi, C.K. (in press). Comments to the special issue on Learning Sciences and Instructional Systems Design, *Educational Technology*.
45. Hung, W. L. & Chen, D. (in press). What Makes A Vibrant and Sustaining Online Community, *Educational Technology*.
46. Hung, D. & Koh, T.S. (2004). A Social-Cultural View to IT Integration in School Contexts. *Educational Technology*, 44(2), 48-53.
47. Chen, D-T. & Hung, D. (2004). Is Dialogue *the* Method of Choice in Collective Communication? A Response to Banathy, *Educational Technology*. 43(5), 61-62.

48. Hung, D., Chen, D-T., & Tan, S.C. (2003). A Social-Constructivist Adaptation of Case-Based Reasoning: Integrating GBS with CSCL. *Educational Technology*, 43(2), 30-35.
49. Hung, D. (2001). Design principles for web-based learning: Implications from Vygotskian thought. *Educational Technology*. 41(3), 33-41.
50. Hung, D. & Chen D-T. (2003). Online Learning in the Asia Pacific: Perspectives, Issues, and Divides. *Educational Technology*. 43(1), 5-9.
51. Hung, D., Tan, S.C., Chen, D-T., &. (2003). IT Integration and Online Learning in Singapore Schools. *Educational Technology*. 43(3), 37-44.
52. Nichani, M. & Hung, D. (2002). Can a community of practice exist online? *Educational Technology*. 42(4), pp. 49-54.
53. Tan, S.C. & Hung, D. (2002). Beyond Information Pumping: Creating a Constructivist e-learning environment. *Educational Technology*, 42(5), 48-54.
54. Hung, D & Chen, D-T (2002) Understanding how thriving Internet quasi-communities work: Distinguishing between learning *about* and learning *to be*, *Educational Technology*, 42, 1, 23-27.
55. Hung, D. & Nichani, M. (2001). Constructivism and e-learning: Balancing between the individual and social levels of cognition. *Educational Technology*. 41(2), 40-44.
56. Pang, P. & Hung, D. (2001). Activity Theory as a Framework for Analyzing CBT and E-Learning Environments. *Educational Technology*, 40(4), 36-42.
57. Hung, D. & Wong, P. (2000). Towards a research framework in Information and Instructional Technology. *Educational Technology*, 40(6), 61-62.
58. Hung, D., Koh, T. S., Chua, C. L. (2000). Social-Cultural Perspectives of R & D in Educational Technology. *Educational Technology*. 40(4), 29-32.
59. Hung, D. & Chen, D-T. (2000). Appropriating and negotiating knowledge: Technologies for a community of learners. *Educational Technology*, 40(3), 29-32.
60. Hung, D. & Wong, A. (2000). Activity theory as a framework for project work in learning environments. *Educational Technology*, 40(2), 33-37.

Books and Publications Edited -- 4

1. Hung, W. L. & Chen, D. (Eds.) (2003). Educational Technology special issue: Online Learning and Information Technology in the Asia-Pacific Region, 43(3).
2. Hung, D. & Towndrow, P. (Eds.) (2003). Special Issue in ICT in Education. Teaching and Learning, 24(1). World Scientific.
3. Hu C., Cheong, W.s., Hung, D. (Eds.) (2004). Special Issue in Teaching and Learning for Engaged Learning in ICT, 25(1). Teaching and Learning. World-scientific.
4. Hung, D. & Khine, M.S., (Eds.) (in press). Engaged learning with emerging technologies. Dordrecht, The Netherlands: Springer.

International Handbooks (4)

1. Hung, David & Chen Der-Thang (in press). An Overview of Virtual Learning Environments in the Asia-Pacific: Provisos, Issues, and Divides" In J. Weiss, J. Nolan, & P. Trifonas (Eds). International handbook on VLEs: Kluwer
2. Looi, C.K. & Hung, D. (in press). ICT-in-Education Policies and Implementation in Singapore and other Asian countries. In A. Aviram & J. Richardson (Eds.). Upon what does the turtle stand? Rethinking education for the information age. The Netherlands: Kluwer Academic Publications.
3. Hung, D., Bopry, J., Looi, C.K., Koh, T.S. (in press). Situated Cognition and Beyond: Martin Heidegger on Transformations in *Being* and Identity. In J. Kinchelov & Horn, R. (Eds). Education and Psychology: An encyclopedia. Greenwood Publishing Group.
4. Hung, D., Tan, S.C., & Koh, T.S. (in press). Engaged Learning: Making learning an authentic experience through technologies. In D. Hung & M.S. Khine (Eds.) Engaged learning with emerging technologies. Dordrecht, The Netherlands: Springer.

Other book chapters (15):

1. Tan, S.C., Hung, D., & Scardamalia, M. (in press). Education in the Knowledge Age – Engaging learners through knowledge building. In M.S. Khine (Ed.). *Engaged Learning with Emerging Technologies*. Kluwer.
2. Tan, C. Y. G., Tan, S.C., & Hung, W.L. (2003). Building a learning community with technology. In S.C. Tan & A.F.L. Wong (Eds.) Teaching and Learning with Technology – An Asia-Pacific Perspective. Singapore: Pearson Education Pte Ltd.
3. Hung, D., and Tan, S.C. (2003). Design principles for web-based learning: Balancing individual and social perspectives in technology-rich learning environments. In M.S. Khine and D. Fisher (Eds.). *Technology-rich Learning Environments: A Future Perspective*, (pp. 385-406). Singapore: World Scientific.
4. Tan, S.C., Wong, A.F.L., & Hung, D. (2003). Introduction: Learning with Technology. In S.C. Tan & A.F.L. Wong (Eds.) Teaching and Learning with Technology – An Asia Pacific Perspective (pp. 1-6). Singapore: Pearson Education Pte Ltd.
5. Hung, D. & Chen D-T. (2003, in press). ICT in the Asia-Pacific. In S.C. Tan & A.F.L. Wong (Eds.) Teaching and Learning with Technology – An Asia-Pacific Perspective. Singapore: Pearsons.
6. Hung, D. & Chen, D-T. (2003, in press). Learning Theories and ICT. In S.C. Tan & A.F.L. Wong (Eds.) Teaching and Learning with Technology – An Asia-Pacific Perspective. Singapore: Pearsons.
7. Tan, C., Tan, S.C., & Hung, D. (2003). Building a learning community with technology. In S.C. Tan & A.F.L. Wong (Eds.) Teaching and Learning with Technology – An Asia Pacific Perspective (pp. 247-264). Singapore: Pearson Education Pte Ltd.

8. Hung, D. & Wong, P. (2002). Designing project work for students: Integrating thinking, IT, and Content. In A.S.C. Chang & C.C.M. Goh (Eds.) *Teachers' handbook on teaching generic thinking skills*. Singapore: Prentice Hall.
9. Hung, D. Ang, D. & Mashhadi, A. (1999). Learning theories and IT. In M. Williams (Ed.). *Integrating technology into teaching and learning*. Prentice-Hall.
10. Chen, D., Hsu, J., & Hung, D. (2000). Learning theories and IT: The computer as a tool. In M. Williams (Ed.). *Integrating technology into teaching and learning: An Asia-Pacific Perspective* (pp. 185-201). Singapore: Prentice-Hall.
11. Hsu, J., Chen, D-T., Hung, D. (2000). Learning theories and IT: The computer as a tutor. In M. Williams (Ed.). *Integrating technology into teaching and learning: An Asia-Pacific Perspective* (pp. 71-92). Singapore: Prentice-Hall.
12. Hung, D., Chen, D. & Cheung, W.S. (1998). Fostering a classroom milieu of thinking and learning: The GNOSIS process. In M.L. Quah & W.K. Ho (Eds.). *Thinking processes: Going beyond the surface curriculum*, (pp. 258-266). Singapore: Prentice Hall.
13. Chen, D. & Hung, D. (1998). Computers as thinking tools. In M.L. Quah & W.K. Ho (Eds.). *Thinking processes: Going beyond the surface curriculum*, (pp. 427-432). Singapore: Prentice Hall.
14. Chen, D., Hsu J., & Hung, D. (1998) (Chapter in Chinese). Integrating learning theories, thinking, and IT. In Chua C. L. (Ed.) *Creative instructional technology: Theory and practice*. Singapore: SNP Publishing.
15. Chen D. & Hung, D. (1997) (Chapter in Chinese). Using the computer as a thinking tool. In Chua C. L. (Ed.) *Creative thinking and information technology*. Singapore: SNP Publishing.

Conference papers (20):

1. Hung, D., Hedberg, J.G., Tan, S.C., & Koh, T.S. (2003). Fostering communities of practice through learning communities. Proceeding of Education Research Association (Singapore) Conference, Singapore, pp. 195-209.
2. Chai, C.S., Tan, S.C., & Hung, W.L. (2003). Fostering knowledge building communities (KBC) through computer-supported collaborative learning (CSCL). HERSDA conference, New Zealand, July 2003.
3. Chai, C.S., Tan, S.C., & Hung, W.L. (2003). Fostering learning communities: Potentials and issues. Asia Pacific Conference in Education, Singapore, June 2003.
4. Tan, S.C., Hung, D., & Chai, C.S. (2003). A blended constructivist learning environment for pre-service teachers. E-Learn 2003: World Conference on e-Learning in Corporate, Government, Healthcare, & Higher Institution, at Hyatt Regency Phoenix, Arizona, from 7-11 Nov 2003.
5. Tan, S.C., So, K.L. & Hung, D. (2003). Fostering scientific inquiry in schools through science research course and Computer-Supported Collaborative Learning (CSCL). International Conference on Computer in Education, at Hong Kong Convention and Exhibition Centre, Hong Kong, 2-5 Dec 2003.
6. Chen, D. & Hung, D. (2004). E-learning: Trends and Challenges. Paper presented at the International Symposium on Towards Building an E-learning Network in Northeast Asia, 18-20, 2004, Gangwondo, South Korea.

7. Hung, W. L. & Chen, D. (2004). Activity Theory and the Transactional-Constructivist perspective to learning: implications for the design of learning activities. Paper presented at the 29th International Conference on Improving University Teaching: Optimal Teaching and Learning: Achieving Higher Education Excellence, 12 –15 July 2004, Bern, Switzerland.
8. Chen, D. & Hung, D. (2003). Rules for Online Argumentation and Discussion: Lessons Learned from Project ROAD. Paper presented at the World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education, 7 – 11 November 2003, Phoenix, USA.
9. Tan, S.C., Hung, D., & Chai, C.S. (Accepted). A blended constructivist learning environment for pre-service teachers. E-Learn 2003: World Conference on e-Learning in Corporate, Government, Healthcare, & Higher Institution, at Hyatt Regency Phoenix, Arizona, from 7-11 Nov 2003.
10. Tan, S.C., So, K.L. & Hung, D. (Accepted). Fostering Scientific Inquiry in Schools through Science Research Course and Computer-Supported Collaborative Learning (CSCL). International Conference on Computer in Education, at Hong Kong Convention and Exhibition Centre, Hong Kong, 2-5 Dec 2003.
11. Chai, C.S., Tan, S.C., & Hung, W.L. (2003). Fostering knowledge building communities (KBC) through computer-supported collaborative learning (CSCL). Paper accepted for HERSDA conference, New Zealand, July 2003.
12. Chai, C.S., Tan, S.C., & Hung, W.L. (2003). Fostering learning communities: Potentials and issues. Paper accepted for Asia Pacific Conference in Education, Singapore, June 2003.
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