

Educational Research Association of Singapore (ERAS)

Research Workshop 2013

The Educational Research Association of Singapore (ERAS) is pleased to announce a series of introductory research workshops in the spirit of promoting teaching research in Singapore schools. These workshops will familiarize participants with introductory concepts pertaining to a range of topics relating to research skills. These workshops will benefit teachers, educators in general, who are interested in exploring the use of data to improve classroom teaching and enhance student learning. These workshops will also provide the platform for teachers to expand their network and practice of learning communities.

Research Workshop Topics

| Session A : Thursday 6 June 2013 0900 HRS – 1200 HRS | | | |
|---|--------------------|--------------|-------------|
| Торіс | Facilitator | No of Places | Venue |
| Introduction to Planning and Conduct of Focus Group Discussions (FGDs) | Dr Trivina Kang | 20 | NIE2-TR-207 |
| Excel for Educational Data Analysis: Beyond Counting and Sorting ** | Dr Zhou Ming Ming | 25 | NIE3-B1-04 |
| An Introduction to Qualitative Research Design and Data Analysis | Dr Myra Bascal | 20 | NIE2-TR-209 |
| Survey Studies | Dr. Cheng Yuanshan | 25 | NIE2-TR-211 |
| How to Conduct Experimental Study in Classroom Teaching 1: Randomized Experiments | Dr Nie Youyan | 20 | NIE2-TR-212 |
| Session B : Thursday 6 June 2013 1300 HRS – 1600 HRS | | | |
| Analyzing Data from Focus Group Discussions (FGDs) | Dr Trivina Kang | 20 | NIE2-TR-207 |
| Excel <i>for</i> Data Analysis; Excel <i>in</i> Data Analysis** | Dr Zhou Ming Ming | 25 | NIE3-B1-04 |
| An Introduction to Qualitative Research Design and Data Analysis (Hands-On) | Dr Myra Bascal | 20 | NIE2-TR-209 |
| Using SPSS to Answer Different Research Questions** | Dr. Cheng Yuanshan | 20 | NIE3-B1-21 |
| How to Conduct Experimental Study in Classroom Teaching 2: Quasi-experiments | Dr Nie Youyan | 20 | NIE2-TR-212 |

Note:

** ICT-based lessons



Re-run of the Day 1 sessions

| Session A : Friday 7 June 2013 0900 HRS – 1200 HRS | | | |
|---|--------------------|--------------|-------------|
| Торіс | Facilitator | No of Places | Venue |
| Introduction to Planning and Conduct of Focus Group Discussions (FGDs) | Dr Trivina Kang | 20 | NIE2-TR-207 |
| Excel for Educational Data Analysis: Beyond Counting and Sorting ** | Dr Zhou Ming Ming | 25 | NIE3-B1-04 |
| An Introduction to Qualitative Research Design and Data Analysis | Dr Myra Bascal | 20 | NIE2-TR-209 |
| Survey Studies | Dr. Cheng Yuanshan | 25 | NIE2-TR-211 |
| How to Conduct Experimental Study in Classroom Teaching 1: Randomized Experiments | Dr Nie Youyan | 20 | NIE2-TR-212 |
| Session B : Friday 7 June 2013 1300 HRS – 1600 HRS | | | |
| Analyzing Data from Focus Group Discussions (FGDs) | Dr Trivina Kang | 20 | NIE2-TR-207 |
| Excel <i>for</i> Data Analysis; Excel <i>in</i> Data Analysis** | Dr Zhou Ming Ming | 25 | NIE3-B1-04 |
| An Introduction to Qualitative Research Design and Data Analysis (Hands-On) | Dr Myra Bascal | 20 | NIE2-TR-209 |
| Using SPSS to Answer Different Research Questions** | Dr. Cheng Yuanshan | 20 | NIE3-B1-21 |
| How to Conduct Experimental Study in Classroom Teaching 2: Quasi-experiments | Dr Nie Youyan | 20 | NIE2-TR-212 |

Note:

** ICT-based lessons



Research Workshop Fees for Non-ICT based lessons

ERAS members:\$20 (Administrative fee) for each am/pm session per dayNon-ERAS members:\$50 (Registration fee) + \$20 (Administrative fee) for each am/pm session per day.

Research Workshop Fees for ICT based lessons

ERAS members: \$35 (Administrative fee) for each am/pm session per day Non-ERAS members: \$50 (Registration fee) + \$35 (Administrative fee) for each am/pm session per day.

Note:

- ERAS members include both individual and corporate members (1-year or life members).
- Non-ERAS members will be given 1-year ERAS membership upon payment of the workshop fees.
- The administrative fee will cover the cost of printing materials.
- Snacks will be provided during tea breaks.

Please use the attached registration form to register for the workshops.

Research Workshop Synopses

| Facilitator | Dr Trivina Kang |
|---------------------------|--|
| Brief CV | Dr. Trivina Kang is a Senior Lecturer in the Policy and Leadership Studies Academic Group at the National Institute of Education (NIE). She has been Principal Investigator of several large scale projects that included qualitative data. At NIE, she currently helms the MA (Ed. Mgmt.) Qualitative Research core module as well as other research related in-service modules. She has also worked closely with Research Activists in MOE's TLLM Ignite Programme, and practitioner in schools. |
| Workshop Title (am) | Introduction to Planning and Conduct of Focus Group Discussions (FGDs) |
| Workshop write-up (am) | Focus Group Discussions (FGDs) are increasingly used in schools for data collection. This workshop introduces participants to issues to consider in the planning stage as they design FGD questions and make arrangements to collect data. Opportunities will be given for hands on practice/critique of FGD questions during the workshop |

| Workshop Title (pm) | Analyzing Data from Focus Group Discussions (FGDs) |
|---------------------------|---|
| Workshop write-up (pm) | This workshop introduces participants to techniques for making sense of data obtained from FGDs. This is to encourage more informed analysis of verbal data obtained during the FGDs. |



| Facilitator | Dr. Cheng Yuanshan |
|---------------------------|--|
| Brief CV | Dr Cheng Yuanshan is a Senior Lecturer in the Psychology Studies Academic Group at the National Institute of Education (NIE). He teaches research methodology and statistics for many years in NIE. |
| Workshop Title (pm) | Survey Studies |
| Workshop write-up (pm) | Survey study has been used most often in educational research. The workshop will focus on basic skills of designing a survey study and writing appropriate survey questions. Some issues related to explain survey results will also be discussed. |

| Workshop Title (pm) | Using SPSS to Answer Different Research Questions |
|---------------------------|---|
| Workshop write-up (pm) | SPSS is a very effective and user friendly software. The workshop will teach the basic skills of using SPSS to perform statistical analyses. It will also relate different statistical procedures to answer different research questions, such as the questions in survey, experiment, and action research. |



| Facilitator | Dr. Zhou Mingming |
|---------------------------|---|
| Brief CV | Dr. Mingming Zhou is an assistant professor at Psychological Studies Academic Group, National Institute of Education. Her research interests include motivation, meta-cognition, pedagogy and educational technology. She has been working intensively and productively in researching how to use computer technology to improve teaching and learning effectiveness and efficiency. One of her major contributions to this field is the development of computer tracing methods to capture learning processes on the fly. She has been involved in many international projects, published in a series of books on intelligent learning systems and computer-based learning and journals in e-learning. |
| Workshop Title (am) | Excel for Educational Data Analysis: Beyond Counting and Sorting |
| Workshop write-up (am) | Excel is commonly used in data management and analysis, but not many people can truly use it effectively. This hands-on workshop is to familiarise the participants in Excel's data analysis features. It is to be immediately useful for educational scholars, school teachers, or whoever needs to analyse survey and achievement data to inform schools/teachers/students/parents to address real-world questions in education. Prerequisite: Basic experience with EXCEL. |
| | Topics Covered: Prepare Excel data files for analysis Data description and presentation Paired t-test Independent sample t-test |

| Workshop Title (pm) | Excel for Data Analysis; Excel in Data Analysis |
|---------------------------|--|
| Workshop write-up (pm) | Excel is commonly used in data management and analysis, but not many people can truly use it effectively. This advanced Excel hands-on workshop is designed to equip participants with advanced data analysis features in Microsoft Excel that will enable you to perform more complicated data analysis and create more comprehensive reports to address key research questions in education. Prerequisite: Participants need to understand the basic concepts and methods of statistics (e.g., mean, standard deviation, normal distribution) and basic formulas (e.g., average, sum, standard deviation) and charts in EXCEL. |
| | Topics Covered: One-way ANOVA Two-way ANOVA Regression Analysis Interpretation and presentation of analysis results |



| Facilitator | Dr Myra Bascal |
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| Brief CV | Asst/Prof Myra Garces-Bacsal is a Teacher Educator and Coordinator of the Masters and Bachelor's Program in High Ability Studies and Gifted Education at the National Institute of Education, Nanyang Technological University in Singapore. As a clinical psychologist, she has done extensive work with the gifted which range from conducting psychological assessments to counseling and developing indigenous gifted programs for highly-able learners. She has done several workshops on qualitative research as well as the use of Nvivo software in analyzing qualitative data. Aside from doing teaching supervision in Singapore Schools, she also does clinical supervision among graduate students in counseling psychology. |
| Workshop Title (am) | An Introduction to Qualitative Research Design and Data Analysis |
| Workshop write-up (am) | Although it is common for teacher researchers to employ a quantitative research paradigm to ascertain the impact of teaching strategies on students' learning and outcomes such as the use of pre- and post-tests, quasi-experimental and experimental designs, what remains unknown are the explanations to the impact of teaching strategies. In other words, how do these teaching strategies bring about the necessary change or students' learning? Essentially, qualitative data collection and analysis have the power to explain why certain teaching strategies work, why certain teaching strategies do not, and how teaching strategies can be modified to enhance their effectiveness. The challenge for most teacher researchers is in understanding the paradigm of qualitative data collection and analysis, which can be quite different from quantitative data collection and analysis. This workshop will enlighten participants with key principles and processes – with hands-on experiences, in analysing qualitative data, especially data taken from both interviews and observations |

| Workshop Title | An Introduction to Qualitative Research Design and Data |
|---------------------------|---|
| (pm) | Analysis (Hands-On) |
| Workshop write-up (pm) | Participants would be asked to analyze qualitative data as well as critique journal articles that employ the use of qualitative research using the concepts learned during the morning session. |



| Facilitator | Dr Nie Youyan |
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| Brief CV | Dr Nie Youyan is an Assistant Professor with the Psychological Studies Academic Group at the National Institute of Education. She was involved in many research projects on the evaluation of teacher effectiveness and teaching effectiveness in the past 10 years. |
| Workshop Title | How to Conduct Experimental Study in Classroom Teaching 1: Randomized |
| (am) | Experiments |
| Workshop write-up | This 3-hour workshop will demonstrate on how to conduct randomised |
| (am) | experimental study in the classroom through hands-on authentic tasks. The use of randomised experimental study to improve the quality of teaching will be discussed. The strengths and limitations of randomised experimental study will also be analysed. |

| Workshop Title (pm) | How to Conduct Experimental Study in Classroom Teaching 2: Quasi-experiments |
|---------------------------|--|
| Workshop write-up (pm) | Quasi-experimental study is widely used in educational research due to the difficulty of randomisation in school practices. This 3–hour workshop will demonstrate how to conduct quasi-experimental study in classroom teaching context through hands-on authentic tasks. The use of quasi-experimental study to improve the quality of teaching will be discussed. The strengths and limitations of quasi-experimental study will also be analysed. |