Teacher Assessment Literacy and Student Outcomes in the Province of Tawi-Tawi, Philippines

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This thesis is submitted in fulfillment of the requirements for the degree of Doctor of Philosophy

in the

School of Education
Faculty of the Professions
University of Adelaide

September 2014
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This study examined teachers’ assessment literacy and its probable impact on student achievement and aptitude (the outcome variables) through the intervening variables at the teacher and student levels. It likewise explored the effects of demographic variables on factors at the two levels and on the outcome variables. The study had 582 teacher samples and 2,077 student samples taken from Grade Six, Second Year and Third Year high school classes in the province of Tawi-Tawi, Philippines. It employed a mixed-methods design using quantitative method as a primary approach and qualitative method as a supporting approach. It utilised a number of statistical techniques, including Rasch modeling, structural equation modeling and hierarchical linear modeling, thematic analysis, and through the use of a number of software applications and include SPSS 16.0, LISREL 8.80, and HLM 6.08 to analyse the data.

The results revealed that the elementary and secondary school teachers in Tawi-Tawi, Philippines possessed relatively low assessment literacy. In terms of the specific assessment areas, the teachers performed highest on “choosing assessment methods appropriate for instructional decisions” and lowest on “developing assessment methods appropriate for instructional decisions”. The qualitative finding concerning teachers’ knowledge on validity and reliability supported the low assessment literacy results. Moreover, teachers generally indicated that they practised “assessment purpose”, “assessment design”, and “assessment communication” frequently, and “direct transmission method” and “alternative approach” of teaching in more than half of their lessons. Furthermore, the Grade Six, Second Year, and Fourth Year high school students generally exhibited positive “perceptions of assessment” and positive “attitude towards assessment”. Besides, the Grade Six and Second Year high school students obtained below average “academic achievement”, and Fourth Year high school students obtained below average “aptitude”.

The results further revealed that teachers’ assessment literacy negatively influenced their teaching practices while their assessment practices positively impacted on their teaching practices. No relationship was evident between their assessment literacy and assessment practices. However, analysis of
relevant sub-variables showed some degree of positive effect of assessment literacy on assessment practices. Additionally, the students’ “perceptions of assessment” appeared to positively influence their “attitude towards assessment”. The Grade Six and Second Year high school students’ “perceptions of assessment” and “attitude towards assessment” likewise showed significant positive effects on their “academic achievement”. The Fourth Year high school students’ “perceptions of assessment” and “attitude towards assessment” exerted negative and positive effects, respectively, on their “aptitude”.

Some demographic factors had moderating effects on the variables tested. Teachers’ age range (60 years and above), school type, and gender appeared to moderate effects on “academic achievement” while teachers’ age range (below 25 years), academic qualification, and years of teaching experience (16-20 years) had moderating effects on “aptitude”.

The study’s results generally serve as empirical evidence and additional information on in-service teachers’ assessment literacy and its relations with other relevant variables. The results have implications for further research using other contextual variables and for the formulation of relevant policies, launching of assessment reform, development of assessment and research programs, and re-examination of assessment component of the Licensure Examination for Teachers. Furthermore, the findings in this study are relevant to pre-service teacher education programs and professional development of elementary and secondary school teachers, especially those from rural communities like Tawi-Tawi in the Philippines.
Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Signature: ............................................. Date: 15 September 2014
Acknowledgements

The contributions of a number of institutions and the many people have been so instrumental in the accomplishment of my PhD research and in the successful completion of my PhD program. For these, I’m deeply indebted that words of thanks are not sufficed to express my gratitude to them. Indeed, they greatly helped me achieve a milestone that should have been impossible without their invaluable support, advice, and guidance. In particular, I’m incredibly grateful to the following:

The Australian Government, through the Australian Agency for International Development (AusAID) and the Philippines-Australia Human Resource and Organisational Development Facility, for the Australian Leadership Awards (ALA) Scholarship, which made my PhD study in Australia possible. The scholarship afforded me a great opportunity to pursue the highest degree in my field, and to be more contributory to the future development of my community/country;

Associate Professor Sivakumar Alagumalai, my principal supervisor, for seeing me through in my entire PhD journey. The road was so bumpy that without his guidance the journey could have certainly been a failure. Moreover, his many pieces of advice beyond my PhD work served to enlighten me on the way I conduct myself towards my profession and life in general. These provided essential lessons that when combined with my PhD experiences constitute a truly meaningful journey. A well-principled educator, he is indeed a role model that deserves emulation;

Dr. I Gusti Darmawan, the former postgraduate research coordinator of the University of Adelaide’s School of Education and my co-supervisor, for his valuable advice, especially on the methodology section of my research study. His insightful suggestions contributed a lot to the success of this research work;

Dr. Francisco Ben, also my co-supervisor, who had been so kind and patient in entertaining my concerns even beyond his official consultation time. His guidance in the statistical treatment of my data using specialised statistical software and in organising some chapters in my thesis had been enormously helpful. Moreover, his family had been so generous in extending help whenever I needed it during my stay
in Adelaide. They have been my family away from home for which I’ll be forever grateful. Francis, Ivey, and Nikolai, you are all part of my success!

The Philippine Department of Education (DepEd) Secretary, Br. Armin B. Luistro, through his Undersecretary Rizalino D. Rivera of the DepEd National Office, former Regional Secretary Atty. Baratucal L. Caudang of the DepEd Regional Office in the Autonomous Region in Muslim Mindanao (ARMM), and Superintendent Dr. Kiram Irilis of the DepEd Tawi-Tawi Division, for the permission to administer my research study in the Division of Tawi-Tawi, Philippines and to access the National Achievement Test (NAT) and the National Career Assessment Examination (NCAE) results;

The DepEd National Educational Testing and Research Center under the directorship of Dr. Nelia V. Benito for the references/information in relation to NAT and NCAE;

The Mindanao State University Tawi-Tawi College of Technology and Oceanography (MSU-TCTO), my home university, for my study leave and the permission to make use of its Science High School, Preparatory High School, and Laboratory Elementary School as the pilot schools for my research study, and to administer my research questionnaires to its different community high schools;

The Tawi-Tawi State Agricultural College, Mahardika Institute of Technology, and Abubakar Computer Learning Foundation, Inc. for their permission to conduct my research study in their respective secondary and elementary schools;

Dr. Craig A. Mertler, currently the Dean of the Ross College of Education at Lynn University, Florida USA, for the permission to use the Assessment Literacy Inventory and for the needed literature on their instrument;

Prof. Eddie M. Alih, our former chancellor at the MSU-TCTO and under whose leadership I received the ALA Scholarship, for his unwavering support and permission to go on study leave, and for his constant encouragement to grow professionally; Sir Ed, I am also grateful to you for what I am now;

Atty. Lorenzo R. Reyes, our current chancellor at the MSU-TCTO, also for his support and encouragement to complete my PhD study;
Prof. Almuzrin B. Jubaira, my poet-friend whose life is poetry and whose poetry is life, for his appreciation, constant encouragement, and great ideas;

Prof. Felisa B. Halun, our vice-chancellor for academic affairs, and Dr. Elvinia Alivio, our Dean at the College of Education of the MSU-TCTO, for their constant advice to pursue a PhD;

Prof. Clarita A. Taup, Prof. Lucita R. Galarosa, and Prof. Manuel G. Pon of the MSU-TCTO for the validation of my instruments; Mr. Ibba Asakil of the MSU-TCTO Secondary Education Department for his help in coordinating the schools under their jurisdiction;

Mr. Noor Saada, the ARMM Undersecretary, Mr. Marjuni Maddi, the Assistant to the ARMM Regional Governor, and Dr. Abdurizal Aripin, Division Supervisor at the DepEd-Tawi-Tawi Division, for their help in facilitating and channeling the DepEd permissions at the regional and divisional levels;

Mr. Atari A. Idjiran, the DepEd District Supervisor of East South Ubian District, for his support during the conduct of the study in his district and in the municipalities of Bongao and Panglima Sugala;

Mr. Mohammad Nur Tidal, the principal of the Tawi-Tawi School of Arts and Trades, for the 2010-2011 NAT and NCAE results of the Tawi-Tawi Division;

Atty. Anwar Ito, Education Specialist III at the DepEd National Office, and Mr. Rajis Abdulwahid, the DepEd Tawi-Tawi Division Administrative Officer, for the DepEd demographic data;

Mr. Abdulwahid S. Dawang & Mrs. Nena Y. Dawang of DepEd-Tawi-Tawi division for their precious time and effort in arranging some meetings with school officials and in coordinating with some schools in Bongao and other municipalities;

Mr. Mohammad Jalam Eraham of the Tawi-Tawi School of Arts and Trades, Mr. Abdulnadi B. Hailaya, my uncle, Mr. Widin M. Hailaya, my brother, and Mr. Jansal Abdulpatta, my brother-in-law, for accompanying me to the different islands and for assisting me during my data collection;

Mr. Ricky Mohammadsali, principal of Simalak Elementary School; Mr. Elwan Matanio, principal of Likud Tabawan Elementary School; Mr. William Baird of the MSU-TCTO; Mr. Rio K. Hailaya, my uncle; Mr. Wilson M. Hailaya, my brother; Mr. Nursirim Kalim and Mr. Nur Perong of Tawi-Tawi School of Arts and
Tradesl; Ms. Jurifatol S. Huglay, Ms. Elenda Sahilaja, and Ms. Friselma Demsio of the Abubakar Computer Learning Center, Inc.; Mr. Alhajan Ellehero of the South Ubian National High School; Mr. Nashier Patani of the Ligayan National High School; Mr. Jaymar Gummoh, Mr. Bernasi Bernabi, and Mr. Alham Abdulhatam of the MSU-TCTO Tabawan Community High School; Mr. Nijal Kausad, Mr. Hamran Sairuna, and Mr. Alnajin Najalin of the Notre Dame of Tabawan High School; Mr. Herman Elemoro of Lawm Tabawan Central Elementary School; Mr. Hahmin K. Belgium of West Tabawan Elementary School; Mr. Khalid G. Muyong of Talisay Elementary School; Ms. Rajima M. Sappayani of Datu Jaafar Central Elementary School; Mr. Mohammad Region Laison of Sipangkot National High School; Mr. Faiser Launion of Tandubas National High School; Ms. Kalsum Telso of the Sanga-Sanga National High School; Mr. Saupi Kalbi of the Tawi-Tawi West Coast Agricultural High School; Mr. Gabra Buhari, Mr. Kasmal Saraie, and Ms. Samsura Buhari of Mantabuan, Tawi-Tawi; Mr. Mark-Ben Francisco of Simunul, Tawi-Tawi; and Mr. Alpirin Jupati of Tabawan, Tawi-Tawi, for their help in the distribution and collection of the research questionnaires;

All district supervisors, directors/directress, and principals of the elementary and secondary schools in the province of Tawi-Tawi for having facilitated the administration of my survey questionnaires to their respective teachers and students, and my interview to their selected teachers;

All Grade 6, Second Year and Fourth Year high school teachers and students during the school year 2010-2011 in the province of Tawi-Tawi for serving as respondents to my study;

The concerned teachers and students of the MSU-TCTO Science High School, Preparatory High School, and Laboratory Elementary School for serving as pilot participants of my study;

My parents and my entire family for the moral support and for constantly praying for my success; and especially to my wife, Riddang, for the unwavering love, constant support and encouragement, and for standing beside me during the darkest moments of my PhD journey;

And finally, the Almighty Allah for the grace and blessings, and for the strength and determination to make this PhD thesis a reality.

Wilham M. Hailaya